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DANTON, GEORGES-JACQUES (1759-94), French statesman and revolutionary orator. The son of a solicitor of Arcis-sur-Aube and grandson of a peasant, Danton at the outbreak of the revolution was a successful barrister at Paris. He came into politics through the Paris municipal council and the famous Club des Cordeliers. Until the overthrow of the monarchy on the tenth of August, 1792, he remained a local figure, half boss, half agitator. He unquestionably helped prepare the sections for the revolt of August 10, and he found himself minister of justice in the provisional government, a leader of the new republic. He helped by his fervent oratory to encourage the French in the war against Austria and Prussia. Elected to the Convention he played for the next two years a difficult role in party intrigues. Danton was an opportumst in the midst of a revolution where interests were clothed—if not indeed shackled with principles. His policy of balancing led him to oppose Robespierre and his program and, working with his friend Camille Desmoulins, to call for elemency to replace the Terror. He was caught without real support and guillotined in April, 1794.

Danton cannot be said to have contributed to political thought. His speeches are excellent examples of popular oratory, of the art of the man who wishes to move large numbers to group action. They are full of a great deal of material suitable for slogans and stereotypes and have been very useful to schoolmasters of the Third Republic. But they are devoid of original ideas. Danton is important to the newer historian first because of his role in modern French patriotism and second because his methods throw light on the technique of revolution. Yet perhaps his real importance is wholly indirect. What has been written about Danton forms one of the best possible bases for a study of historical method, since the leading exponents of objective, scientific history of the French Revolution have been for years at odds as to his character and role. To Aulard he was a hero and a statesman; to Mathiez a grafter, a potential traitor, a mere demagogue. Agreement has not yet been reached, although to the younger generation of historians the quarrel has lost importance.

CRANE BRINTON

Works: Discours, ed. by A. Fribourg (Paris 1910), tt. into English (New York 1928).

Consult: Fribourg's introduction to the Discours above; Madelin, L., Danton (Paris 1914), tr. by Lady Mary Loyd (London 1921). The quarrel between Dantonistes and Robespierristes is best studied in the files of the La révolution française (pro-Danton articles by Aulard and pupils), and the Annales révolutionnaires, and the Annales historiques de la révolution française (anti-Danton articles by Mathiez and pupils).

DANUBE SHIPPING. See International Waterways.

DARGUN, LOTHAR VON (1853-93), German sociologist and economist. Dargun, who wrote in Polish as well as German, was professor of German law and legal history at the University of Cracow. Sharing the views of Bachofen and McLennan and those who contended that every social group necessarily undergoes a similar course of development he attempted in his studies of the early primitive forms of law, property and the family to derive an evolutionary scheme for the Aryan peoples, particularly the Germans. Thus in Mutterrecht und Raubehe und ihre Reste im germanischen Recht und Leben (Untersuchungen zur deutschen Staats- und Rechtsgeschichte, pt. xvi, Breslau 1883) Dargun applied his thesis of the matriarchy as the universally original form of kinship to the case of the Aryans and also advanced the notion that wherever wife purchase appeared it was always preceded by wife capture. Subsequently in Mutterrecht und Vaterrecht (Studien zum ältesten Familienrecht, pt. i, Leipsic 1892) Dargun developed the idea that the patriarchy with its legal, protective relationship between father and child replaced by force the blood kinship system of the matriarchy. Dargun's most significant work in economics is *Egoismus* und Altruismus in der Nationalökonomie (Sociologische Studien, pt. i, Leipsic 1885). Here he opposed the one-sided interpretation of economic phenomena as arising out of exclusively egoistic motivations of the individual. On the whole, it may be said that his work suffered from a neglect of national differences, an overemphasis on law and theory in history and a tendency to hasty or preconceived generalizations.

HERMANN TRIMBORN

DARJES, JOACHIM GEORG (1714-91), German cameralist. Darjes was professor of law first at Jena and later at Frankfort on the Oder during the reign of Frederick the Great. He was a leader of the movement which transformed early cameralism into an administrative science presented as a university discipline with the object of training officials for the service of the absolute state. Differing from the classical mercantilists in his specific purpose and in general ignoring their commercial and monetary doctrines, Darjes retained the fundamental mercantilistic idea that the state was entitled to guard its interests by unrestricted intervention in the affairs of the people—a position which he supported in Discurs über Natur- und Völkerrecht (3 vols., Jena 1762) by the customary appeal to the peculiar cameralistic interpretation of natural rights. The officials of the state must be scientifically trained not only to levy and collect taxes but to handle the manifold problems involved both in the preservation and development of its capital, defined by Darjes as the combined wealth of its entire population, and in the judicious expenditure of its revenues for the general happiness. Hence for Darjes cameralism in its broadest sense embraced Polizeiwissenschaft. Before formulating a policy for regulating industries and agriculture the cameralist must also become intimately acquainted with various technological processes as well as with the pecuniary aspects of production. Darjes himself made interesting calculations of the rentability of certain representative farms and manufacturing plants and manifested an insight into the problem of amortization which helped him to arrive at an accurate analysis of production costs. In his treatment of public enterprises he speculated as to the optimum size of plants and the most advantageous proportion of factors. In spite of the emphasis which he placed upon the importance of an empirical foundation he was chiefly concerned with expounding the principles of the science of management rather than with describing the actual processes. In this respect he differed from the first cameralistic

professors, Dithmar and Gasser. Darjes' capacity for systematization, attributable in part to his training under Christian von Wolff, is perhaps the distinguishing merit of his *Erste Gründe der Cameral-Wissenschaften* (Jena 1756), an admirably successful attempt to shape an encyclopaedic mass of material into an ordered whole suitable for presentation to university students.

Louise Sommer

Consult: Small, Albion W., The Cameralists (Chicago 1909) ch. xii; Walb, Ernst, Kameralwissenschaften und vergleichende Betriebswirtschaftslehre, Kölner Universitätsreden, vol. xviii (Cologne 1927); Roscher, Wilhelm, "Die volkswirtschaftliche Ansichten Friedrichs des Grossen" in Koniglichen sächsichen Gesellschaft der Wissenschaften, Philologisch-historische Classe, Berichte über die Verhandlungen, vol. xviii (1866) 1–56.

→DARWIN, CHARLES ROBERT (1809–82), English naturalist. He was born at Shrewsbury, the grandson of the scientist Erasmus Darwin. He collected the basic evidence and obtained the initial inspiration for his theory of evolution during his voyage as a naturalist on the Beagle between 1831 and 1836. Illness prevented him from ever leaving Great Britain again and he remained at his home in Down patiently experimenting with plants to verify his hypothesis. His first public statement of the evolutionary theory was made in 1858 simultaneously with a comparable formulation of the hypothesis by Alfred Russel Wallace. His epoch making book, The Origin of Species, appeared in 1859, and the fifty years that followed its appearance might well be called the Darwinian era in biology, psychology and the social sciences. For while he was only one of many mid-century evolutionists and always remained a laboratory worker, leaving the polemical work to be done by Huxley, Spencer and Haeckel, his work was so thorough and so far reaching in its implications that it became the central agency in a revolution of thought in all the humanistic studies. Even today evolution is popularly conceived to be his doctrine of descent. By placing man wholly within the organic realm he upset creationism, raised doubts as to the unique spiritual nature of man, undermined belief in miracles, revelation and answer to prayer, destroyed the myths of the fall and original sin and compelled a complete recasting of the argument from design and of theology in general. In addition, his emphasis on continuity and naturalism stimulated extensive inquiries into the origin,

nature and evolution of ideas of the soul and of religious beliefs and practises. The religious controversy thus aroused still rages in certain quarters, although elsewhere the logical outcome of his discoveries is only now being formulated as naturalistic humanism.

Darwin saw that the connecting link between biological and psychological evolution is to be found in instinct. While his treatment of instinct is somewhat influenced by Lamarckianism, he made variation, natural selection and heredity the chief sources of innate adapted responses, of the emotions and their expression, of play, the "social instincts" and intelligence. He thus gave a new orientation to researches in comparative, genetic and animal psychology and mental inheritance. His position ultimately affected the conception of the nature of mind itself. Since continuity on the organic plane implies inheritance, the evolution of mental traits must have rested on organic changes. The outcome could be none other than a behaviorism which considers mind, including consciousness, as not an entity but the functioning of psychophysical structures.

His influence on anthropology was largely in stimulating researches on the origin of man and human races. He raised expectations regarding "missing links" and fossil men which have in part been realized and intense interest in the now partially delineated genealogical tree of man. His views stimulated the study of the comparative anatomy and physiology of races, the effects of race crossing and of environmental selection and racial adaptations and modifications due to temperature, moisture, altitude, sunlight and type of food.

The Darwinian concepts were transferred from the biological to the ethical, political, economic and sociological fields. Darwinism as an expression of a fundamental law of nature became a new orthodoxy to which appeal was made to justify diverse opinions in many spheres. It was invoked to explain social evolution in general and to support individualism and socialism, competition and cooperation, aristocracy and democracy, brute force and kindliness, militarism and pacifism, ethical pessimism and optimism, creative emergent evolutionism and evolutionary naturalism.

Darwin's discoveries were directly responsible for intensive study of human heredity—the relative influence of heredity and environment in individual differences and the rise of eugenics, as typified by Galton and Pearson; for the theories of the social selectionists, such as Ammon and Lapouge, as to the effects of differential fertility, migration, urbanism, poverty and other social conditions on human stock and social progress; and for the vast literature of social Darwinism on the biological, ethical and social significance of competition, conflict and war, as in the works of Bagehot, Kidd and Gumplowicz versus Kropotkin and Novicow. His theories gave rise to such influential doctrines of racial supremacy and racial determinism as Aryanism and Nordicism.

FRANK H. HANKINS

Consult: Darwin, Francis, Life and Letters of Charles Darwin, 3 vols. (London 1887); Darwin and Modern Science, Essays in Commemoration of the Centenary of the Birth of Charles Darwin and of the Fiftieth Anniversary of the Publication of the Origin of Species, ed. by A. C. Seward (Cambridge, Eng. 1909); American Association for the Advancement of Science, Fifty Years of Darwinism (New York 1909); Hadley, A. T., and others, "The Influence of Charles Darwin" in Psychological Review, vol. xvi (1909) 143-218; Bristol, L. M., Social Adaptation (Cambridge, Mass. 1915) p. 58-68; Drachman, J. M., Studies in the Literature of Natural Science (New York 1930) chs. v-xix; Spiller, G., "Darwinism and Sociology" in Sociological Review, vol. vii (1914) 232 · 53; Dewey, John, "Darwin's Influence upon Philosophy" in Popular Science Monthly, vol. lxxv (1909) 90-98; Rádl, Emmanuel, Geschichte der biologischen Theorien, 2 vols. (Leipsic 1909-13), tr. by E. J. Hatfield (London 1930); Kempf. E. J., "Charles Darwin-The Affective Sources of His Inspiration and Anxiety-Neurosis" in Psychoanalytic Review, vol. v (1918) 151-92; Ward, C. H., Charles Darwin, the Man and His Warfare (Indianapolis 1927); Dorsey, G. A., The Evolution of Charles Darwin (New York 1927).

DAS, "DESHBANDHU" CHITTA RAN-JAN (1870-1925), Indian nationalist. Das was the son of a Brahman intellectual. He received an English education, earned a fortune as a lawyer and made his first contact with politics as defense counsel in political cases. In 1917 he was president of the Bengal Provincial Conference and delegate to the Indian National Congress. In December, 1920, he made a political pact with Gandhi, abandoned his law practise and adopted a Spartan mode of life. Elected president of the Indian National Congress of 1921 he was unable to serve because of his arrest, followed by six months' imprisonment. The withdrawal of the boycott against the government and Gandhi's imprisonment in 1922 gave Das an opportunity to become the leading Nationalist figure. As president of the congress of 1922 he launched a new program, which urged participation in politics. His Swaraj party won a plurality in the Bengal legislature in 1923. and in the Calcutta Corporation in 1924, making Das mayor. In 1923–24 he played an important role in the trade union movement.

His program was representative of the liberal bourgeoisie of India, opposed to Great Britain and the native feudal aristocracy of princes. His demand for Swaraj (self-government) was never clearly defined. He desired decentralization, emphasizing village autonomy, but preferred to remain within the British Empire if it would assure scope for the growth and development of India's life. He often changed his policy. After opposing non-cooperation he accepted it, then abandoned it again for active obstructionism. The Swaraj party rejected the Montagu-Chelmsford reforms as insufficient, refused to form a ministry in 1923, opposed the payment of salaries to ministers in 1924 and 1925 and forced the suspension of diarchy in Bengal. With the rise of a revolutionary wave Das again changed his policy. His repudiation of violent revolution on ethical as well as practical grounds aroused the attention of the India Office and led to negotiations in which Das showed a readiness to cooperate with the imperial government even to the extent of forming a ministry and approving the Montagu-Chelmsford reforms. His labor policy was undefined; he offered no program beyond favoring some social legislation contradictory in essence neither to capitalism nor to western civilization. He argued that administrative decentralization would save the Indian masses from being ruled by a native bourgeoisie and bureaucracy after self-government had been attained. Communist doctrine he opposed vehemently. He set a personal example as a social reformer by encouraging his three children to marry outside their caste. A few months before his death he made over his properties to philanthropic enterprises administered by his wife.

J. VIJAYA-TUNGA

Consult: Ray, P. C., Life and Times of C. R. Das (London 1927); Roy, Evelyn, "The Metamorphosis of Mr. C. Das" in Labour Monthly, vol. iv (1923) 363-76; Kohn, Hans, Geschichte der nationalen Bewegung im Orient (Berlin 1928), tr. by M. M. Green (London 1929).

DATO E IRADIER, EDUARDO (1856-1921), Spanish jurist and statesman. His name is associated with the introduction into Spain of effective legal measures for the protection of workers. As minister of the interior he was called upon to promulgate two laws which mark

the beginnings of thoroughgoing Spanish labor legislation-the labor accident law of January 30, 1900, and the law of March 17, 1900, dealing with female and child labor. Although a representative of conservative interests Dato during the serious controversies aroused by the former law lent his influence as a jurist to the modern theory of occupational risk, defending it as more just, despite the added burden to employers, than the classic theory of liability. Thereafter he maintained a continuous interest in the progress both of social legislation in Spain and of international organization directed toward similar ends. During the World War he was absorbed as president of the ministerial council in preserving Spanish neutrality; but in 1920 he again manifested his interest in the reform movement by revitalizing the Instituto de Reformas Sociales and still more by creating the ministry of labor, which should constitute an official agency for extending the work of this institute. Ironically enough, Dato was assassinated, during a period of great unrest in Madrid, by a member of the syndicalist party.

C. Bernaldo de Quirós

Consult Loyarte, Adnán de, Eduardo Dato-Iradier (San Sebastian 1914), "Sesión necrología . . . en honor del . . . Eduardo Dato e Iradier . . . ," and Moreno Calderón, A., "Significación social y jurídica de Eduardo Dato" in R. Academia de Jurisprudencia y Legislación, Publicaciones, no. xxxvii (Madrid 1921), and no. lxi (Madrid 1922); Madariaga, Salvador de, Spain (London 1930) p. 389 418.

DA'ŪD AL-ZĀHIRI (b. Khalaf al-Isfahānī Abū Sulaymān) (815-83), Arabic jurist. Dā'ūd studied under various leading theologians and settled in Bagdad, where he acquired a large group of pupils. None of his writings are extant, but his doctrines have been reconstructed from quotations by later authors.

Dā'ūd al-Zāhiri means David the literalist, and his school of Mohammedan law marks a distinct reaction from the liberalizing tendencies of al-Shāfi'i. Of the four sources of authority in Mohammedan legal philosophy, the Koran, prophetic usage, analogy and the consensus of opinion, he accepted only the first two. He rejected analogy entirely and admitted the consensus of opinion only in the limited sense of the agreement of the immediate companions of the prophet. He based his law upon the Koran and the usage of Mohammed and insisted upon a literal interpretation of both. To go beyond the strict meaning of the words was to err in the direction of analogy. He had of course

eventually to admit analogy into his system; for as an earlier jurist had pointed out, the number of possible cases was unlimited, while the number of authentic decisions of the prophet was limited, a gap which at times could be bridged only by the use of analogy. Dā'ūd insisted, however, that where analogous cases were admitted they should be considered only as a proof and not as a source of law, a somewhat meaningless distinction. He also held that the reasons for a decision of the prophet could be investigated only when they were clearly stated. He refused to infer the reasons or to apply those stated in one case to a decision in another case.

The Mohammedan world soon discovered that the uncompromising doctrine of the Zahirite school made it impracticable. Most Moslems held that a Zahirite could not legally act as a judge. Yet for centuries Zahirite doctrine had a following among the common people, who could not understand the somewhat involved reasonings of other jurists and who preferred to base their law upon "the word of God" and the clear statements of His prophet. It gained a strong foothold in northern Africa and in Spain.

WILLIAM M. RANDALL

Consult: Goldziher, Ignacz, Die Zâhiriten, ihr Lehrsystem und ihre Geschichte (Leipsic 1884).

DAVANZATI, BERNARDO (1529–1606), Italian merchant and economist. After living for a time in Lyons he established himself as a merchant in Florence. Davanzati had many literary interests: he wrote a history of the Reformation in England (Scisma d'Inghilterra, Rome 1602) and his translation of Tacitus (Florence 1637) at once took its place as a masterpiece of Italian literature. He was a member of the Florentine and other academies.

Davanzati's contributions to economics are contained in two short essays: Notizia dei cambi (1582), dealing with foreign exchanges, and Lexione delle monete (1588), a lecture on money delivered before the academy in Florence; both of which are published in his Opere (ed. by E. Bindi, 2 vols., Florence 1852-53, vol. ii, p. 425-57). Except for a few unimportant quotations he does not appear to have been influenced by the canonistic literature on the legitimacy of usury and of dealing with foreign exchange. His approach is that of a merchant who analyzes facts and attempts to explain them. He recognizes the economic function of

the foreign exchange market and describes the variations of exchange rates around par and between gold points which are fixed by the amount of interest lost pending the transmission, the cost of carriage and risk. Between these points exchanges fluctuate according to the supply and demand of bills.

Davanzati was one of the first writers to point out the quantitative relationship between the volume of money and the level of prices and explained the great increase in prices in the sixteenth century by the influx of gold from America. He was in favor of free coinage and severely criticized princes who debased their currency for the sake of an immediate gain and to the detriment of public finance, creditors and society as a whole. He also noted the influence of scarcity and subjective utility as factors in price determination.

Luigi Einaudi

Consult: Noaro, G. C., La teoria dei cambi esteri di Bernardo Davanzatı (Rome 1920); Arias, G., "Davanzatı et Montanari" in Revue d'économie politique, vol. xxxvi (1922) 733-50; Sewall, H. R., "The Theory of Value before Adam Smith" in American Economic Association, Publications, 3rd ser., vol. ii, no. 3 (1901) 52-55.

-DAVENANT, CHARLES (1656–1714), English writer on economic and political subjects. From 1683 to 1689 Davenant held office as commissioner of excise and from 1705 to 1714 as inspector general of exports and imports. He was three times elected to Parliament, in 1685, in 1698 and in 1700. Whether or not he was influenced by his attachment to the Tory party and by his violent antipathy to the Whigs, whom he satirized in his animated True Picture of a Modern Whig (3 vols., London 1701-07), Davenant consistently attacked the Whig policy of restriction of trade with France. Fundamentally, however, despite isolated evidence in his acts and writings which seems to point toward economic liberalism Davenant was in agreement with the current mercantilistic theories of his time. He deplored evasions of the navigation acts and believed in regulating the development of plantations. When he declared in his Essay on the East India Trade (London 1696) that "trade is in its Nature free, finds its own Channel and best directeth its own Course," he added that government should take a "providential care" of its general workings. The chief arguments of this essay, written to defend the East India Company in the controversy over the effect of its importation of Indian

textiles on English woolens, were based on practical rather than theoretical grounds, namely, that large quantities of these imports were reexported to the continent and that any limitation imposed by England would divert the trade to the Dutch. English interests would best be served by a reduction in the production costs of English woolens so that wider markets could be gained abroad. This purpose could be achieved if the poor were properly set to work, for Davenant unreservedly accepted the contemporary assumption that a large population, fully employed and living near the subsistence level, would necessarily contribute to the increase of national wealth. In monetary questions Davenant was the most enlightened of his contemporaries. His Discourses on the Publick Revenues and on the Trade of England (2 vols., London 1698) asserted that "Money is at Bottom no more than the Counters with which Men in their dealings have been accustom'd to reckon" and that its value, like that of all commodities, was determined by its "want or scarcity." Perhaps his most notable observation on the money problem, contained in the same treatise and emphasized by his citation of the example of Spain, was that "Gold and Silver are often a surfeiting Diet to a Nation; and there may be as well too much as too little of this kind of Treasure, if it be not turn'd to proper Uses." Davenant was deeply interested in political arithmetic, which he defined in terms that have since become classical as "the art of reasoning by figures upon things relating to government." In his Essay upon the Probable Methods of Making a People Gainers in the Ballance of Trade (London 1699, 2nd ed. 1700) he endeavored to correct what he regarded as the lamentable recklessness of his adversaries in the use of figures by extensive quotations from the estimates of Gregory King. It was through Davenant's Essay that these estimates (which were otherwise available only in manuscript) became public and served as the basis for much eighteenth century statistical discussion.

J. F. REES

Other works: An Essay upon Ways and Means of Supplying the War (London 1695, 3rd ed. 1701); Reflections upon the Constitution and the Management of the Trade to Africa, 3 vols. (London 1709); Essays upon the Ballance of Power (London 1701); Essays upon Peace at Home and War Abroad (London 1704). His collected works, edited by Sir Charles Whitworth, were published in five volumes (London 1771).

Consult: Ballière, Yvon, L'oeuvre économique de C. Davenant (Paris 1913); Casper, Willy, Charles

Davenant; Ein Beitrag zur Kenntniss des englischen Mercantilismus, Beiträge zur Geschichte der Nationalökonomie, vol. vii (Jena 1930); Ashley, W. J., "The 'Tory Origin of Free Trade Policy" in his Surveys, Historic and Economic (London 1900) p. 268-303.

DAVENPORT, HERBERT JOSEPH (1861-1931), American economist. Davenport spent two years at Harvard Law School and two more in study abroad and received the doctorate in political economy from the University of Chicago in 1898. He returned to high school teaching for another four years and in 1902 became an instructor at the University of Chicago. In 1908 he went to the University of Missouri as head of the department of economics and from there to Cornell University, where he taught from 1916 to 1928. Davenport commands consideration both as an economic theorist and as a teacher. He was the author of several economic textbooks and of numerous articles in economic periodicals, such as the Journal of Political Economy, the Quarterly Journal of Economics and the American Economic Review. His two principal books are Value and Distribution (Chicago 1908), a critical survey of economic doctrines and The Economics of Enterprise (New York 1913), an exposition of his own system. He left in manuscript a critical study of Marshall which represents in a sense the culmination of his criticism of classical and neoclassical theory.

In economic theory Davenport's guiding principle was to keep attention fixed on the facts of price and price relations and on competition between gain seeking entrepreneurs as the process determining prices, including the distributive payments. In all this he recognized the conservative, back-to-Smith character of the emphasis and also acknowledged the leadership of Cannan in "the return to the better way." This approach at once involved the scrapping of the Ricardian rent concept and the reduction of utilities and costs to purely relative terms. Davenport was thus the leader in a vital crusade against all notions of the determination of prices or control of economic activity by real values or real costs. The detailed features of his work involve issues which are more controversial. One point which he greatly stressed and for which he claimed originality was the loan-fund doctrine of capital. Here he grasped a fundamental problem, although he may not receive credit for a major original contribution to its solution. The postwar work on money and economic cycles by British, German and Scandinavian writers has

built rather upon Wicksell, who undoubtedly had a deeper insight; but Davenport arrived at his views independently, although they were not altogether new. An important limitation of Davenport's thought was that he never learned to think on economic problems mathematically even in such fields where little special technique was required. Therefore he never fully understood some essentials in a pure theory treatment, such as continuous variability and the role of small increments, especially in relation to variability of proportions of joint factors, as well as the notions of mutual determination and general equilibrium.

These technical deficiencies of Davenport's thought are probably explained by a division of interest, the extent of which he never realized. Davenport was a reformer and sometimes, perhaps, a reformer before he was a scientific analyst. His reformism ran in the direction of "stalwart individualism," that is, contrary to the state socialism which dominated social radicalism in his generation. Very significant is the final sentence of the preface to The Economics of Enterprise, in which he inveighs against monopoly and especially against "the monopoly, so far enjoyed by the reactionaries, of all authoritative economic doctrine." Another discordant factor was the combination of a logical mind and a craving to generalize with a bent for realism, somewhat opposed to abstraction and theoretical refinement as such. He even liked to play with ideas and words, so that his works are not easy reading; but he was not concerned to think his conflicts through. In particular he did not carry his anti-apologetic attitude in theory through to an analysis of the grounds for failure in the competitive system nor did his radical individualism lead to an elaboration of a concrete program of reform. He combined an almost fervent admiration for Veblenism with personal work conspicuously conservative and "sound." So too he could advocate the single tax "in principle" while opposing its inequity in application. For such reasons his work lacked apparent unity and constructiveness and he tended to remain something of a voice crying in the wilderness.

As a teacher especially Davenport was a radical. He believed in education as a creative activity on the part of the student and abhorred lecturing to his classes, although he loved rhetoric and dialectic and on the platform could be impressive and even moving. Moreover, he had the moral courage lacking in most teachers of

similar convictions: he could remain silent before a class until someone else started a discussion and even while the group wrangled over irrelevancies. He was a real teacher.

FRANK H. KNIGHT

DAVID, EDUARD (1863-1930), German economist and politician. He studied history and philosophy and became a college teacher but soon abandoned this profession and started his public and political career as a member of the Social Democratic party, which he had joined as a student. He was one of the very few academically educated people who joined the Social Democratic party during the last century, and his influence on its development in Germany was manifold. He founded and edited several Social Democratic newspapers, and his scientific works, which dealt especially with the agrarian problem, were of greatest significance. Chief among them was Socialismus und Landwirtschaft (Berlin 1903, 2nd ed. 1922). In decided contradiction to the teachings of Karl Marx, David tried to prove that the agrarian development was not leading inevitably to the establishment of large sized holdings and that the maintenance and further enlargement of a peasant class under a system of intensified agriculture was economically necessary and desirable. He maintained that this was compatible with socialism and favored peasant proprietorship. The practical agrarian policy which he and the Social Democratic party followed was largely based on these results of his studies. David took an active part in the struggles which were taking place at the turn of the century in the Social Democratic party on the question of whether the party should follow a more evolutionary or a more revolutionary program. He was on the whole a follower of Bernstein and an opponent of Kautsky and Bebel and was one of the ablest leaders of the revisionists.

David was also an important parliamentary figure. He was a member of the parliament of Hessen from 1896 to 1906 and of the Reichstag, where he often exerted considerable influence, from 1903 until his death. His influence was greatest in February, 1919, when he became the first president of the national convention which drew up the new Weimar constitution of the German Republic. One of the first German Social Democrats to accept a high political office, David entered the cabinet during critical periods in German history. He became under secretary of foreign affairs under the kaiser in

October, 1918, when the imperial government was placed on a parliamentary basis; and he was a minister of the republican government from February, 1919, until June, 1920. During the latter period as minister of the interior David was responsible for the final steps and decisions in drafting the new constitution and in passing it through the Constituent Assembly.

Otto Nathan

THOMAS WILLIAM RHYS DAVIDS, (1843-1922), British orientalist. He was born in Colchester and after studying Sanskrit with Stenzler at Breslau went in 1864 as a civil servant to Cevlon, where he studied under Buddhist monks, especially Yatrāmullē. He was a notable popularizer and produced the little manual Buddhism (London 1878, 23rd ed. 1914), which is the basis of popular western ideas on the subject and is still a standard work, and others of like nature. As founder of the Pali Text Society and its chief scholar he performed a task as important for the study of history, anthropology, philology and religion as was the publication of the Vedas, inasmuch as the works of the Buddhist elders made available by the society are proving of great and increasing value in correcting and amplifying those of the Brahmans. After nearly half a century of strenuous work Rhys Davids left the Pali Text Society with its library almost complete, with about 25,000 octavo pages printed and with a great Pali dictionary well under way. His widow and his chief helper, Dr. Caroline Rhys Davids and Dr. William Stede, are completing the work.

Davids was professor of comparative religion at Manchester from 1904 to 1915. Although he succeeded in reconstructing the political and social setting of early Buddhism he did not see it clearly enough as an organic part of Brahmanism and assumed too readily that the Pali canon represents a primitive Buddhism. He made a rationalist of the Buddha and of Nibbana an ethical rather than a mystical experience, and he gave too little place to textual criticism.

K. J. Saunders

DAVIDSON, THOMAS (1840–1900), Scottish born philosopher and educator. After teaching at various schools in Great Britain and Canada, and in St. Louis under W. T. Harris. Davidson in 1875 broke away from academic connections to become a free lance scholar. In the early sixties he had imbibed the religious radicalism then emanating from Germany and from revolution-

ary French émigrés, like Louis Blanc, at that time in London. But in the eighties he became closely associated with the Rosminian Order of Charity in Italy, translated and edited in 1882 Rosmini's Sistemo filosofico and was on the point of joining the editorial staff of the Vatican Edition of St. Thomas. His Scottish individualism, however, made it impossible for him to accept the discipline and politics of the Catholic church, much as he admired its art and religious philosophy. In such a mood during a short stay in London in the winter of 1882 he interested a group of young men and women in a society for religious, ethical and social regeneration. With this nucleus the Fellowship of the New Life was formed, with Havelock Ellis, Edward Pease, William Clarke, Hubert Bland and Percival Chubb among its members. The majority, led by Frank Podmore, soon broke away and organized the Fabian Society, devoted primarily to political and economic questions and taking a socialist turn. The fellowship continued, however, for fifteen years and published a quarterly, Seedtime, from 1889 to 1898. In 1884 Davidson organized an American branch of the fellowship. In the same year he became associated with the Concord School of Philosophy and thereafter himself conducted summer schools of philosophy or of the cultural sciences, first at Orange, New Jersey, then at Farmington, Connecticut, and finally from 1800 to the end of his life at Glenmore, near Keene, in the Adirondacks. In the final stage of his thought he tried to establish a religious basis for democracy in a pluralistic, individualistic and extremely subjectivistic philosophy. He became associated in 1898 with the Educational Alliance on the East Side of New York and in his plans for a Breadwinners' College found the educational work most congenial to his interests and ideals. His plan was to make cultural studies available to persons working in the daytime. In the last two years of his life he gave the movement such an impetus that it continued for eighteen years after his death.

Principal works: The Education of the Wage Earners, ed. by C. M. Bakewell (Boston 1904); "American Democracy as a Religion" in International Journal of Ethics, vol. x (1899–1900) 21–41; A History of Education (New York 1900); Rousseau and Education according to Nature (New York 1898); The Education of the Greek People (New York 1894); Aristotle (New York 1892); The Parthenon Frieze and Other Essays (Boston 1886).

MORRIS R. COHEN

Consult: Memorials of Thomas Davidson, ed. by William Knight (London 1907).

DAVIES, DAVID (d. 1819?), English writer on the poor laws. Davies, the rector of a rural parish in Berkshire, wrote a protest, The Case of Labourers in Husbandry (Bath 1795), concerning the struggle for subsistence of the class represented by his parishioners. His book, addressed to the newly formed Board of Agriculture, is based chiefly upon a series of brief family budgets gathered by himself and other clergymen during 1787; it thus antedates Sir Frederick Eden's more famous series by nearly a decade. Davies, writing just before the scarcity of 1794-95, already draws a very black picture. The poor rate, he finds, is being used in lieu of wages. Whereas at least ten shillings is necessary to support life in a family of five, the common weekly wage is only seven or eight shillings. At least a fifth of his own parish receives relief. Not one child in three receives any schooling. Davies' budgets bear him out: his families spend from 75 to 80 percent of their income on food ("it is but little that the belly can spare for the back"), and that food is almost entirely bread.

Davies advocates a minimum wage, similar to that subsequently embodied in Whitbread's bill, to be set, consonant to the Statute of Elizabeth, by the local justices of the peace in accordance with changes in the price of bread. It should suffice to support two young children. For additional children the poor rate should furnish partial payment in kind without attaching to the recipient the stigma of pauperism. All persons over eight years of age should support themselves. For the unemployed, after proper registration, there should be another automatic allowance equal to two thirds of full wages. Parish officers are to be responsible for furnishing work wherever possible.

Davies is typical of the best humanitarianism of his period. Although he is temperate and circumscribed in suggesting remedies his description of conditions is strikingly frank.

DOROTHY W. DOUGLAS

DAVIES, (SARAH) EMILY (1830-1921), English feminist and educator. A sister of J. Ll. Davies, who was cofounder with F. D. Maurice of the Workingmen's College, she became during the sixties a leading figure among the pioneers of the women's movement, to which she had been introduced by her friend Madame Bodichon. When in 1864 a Schools Enquiry Commission was appointed to make the first systematic survey of English secondary education, Emily Davies recognized a unique oppor-

tunity for directing the government's attention to the neglected question of girls' education. She agitated for and secured the inclusion of girls' schools in the inquiry, a step which led directly to the establishment of the modern system of girls' schools and to university education for women. In 1865 largely through her exertions Cambridge opened its local examinations to women. She then organized a movement for establishing a woman's college of university rank, which led to the foundation of Girton College, Cambridge, opened in 1869. For thirty-eight years she devoted to this college her remarkable powers of organization.

During her earlier years in London Emily Davies took part in the first women's suffrage agitations (1865–67). She resigned this work in order to devote herself to Girton, but resumed it in 1904 and voted at the age of eighty-nine in the first election open to women.

Emily Davies' great aim was to secure for women equality of opportunity with men, and it is largely because of her that there is now no intellectual field in England from which women are excluded. Although her principal achievements were in education, she was an organizer and agitator rather than an educationist. Her bent of mind was conservative and in her later years she strongly opposed the militant suffrage movement. She published two books, *The Higher Education of Women* (London 1866) and *Thoughts on Some Questions Relating to Women* (Cambridge, Eng. 1910), as well as many magazine articles and pamphlets.

BARBARA STEPHEN

Consult: Stephen, Barbara, Emily Davies and Girton College (London 1927); Strachey, Ray, "The Cause" (London 1928).

DAVIS, JEFFERSON (1808-89), American statesman. Davis had a humble birth and a migratory childhood, but these were offset by a West Point education, life among Mississippi plantation gentry and the strong personal influence of a prosperous and patriarchal elder brother. Entering federal politics as a Democrat he supported the war against Mexico and served in it with distinction as a colonel of volunteers. On his return to Washington he was, whether as senator or secretary of war, a steadfast advocate of enlarging and improving the United States army. From the time of the Wilmot Proviso, however, he was most keenly concerned with safeguarding the South against the possibility that northern power would overturn the existing

racial adjustment as embodied in Negro slavery. Dissatisfied with the Compromise of 1850 he contemplated secession with some favor at that time, adopting Calhoun's doctrine of state sovereignty and insisting that slave territory must be extended if the Union was to be preserved. The revival of the crisis in 1860 put him into the forefront of the movement for southern independence and paved the way for his selection as president of the Confederate States. In that office he showed more weakness than strength. His financial policies were unwise and his interferences with strategy sometimes disastrous; his avoidance of personal contacts and particularly his proneness to controversy were damaging to public morale. In his second year as president he lost control of the Confederate Congress, partly because of the doctrine of state sovereignty, which was turned against him when his intense concern with waging effective war led him to resort to policies of doubtful constitutionality. When the drain on the Confederate armies became too great he entertained the idea of enrolling slaves as soldiers and emancipating them after the war, but this ran too radically counter to ingrained southern ideas to escape violent opposition. Before the end of the war ill health and manifold misfortunes reduced him to psychopathic denials of reality. The collapse of the Confederacy, however, found him sane enough. In flight from Richmond, seeking an exit from American jurisdiction, he was captured in Georgia and imprisoned but was later freed. In a mellowing, dignified old age he was widely beloved among the southern people as a relic and symbol of the "lost cause."

Ulrich B. Phillips

Consult: Davis, Jefferson, The Rise and Fall of the Confederate Government, 2 vols. (New York 1881); Jefferson Davis, Constitutionalist, His Letters, Papers and Speeches, ed. by Dunbar Rowland, 10 vols. (Jackson, Miss. 1923); Davis, V. H., Jefferson Davis, Expresident of the Confederate States of America, a Memoir by His Wife, 2 vols. (New York 1890); Dodd, W. E., Jefferson Davis (Philadelphia 1907); Eckenrode, H. J., Jefferson Davis, President of the South (New York 1923); Winston, R. W., High Stakes and Harr Trigger: the Life of Jefferson Davis (New York 1930); Cutting, E. B., Jefferson Davis: Political Soldier (New York 1930).

DAVITT, MICHAEL (1846-1906), Irish nationalist and agrarian reformer. Davitt, who in contrast to Parnell and other Irish nationalist leaders was born of peasant stock, lived as a child in Lancashire, where his family had

emigrated following the Irish famine of 1847. His father had been an agrarian agitator in Ireland, and from an early age Davitt himself was associated with the Fenian movement. In 1870 he was convicted of treason felony and sentenced to fifteen years penal servitude. After serving seven, however, he was released on ticket of leave and followed his family to America. During his years in prison he had convinced himself that extreme revolutionary methods should be abandoned in favor of a constitutional program linked to the agitation for land reform. These views were confirmed and expanded by his association with Henry George in America. On his return to Ireland, therefore, Davitt attempted, although with little official encouragement, to institute a new type of nationalist movement, contrasted on the one hand with Fenianism, on the other with Parnell's parliamentarianism. In 1870 he founded the Land League, with a platform declaring for the abolition of landlordism. For a time there was a close alliance between Davitt and Parnell, which was seriously weakened, however, in the period following the suppression of the Land League (1882) by Parnell's repudiation of Davitt's campaign for land nationalization. After the O'Shea scandal Davitt joined the anti-Parnellite section of the nationalist movement but subsequently helped William O'Brien found the United Irish League, which effected a reconciliation with the Parnellites. He was strongly opposed to the Wyndham Land Purchase Act of 1903, which because of its extreme concessions to the landlords he regarded as a nullification of his life's work. This work constitutes the connecting link between revolutionary and constitutional nationalism as well as between nationalism and agrarian reform. Davitt was also instrumental in bringing the Irish Nationalist party into contact with Fenians in America. His social views were more radical than those of his colleagues in the nationalist movement, being colored by collectivism, agrarian socialism and anticlericalism. His personal character, however, was so high and his patriotism so disinterested that he secured the respect and admiration even of those who disagreed with his views.

GEORGE O'BRIEN

Important works: Leaves from a Prison Diary, 2 vols. (London 1884-85); The Defence of the Land League (London 1891); Life and Progress in Australia (London 1898); The Fall of Feudalism in Ireland (London 1904).

Consult: Sheehy-Skeffington, F., Michael Davitt

(London 1908); Cashman, D. B., The Life of Michael Davitt (Boston 1881); O'Hara, M. M., Chief and Tribune, Parnell and Davitt (Dublin 1919); Hardie, J. K., "Michael Davitt, the Democrat," and Kettle, T. M., "Michael Davitt, the Nationalist" in Socialist Review, vol. i (1908) 410-22.

DAWES PLAN. See REPARATIONS.

DAWSON, SIR JOHN WILLIAM (1820-99), Canadian educator. Dawson was educated at Pictou Academy, Nova Scotia, and at Edinburgh. He was a pioneer geologist and earnestly encouraged the Canadian geological surveys upon whose work the great Canadian mineral development since 1890 has been based. He had a great gift for popularization, and in books and articles running to editions of tens of thousands he labored on behalf of his generation for the reconciliation of natural science with religion and against the Darwinian variation theory. No nineteenth century educator with the exception of Ryerson left a broader mark on Canada. Convinced not only that popular education was necessary in the Canadian communities which had recently become self-governing but that it must keep pace with the growth of scientific knowledge, he set up from 1850 to 1853 the comprehensive educational system of Nova Scotia and carried his ideas to New Brunswick in 1854 and to bilingual Quebec in 1855. Here he laid down the main outlines of a system to preserve and encourage the culture of the English speaking minority. Also, by affiliating McGill University with smaller institutions in Quebec and elsewhere in Canada he started a process which ultimately extended the university's influence nationally from the Atlantic to the Pacific. He was principal of McGill from 1855 to 1893. He found it on the edge of oblivion and, having won the support of wealthy Montrealers, left it one of the world's great universities, whose professional graduates not only served the growing Canadian community but went as well to Great Britain and the United States. As early as 1869 Dawson endeavored to extend higher education to women, although he objected to coeducation, and he was able to provide university classes for them after 1884. His great mark on national education, however, rose from the insistent emphasis which he placed on the close relation of scientific advance to professional training. To him may be credited a large share in promoting high standards of Canadian education in medicine and the various branches of engineering (notably, of course, geology and mining) as well

as in pure science. The impetus for the study of anthropology in Canada was provided by Dawson's son, George Mercer Dawson (1849–1901).

Dawson's autobiography, Fifty Years of Work in Canada, was published posthumously (London 1901).

J. BARTLET BREBNER

Consult: Ami, II. M., "Sir John William Dawson" in American Geologist, vol. xxv1 (1900) 1-48, with complete bibliography; Macmillan, C., McGill and Its Story (Montreal 1921); McIlwraith, T. F., "The Progress of Anthropology in Canada" in Canadian Historical Review, vol. xi (1930) 132-50.

DAY NURSERY. The day nursery, or crèche, is primarily a by-product of the world wide industrialization of women's work. The participation of mothers of young children in occupations additional to those of housekeeping and family care preceded the industrial revolution, but it is only within the last hundred years that any considerable number of mothers of young children have engaged in work which takes them away from the child and the home. At the outset of this period the creation of the day nursery was primarily a result of charitable effort to alleviate the problem of neglected children. At the present time day nurseries may be classified as charitable, commercial, industrial or employers' crèches in factories or factory vicinities and crèches which are municipally controlled or aided either as a separate unit or in connection with schools or other public institutions.

The rise and most rapid development of the day nursery movement in the nineteenth century occurred in France, although the first day nursery was founded at Detmold, Germany, in 1802. The early realization of the effects of a constantly declining birth rate in France at the time when the birth rate in other European countries was rising and of the high percentage of infant mortality in districts housing working mothers has undoubtedly been a factor in this development. The first day nursery in France to survive was founded in 1844 at Chaillot, a suburb of Paris, by Firmin Marbeau, whose investigations as to the causes of excessive infant mortality, especially for children under two, led him to correlate the death of children with the neglect due to the absence of their working mothers. In 1846 Marbeau founded the Crèche Society of France with the idea of fostering such child care throughout the country, and within thirty years there were 130 crèches in France, 40 in the department of the Seine alone. Other continental countries followed the example of France

A legal status was definitely given to the creche in France by decree of 1897 and provision was made for regular inspection of its operations. Government encouragement, including local and national subsidies granted to those whose requirements met standards, has influenced the development of the day nursery movement there.

Factory crèches with provision for employed mothers to leave employment at certain periods in order to nurse their babies have been a continental development, often meeting with public approval and support. In Italy the first factory nursery, created through a cooperative effort of workers and employers, was sponsored by the organization, Umanitaria, in 1909. The first factory crèche in France was opened in 1846 at Beauvais, and by 1912 such crèches had been established in fifty factories.

The earliest factory crèche in Germany was opened in 1874 at Linden, near Hanover, and in 1877 a Crèche Association was organized in Berlin. By 1913 day nurseries existed in most of the large cities, and in that year, impressed by the extensive industrialization of women's work, the minister of the interior urged factory inspectors to advocate the institution of factory crèches. Many municipal crèches have been opened in Germany since the war and in Dresden municipal authorities have undertaken the entire financial responsibility. The day nurseries in Charlottenburg and since 1917 in Lübeck have been connected with the elementary schools. But in spite of this rapid growth most children of working mothers are still "boarded out"- left to the care of relatives or neighbors—a type of care preferred by many competent authorities in Germany.

As the industrialization of women's work increased, other countries—Spain, Italy, Austria, the Scandinavian countries, Russia, India and Japan—adopted the day nursery idea.

In England the first day nursery was opened in 1850, but due to lack of public support and the meagerness of private philanthropic efforts the movement has not spread as rapidly as on the continent. Somewhat similar experiments, such as the Country Home for Nursery Children at Tunbridge Wells, which is open the year round for day nursery and other children in need of such care, were later undertaken.

In the United States the movement was at its outset largely philanthropic. The first day nursery in the country was opened in 1854 by the Nursery and Child's Hospital of New York

City to provide daytime care for children of working mothers who had been patients at the hospital. The oldest institution still in existence is that which was founded in Troy, New York, in 1858. The social effects of the Civil War led to the establishment of the First Day Nursery in Philadelphia in 1863 and to similar nurseries elsewhere. In addition to the philanthropic enterprises there sprang up individual enterprises on a commercial basis. The movement was sufficiently widespread by 1898 to lead to the foundation of a National Federation of Day Nurseries.

The most important developments in the day nursery movement in the United States and in Europe as to both the number of nurseries established and the type and quality of care provided took place during the World War and have continued since that time. The sudden great increase in the number of working mothers, due to the shortage of other types of labor, led to a realization on the part of most European countries of the need to provide some form of care for their children under government supervision and often with government aid. The governments of England, France and Germany gave their sanction and aid to the opening of day nurseries in munition centers, and in Italy alone eight hundred factory nurseries, nidi (nests), were opened during the war period. France by its legislation of 1917 provided allotted rest periods and in cases where more than a specified number of women were employed a rest room for mothers of nursing children. Subsidies were granted to day nurseries, amounting in the case of the English nurseries to 50 percent of their expenditure, and were regarded as measures both of war relief and of education. The reported existence in 1922 of 150 day nurseries in England and Wales may be laid to this encouragement. In Scotland, where the system of boarding out is preferred, only 20 such day nurseries were reported. These subsidies were considered necessary supplements to the provisions through maternity grants for financial assistance to mothers during the period of confinement. There has developed an increasing tendency for public bodies to make government supervision more stringent in order to develop new and better standards of housing, equipment, medical provision and personnel.

In the United States no similar system of public day nurseries or of public aid or subsidy to private institutions developed during the war. Nevertheless, in 1923 there were 22,822 children

in 613 nurseries; and the magnitude of the problem, particularly as it was disclosed by studies of the high rate of infant mortality among children of working mothers, led to an awakening of interest on the part of government bureaus and social workers' organizations. Up to 1919 the discussion of the day nursery was not scheduled on the programs of the National Conference of Social Work; state surveys of work for children, prepared by national welfare organizations, made little or no mention of the nursery. The lack of public control and supervision led to grave abuses especially in the commercial day nurseries, which were closely allied to the notorious "baby farms." In 1924 out of forty-eight states only six had some measure of state protection and thirteen had no state or city provisions for licensing of day nurseries. At the present time state boards of health and welfare are exercising increasing control over nursery work.

Part of the neglect of the problem has been due perhaps to the widespread disparagement of the day nursery as an institution of child care. In all countries there has been a belief that public funds might better be apportioned among the mothers themselves. In many instances there has been a preference for the boarding out system. It has been pointed out that the day nurseries have never been popular with working mothers either in the United States or in Europe. A study made in Philadelphia in 1918 showed that out of 558 working mothers with small children only 9 percent used day nurseries, although the families lived in parts of the city where day nurseries had long been established. Reasons given for this prejudice are fear of institutional care, the stigma of charity, the strain of traveling, the exclusion of the child for a slight illness, the occasional quarantine of the nursery itself. Moreover, contrary to European practise the better nurseries in the United States have always tried to secure for very young children alternate types of care through relief from family agencies or through foster home or institutional care. Some nurseries refuse children under nine months of age, and others have a minimum of two or even three years.

It is interesting to note in this connection a procedure, undertaken in 1927 by the First Day Nursery of Philadelphia and now being contemplated by another Philadelphia nursery, which may vitally affect the future of nursery work. Because of the shift of population the First Day Nursery had become so difficult of access that

the building was sold, and instead of relocating the nursery an experiment in foster home care and placement of children in homes near those of their parents has been undertaken. The new elements in the plan are the regular service of the trained case worker and the supplementing in most cases by the nursery of the cost of board.

Failure to encourage the day nursery movement also has roots in the fear that its spread would be an added inducement for mothers to enter industry in such numbers as seriously to endanger child and family welfare and in addition to affect detrimentally wage rates for men workers and the introduction of systems of maternity insurance and pensions. This has shown itself in the discouragement in England and the United States of the factory crèche, even during the war.

Reports indicate, however, that the mother of the day nursery child is in many cases the resourceless mother without relatives, friends or husband to assist in child care or support. The largest number of children in the day nurseries of the United States today come from homes in which families have been broken by the death of one parent, by separation or desertion. A recent study by the Federation of Day Nurseries of its affiliated nurseries in New York and Philadelphia shows that of the total number of families whose children are in day nurseries 37 and 51 percent respectively come from such homes. The percentage of the total number of children is probably much higher and in one state ran as high in 1924 as 89 percent. Moreover, in only 8 cases out of 100 in that state was the wage of the father who could be called upon for support adequate to provide for the minimum wants of the family.

A more realistic attitude therefore, especially in view of the fact that not all states provide mothers' pensions or other forms of family assistance and that the adequacy of the provision varies from state to state, has led to a movement for the improvement of conditions within the day nurseries.

This movement has had several aspects. There has been an increase of legislative regulation and inspection of day nurseries, public and private; standards of equipment and personnel have been improved. The nursery has been used in experiments such as that undertaken by the Fitch Crèche in Buffalo as a training school for workers. It has also been extended in function as an educational institution for both experimental education and child guidance work. It

has been demonstrated that the extension of such functions can transform the day nursery from a mere receiving agency into an agency offering health service and other benefits to the child and his family.

The development of the nursery school movement in England, where it originated, and in the United States, although arising to meet needs of other groups, has to some extent justified the separation of mother and child for part of the day in order to group children for educational activities and has influenced the introduction of nursery school methods into some of the more advanced day nurseries. Thus, for instance, the Bethlehem Day Nursery of New York City has a progressive nursery school; a behavior clinic for mental hygiene service is provided for the nurseries of Cleveland; and in many instances the nursery and day nursery school are combined. There is still, however, a functional distinction to be made between the day nursery and the nursery school. The day nursery may embrace the nursery school but their goals are different, for even when nursery school facilities and opportunities are added, the most important factor in deciding whether to grant or withhold aid is the economic status of the family. Yet most progressive day nurseries feel that it is within their widened scope to offer to children of lower economic status the same service the nursery school extends the child of the wealthier parent, who selects the nursery school he can afford.

The connection between school and day nursery has to some extent been fostered by public school authorities, especially in Germany. In the United States, as a result of an attempt during the war to keep in school high school children who might otherwise be called upon to substitute for their mothers in child care, Los Angeles public school authorities have created day nurseries for the younger children, and thirty of the thirty-eight day nurseries in the city are financed and controlled by the public school authorities.

It is interesting to note that in the intensive child saving program carried on in Russia after 1917 the day nursery played a considerable part. In 1917 there existed 14 day nurseries in industrial neighborhoods; during the famine period these reached a peak number of 914 in 1922; in 1925, however, there were still 584 in existence. In the period from 1913 to 1923 the rate of child mortality decreased from 27 to 17 percent. The exact relationship between the day nursery movement and the lowering of the infant mor-

tality rate in any country would of course be difficult to prove.

With improvements in management, provisions for adequate regulation by public bodies and close coordination with other agencies for child care the day nursery may very well function as an effective agency for child care. Its role in any program of social welfare is interrelated, of course, with the broader problems of child welfare and of the continued industrialization of women's work.

HELEN GLENN TYSON

See: CHILD; WOMEN IN INDUSTRY; MOTHERS' PENSIONS; PRESCHOOL EDUCATION.

Consult: National Society for the Study of Education, Preschool and Parental Education, Yearbook, vol. xxviii (Bloomington, Ill. 1929) pt. i, ch. v; United States, Women's Bureau, The Family Status of Breadwinning Women in Four Selected Cities, Bulletin no. 41 (1925); United States, Children's Bureau, Infant Welfare Work in Europe, by Nettie McGill, Publication no. 76 (1921); Wright, H. R., Children of Wageearning Mothers (Washington 1922); Baker, S. J., "Day Nursery Standards" in United States, Children's Bureau, Standards of Child Welfare, Conference Series, no. i, Bureau Publication no. lx (1919) p. 219-33; Brenton, H. M., A Study of Day Nurseries (Chicago 1918); Haines, A. J., Health Work in Soviet Russia (New York 1928); Carnegie United Kingdom Trust, Report on the Physical Welfare of Mothers and Children in England and Wales, 3 vols. (Liverpool 1917); Philadelphia, Association of Day Nurseries, Day Nursery in Its Community Relations, by H. G. Tyson (Philadelphia 1919); Gesell, A. L., The Preschool Child from the Standpoint of Public Hygiene and Education (Boston 1923) ch. iii; Forest, Ilse, Preschool Education (New York 1927) ch. ix; Association of Day Nurseries of New York City, "Day Nurseries in a Changing Industrial World" by Helen Hart in Report, 1926 (New York 1926) p. 15-24; Pennsylvania, Department of Welfare, "Day Nurseries in Pennsylvania: a Study Made for the Bureau of Children" by H. G. Tyson in Bulletin, no. xvii (rev. ed. Harrisburg 1925); Hibbs, H. H., "The Influence of Economic and Industrial Conditions on Infant Mortality" in his Infant Mortality: Its Relation to Social and Industrial Conditions (New York 1916) ch. vi; London County Council, Public Control Department, Crèches or Day Nurseries (London 1905); Great Britain, Local Government Board, The Welfare of the Children of Women Employed in Factories in France and Germany: Report (London 1919); Marbeau, Firmin, Crèches pour les petits enfants des ouvrières (7th ed. Paris 1873).

DEADLOCK. In modern democratic governments the legislature has attained so dominant a position that the dangerous form of deadlock between it and a powerful executive rarely occurs. Deadlocks between the king and the legislature, like that in England which led to the revolution of 1648 and like those between

the king and the sovereign courts, or parlements, in France which hampered the administrative programs of the French royal governments, are hardly possible in a modern government where there is direct responsibility to the people on the part of both legislature and executive. Deadlocks in a popular government may occur, however, as a result of conflict between the houses in a bicameral legislature or through party differences. They may arise over the passage of laws or the voting of taxes or appropriations. While inability to pass legislation may seriously hamper the program of a government, the latter can continue to function so long as funds are available. Legislative failure to vote taxes or appropriations, however, may absolutely prevent the continued existence of the government and may lead to revolution or other violent extraconstitutional action.

A deadlock between two houses of a legislature may become very serious where the houses represent different classes of the population. An outstanding case is the Parliament of England with the hereditary House of Lords, having a permanent conservative majority, and the elective House of Commons. As the suffrage was extended the Commons became the active body in legislation reflecting public sentiment. The threat of deadlock was finally ended by establishing the supremacy of the House of Commons and leaving the Lords only the power of a delay for a certain time.

In parliamentary governments like that of France, where both chambers are elective and where the economic interests of majorities and the party composition in the two chambers may differ, there is a possibility of serious deadlock. In practise, however, party and personal responsibility to the voters acts as a check on a situation that has in it the seeds of revolution.

Deadlocks are always possible in the American Congress between the House of Representatives and the Senate. Every two years the whole House of Representatives, but only one third of the Senate, is elected, so that one party may win control of the House while the other remains in power in the Senate. The different relative influence of different geographic areas, resulting from the right of each state to have two senators while congressmen are allotted on a basis of population, may result in the predominance of different interests in the two houses. The power of the minority in the Senate to obstruct, especially by unlimited debate, legislation approved by the House forces

consideration of the minority point of viewan important safeguard in a popular government-but may lead to deadlock with the House, which is more effectively controlled by the party machinery. The Senate has at times threatened to refuse to vote all or part of the appropriation bills in order to force certain action by the dominant party in the House and by the president. One check on deadlock lies in the responsibility to the popular vote. As members of a party senators and representatives are obliged to consider the effect of persistence in a deadlock on the fortunes of their party; as individuals they are subject to the pressure of their constituents. Another check lies in the multiplicity of bills and variety of policies depending on action in Congress, so that the opportunity for compromise is very great. Furthermore, a deadlock may continue for a long period on a particular measure without interfering seriously with the working of the legislative machinery in other fields. Finally, the lack of a definite majority in Congress does not prevent the existence or continued functioning of the independent executive.

Party control lessens the danger of deadlock between two houses, but party and group are a prolific source of difficulty in each house. In the United States the loose two-party system permits the formation within the parties and frequently across the parties of more or less temporary blocs representing particular interests. Such blocs may result in deadlocks on particular measures.

Under the parliamentary form of government, where the executive is a committee of parliament, party rivalries may cause a deadlock. Under a two-party system with strict party control deadlock in a parliament disappears, since the executive ministry is also the steering committee of the parliament and can force through its legislative as well as its financial program. If it loses the confidence of the parliament it is replaced by a different party with a different program strong enough to secure the passage of finance measures and of the important legislation to which it is pledged. Should there be doubt as to which of the two parties has the confidence of the people, a new election can be called and there will normally be a majority returned which under party discipline can create an executive and carry on the government without danger of deadlock. Where, however, there are a number of parties and groups based on economic interests, polit-

ical ideals or allegiance to individuals, the parliamentary system becomes difficult to operate. In a parliamentary state the result of a party or group deadlock is not merely, as in a country like the United States, a delay in legislation. A ministry must be formed if the executive is to function. This can be done only through a grouping of parties with wide differences in their programs and personal antagonisms among their leaders. The power which this gives to parties must be counterbalanced by a strong sense of national unity which will induce the sacrifice of personal ambitions and party programs in the national interest. The consequences of continued deadlock are so grave that the pressure of public opinion will ordinarily compel some kind of a compromise which may be temporary and ineffective in securing important legislation. If the remedy applied is a dissolution of the parliament, the new chamber may be as hopelessly divided as the old. As economic questions come increasingly to the fore, enlisting the economic interests of different groups, the difficulty of forming governmental coalitions and of passing the necessary economic legislation increases.

One device for overcoming a deadlock occasioned by a multiplicity of parties is that of permitting the tax and appropriation laws to continue in effect until they are changed by parliamentary action. Thus the functioning of the government is assured. This alone is not sufficient in a modern state, particularly in Europe where the conduct of foreign affairs is of such importance. Nor does a government immobilized by internal dissension and incapable of action fit the needs of a country in sore economic stress or in which new economic or social ideals are supported by a large and active section of the population. The deadlock must be broken, a ministry with majority support formed and remedies applied. If this cannot be accomplished through the vote of the people or through compromise, the stage is set for the drastic solution through dictatorship, either constitutional, as in Germany in 1930, or extra-constitutional, as in Italy.

J. P. CHAMBERLAIN

See: SEPARATION OF POWERS; VETO; CHECKS AND BALANCES; OBSTRUCTION, PARLIAMENTARY; CLOSURE; PARTIES, POLITICAL; BLOC, PARLIAMENTARY; INTERESTS; POWER, POLITICAL; COALITION; COMPROMISE; COUP D'ÉTAT; DICTATORSHIP.

Consult: Luce, Robert, Legislative Procedure (New York 1922) p. 407-15. Descriptions of the system

under which deaolocks may appear can be seen in Lees-Smith, H. B., Second Chambers in Theory and Practice (London 1923); Rogers, Lindsay, The American Senate (New York 1926); Hasbrouck, Paul De Witt, Party Government in the House of Representatives (New York 1927).

DEAF. The term deaf is applied indiscriminately to three groups in the population: those who are entirely without sound perception; those who are partially deaf; and those who are deaf mutes, that is, who not only are unable to hear but also lack normal speech. Deafness in the last sense is comparatively rare. Devices for testing and measuring auditory power reveal that most of those who are known as deaf and even the majority of deaf mutes have a certain degree of undeveloped hearing.

Deafness and mutism are quite distinct. No anatomical connection exists between the organs of hearing and those of speech. Lack of speech results from lack of hearing because without hearing one cannot learn to speak unless specially taught and cannot distinguish voice modulations and inflections. A deaf mute is thus one who was born without hearing or has lost it at an early age and who therefore has not acquired speech. The later the age at which such an individual has lost his hearing the better will be his speech. Persons unable to speak despite the possession of hearing are very rare, their condition being due in nearly all cases to some mental or nervous disorder.

There has been but limited research upon the subject of the cause of deafness and little accurate knowledge is available. From one third to two fifths of the deafness of deaf mutes is congenital; from three fifths to two thirds is acquired, usually, from some disease of infancy or early childhood which affects the middle ear or the internal ear. About 17 percent of acquired deafness is caused by meningitis and 17.6 percent by scarlet fever. Measles, typhoid fever, whooping cough, diphtheria, pneumonia, catarrh and inflammations in some part of the auditory apparatus sometimes result in deafness. Some deafness is of hereditary origin, either directly or indirectly, although little is known of the exact extent or nature of hereditary deafness. Intermarriage of the deaf does not play a large part in deaf mutism, probably because as a rule each parent suffers deafness from a different pathological condition. Much deafness can be prevented through general measures for the protection of the health and for the improvement of living conditions. The immediate practical program is the arrest and control of diseases in infancy and childhood, especially communicable diseases which leave deafness in their wake, and the education of the deaf in speech and lip reading. The hard of hearing, although still frequently exploited by quacks, are being increasingly aided by perfected mechanical appliances.

There has been little investigation in any country of the total number of persons wholly or partially deaf or with impaired hearing. In the United States the conservative estimate for deaf mutes is about 53,000. Deaf mutism is relatively more frequent among males than among females. In the population at large there are 104 males to every 100 females; the ratio of male deaf mutes is about 121.

In most ancient civilizations the deaf were regarded as abnormal and mentally defective. They were exposed to death in Greece and survivors received no special care or protection. In Rome, however, deaf mutes were granted definite rights as citizens and care was provided for those in special need. In the countries of Europe adopting the civil law, especially France, the rights of deaf mutes were respected but their physical disqualifications kept them from meeting certain legal formalities. In England under the common law the early status of deaf mutes was very low. According to the dictum of Blackstone it was a presumption of the law that they were almost idiots.

Both in the British Isles and on the continent a fundamental change in the attitude of the public toward deaf mutes appeared when it was discovered that they could be educated. The first school for the deaf was established by Charles-Michel, abbot of L'Épée, near Paris in 1755. Schools were also established about the same time by Samuel Heinicke near Hamburg and by Thomas Braidwood in Edinburgh. In 1784 a school was founded in Rome, in 1788 in Madrid and in 1801 in Genoa, followed by many others in the cities of Europe.

The first school for the education of deaf mutes in the United States was opened at Hartford, Connecticut, in 1817, and since then their spread has been rapid. At present only a few of the less populous states in the Union are without special schools for deaf children. In about half a dozen states deaf and blind children are educated in the same school, an arrangement generally regarded as undesirable. In many schools the presence of feebleminded or mentally backward children among the deaf complicates the

problem of education. Most schools for the deaf are state institutions under the immediate direction of a special board of trustees or a state board. A few schools in the East are private institutions, partially endowed but depending largely upon state per capita appropriations or subsidies. In addition to the state institutions day schools for the deaf have been established as parts of local educational systems, often operating under special state laws. With the pupils residing in their own homes a normal order of living is provided. Gallaudet College, located at Washington, D. C., and maintained entirely by the federal government, is a special institution for the higher education of the deaf. Within recent years, largely in consequence of similar work for children with defective eyesight, special classes have been organized for children with defective hearing in the schools of the larger cities. Ear clinics are being established in connection with such classes.

In Europe the oral method has been the prevailing one used, formal adherence to this method having been established at an international convention of the instructors of the deaf at Milan in 1880. There has been far less direct recognition of the sign language than in the United States. In the most advanced European schools for the deaf increasing attention is being given to the possibilities of acoustic instruction and to vocational training, but the physical facilities for the latter are generally inferior in extent and efficiency to those in the United States. Both special institutions and day schools for the deaf are now found, with an evident trend toward the latter, and classes for the hard of hearing are being established on a wider scale. Compulsory education laws are being extended to the deaf. In some countries education of the deaf is not considered a function of the state, although the trend is distinctly in that direction. Private schools, found more frequently in southern than in northern Europe, usually under the control of some religious body, are often subsidized by the state. Little organized provision is made for higher education of the deaf in Europe. The deaf have not achieved the social and economic position of the deaf in the United States but have been regarded to a greater degree as charity dependents.

As a result of their education the legal limitations and disqualifications against the deaf have gradually disappeared. Apart from the provision for schools legislative action has taken but occasional notice of the deaf whether in measures

of material assistance, protection or discrimination. In judicial proceedings the tendency has been to put deaf mutes on an equal footing with others. They are now generally held quite responsible for their criminal misdeeds. They are qualified as witnesses if proper interpreters are available and are capable of making wills and of entering into contracts. In the economic sphere the differences between deaf mutes and the general population are minor as compared with the status of the blind. While their handicap is a barrier to their entry into certain commercial and professional fields, there are a variety of other semiskilled industrial positions where deafness does not act as a drawback. Provision is generally made for occupational training in the special schools for the deaf.

The deaf suffer as a result of their social cleavage from the rest of their fellow men, but they compensate for this by close association among themselves. They form their own societies and organizations and communicate by the sign language and by finger spelling or by a combination of the two. The sign language consists of both natural and arbitrary signs and embraces pantomime and many expressive gestures, all of which become codified for the experienced user. Finger spelling is reserved for uncommon words. Some of the deaf employ speech and lip reading, which they have been taught in their schools, but with many this method of communication proves unsatisfactory. Writing is resorted to when other methods are not available. In most of the schools both the sign language and speech with lip reading are being taught. In certain schools no other methods of communication except speech and lip reading are permitted. The auricular method, by which the residual powers of the ear are brought into use, is being increasingly used in schools and is likely to become an important factor in the education of the deaf.

As compared with the blind and cripples there have been relatively few organizations created for the benefit of deaf mutes apart from the activities of certain religious bodies and an occasional measure by some social welfare agency. Leagues for the hard of hearing are being organized whose chief purpose is the instruction of adults in speech and lip reading, and which sometimes provide in addition certain forms of social welfare work, such as special employment service. It is generally recognized, however, that there is a close connection between the social and economic status of the deaf and their degree of education and that the problem of creating

normal relationships and independence for deaf individuals is chiefly a problem of overcoming their educational handicap.

HARRY BEST

See: Communicable Diseases, Control of; Public Health; Health Education; Poverty; Blind; Cripples.

Consult: Gaw, A. C., The Legal Status of the Deaf (Washington 1907); Reamer, J. C., Mental and Educational Measurements of the Deaf (Princeton 1921); Day, H. E., Fusfeld, I. S., and Pintner, Rudolf, A Survey of American Schools for the Deaf, 1924-1925 (Washington 1928); Upshall, C. C., Day Schools vs. Institutions for the Deaf, Columbia University, Teachers College, Contributions to Education, no. 389 (New York 1929); Best, Harry, The Deaf (New York 1914); Love, J. K., The Deaf Child (Bristol, Eng. 1911); Peck, A. W., Samuelson, E. E., and Lehman, Ann, Ears and the Man: Studies in Social Work for the Deafened (Philadelphia 1926); Fay, E. A., Marriages of the Deaf in America (Washington 1898); Keller, Helen, The Story of My Life (New York 1903); United States, Bureau of the Census, The Deaf-mute Population of the United States, 1920 (Washington 1928); Great Britain, Royal Commission on the Blind, the Deaf and Dumb, Report, Parliamentary Papers by Command no. C-5781, 2 vols. (1889). See also the following periodicals: American Annals of the Deaf, published bimonthly (Washington 1847-); Volta Review, published monthly (Philadelphia, Washington 1899-).

-DEÁK, FERENCZ (1803-76), Hungarian statesman. Both in the formulation of a reform program and in the struggle with Austria Deák was an outstanding leader of Hungarian moderate liberalism. Shortly after his election to the national Diet in 1833 Deák led the liberal opposition in its reform measures of toleration for Protestants and Jews, improvement of the lot of the peasants and abolition of the exemption from taxation of his own class, the landowning magnates and gentry. The intensity of counteragitation aroused by certain phases of his program led him to refuse his seat in the Diet, to which he was unanimously elected in 1843 and 1844, but in 1848 he accepted the post of minister of justice. His draft of a modern criminal code, which provided for the abolition of capital punishment, won him considerable international repute. After the compromise of 1867 Deák devoted himself again to the cause of religious tolerance, and in 1873 he wrote at length in support of the separation of church and state. His speeches have been collected and edited by M. Kónyi (6 vols., Budapest 1882-1903), but neither these nor his "A contribution to Hungarian public law "(Pest 1865) have been translated.

His most outstanding contribution was, however, as mediator in the contest with Austria prior to, during and after the Revolution of 1848. His program of resistance to Austrian aggression on constitutional rights was, like that of Eötvos, far less radical than the demands of Kossuth. Nevertheless, in the Diet of 1839-40 Deák led the fight for amnesty for Kossuth. After the failure of conciliatory methods and the suppression of the Revolution of 1848 Deák, who had been court martialed but acquitted, retired from public office. During the entire period of repression he continued his agitation for constitutional liberty, refusing to accept defeat as permanent but opposing the radical plans for a second revolution. In 1860 after the disastrous war with Italy Francis Joseph sought to placate Hungarian discontent by a promise of constitutional liberty and Deák was chosen by the Hungarian Diet-in spite of the opposition of its majority to his radical policy—to frame the address to the emperor. He proposed as basic measures the restoration of the constitution of 1848 and the creation of an independent ministry. The effort failed and the Diet was dissolved. Nevertheless, in 1865, when Austrian defeat by Prussia and Italy led to renewed efforts for peace with Hungary, Deák at the risk of his popularity advised against exploitation by Hungary of Austria's weakened condition, counseled the development of reciprocal good will and encouraged the resumption of negotiations on the theory that in such controversies it was the sovereign who acted as protector of the people and often blocked infringement by his own ministers on constitutional liberty. The compromise of 1867 embodied substantially the program Deák had drafted in 1861. Although he declined to accept the post of prime minister as a mark of recognition for his services in behalf of peace Deák continued until his death to exercise considerable influence on the policy of his country and of the Austrian empire.

HENRY MARCZALI

Consult: Csengery, A., Ferencz Deák (Budapest 1877), German translation (Leipsic 1877); Laveleye, E. de, "Ferenz Deák" in La Prusse et l'Autriche depuis Sadowa, 2 vols. (Paris 1870); Arnold-Forster, F. M., Francis Deák (London 1880); Wlassics, G., Ferencz Deák (Budapest 1923).

DEAKIN, ALFRED (1856-1919), Australian statesman. He entered the Parliament of Victoria in 1880. As a Victorian minister from 1883 to 1890 he brought about the first Australian irrigation and factory legislation. Through-

out the nineties he refused office, worked for Australian federation and virtually carried Victoria into the commonwealth. He became the first commonwealth attorney general in 1901 and was thrice prime minister, in 1903-04, 1905-08 and 1909-10.

In essentials Australia's settled policy today goes back to the Liberal party under his leadership. In British politics Liberalism connotes laissez faire. Australia's Liberalism has a tradition of protective tariffs and paternal government-socialisme sans doctrine. Such was the Liberalism of Deakin. Until his retirement from the commonwealth Parliament in 1913 there were few essential matters on which Liberal policy differed from that of Labour. His ideal Australia was a white Australia, developed by state assisted British immigration, guaranteeing by law "fair and reasonable labor conditions" and protected by tariffs from underpaid labor overseas. These have become Australia's settled policy. In external affairs Deakin was both a sturdy nationalist and an ardent imperialist. Australia was to be a free nation (defended by a citizen army and an Australian unit in the imperial navy) within an empire whose unity should be institutionally organized and cemented by preferential trade. Imperial federation apart, this is Australia's spirit still. However regarded, Deakin is the central figure in the political history of the Commonwealth of Australia.

Deakin did not actually originate all the policy which he advocated; he brought to Parliament not so much the gifts of the political inventor as the eager receptive mind, constructive grasp and moral earnestness of the prophet. He brought also magical eloquence and a personal charm which held ministry after ministry.

K. H. BAILEY

Consult: Murdoch, Walter, Alfred Deakin: a Sketch (London 1923).

DEATH CUSTOMS are generally supposed to have their roots in the emotions, especially dread. Savages, among whom death customs are generally more elaborate than among the highly civilized peoples, are alleged to feel an overwhelming fear of death which prompts measures for self-protection. This is not confirmed by observation. Savages live and die publicly, so that the sight of death is often familiar from childhood. In the more civilized groups death is hidden. Contact with it is much rarer and for that reason gives a greater shock;

the principal. A mitigation of the iloloku is practised in cases where people lie down during the period of mourning or a finger is amputated at the death of a chief. It is as iloloku that all the little children put on clothes for the first time at the death of a chief. It is clear that the Fijian mind associates the clothing of the dead with a boy's first assumption of clothes. Sexual abstinence is common both as a funeral practise and as a prelude to initiation. The fictitious death of mourners may explain I Corinthians xv: 29, "Else what shall they do which are baptized for the dead, if the dead rise not at all? Why are they then baptized for the dead?" Evidently the baptism of kinsmen was supposed to help the dead to resurrection by the identification of the living with the dead.

The living undergo the same rite as the dead but with a difference. The deceased is clad in all his finery, but the mourners wear tattered or dark colored clothes and eschew ornaments. The wife who commits suttee is elaborately dressed, but the widow who survives must be shabby. Thus another idea comes in to modify the basic one of imitation: the death ritual raises the dead to a higher rank than all the preceding consecrations; therefore the living humble themselves before him as vassals before the king.

The gradation of sacraments explains apotheosis, or deification, after death. The king is divine in his lifetime but not to the highest possible degree. The consecration at death makes him completely one with the god. This is also true of saints, especially in India. There the individual soul, prepared by a long course of austerities, becomes absorbed in the universal soul. A kind of pantheism results.

In apotheosis the deceased is supposed not to die but to be translated. Thus the image of a Roman emperor was treated as if he were asleep not dead. Both in South India and Fiji a chief is said to sleep not to die. The distinction between dying and extinction which is not death is puzzling. In India it is expressed thus: "For men they slay the victim on the frontal bone. . . . For gods they choke or strangle it, and say, not, 'Slay, kill it,' after the human manner, but 'Quiet it. It has passed away.' For when he says, 'It has passed away,' then the sacrificer passes away to the gods." In interpreting this it must be remembered that the victim and the sacrificer are identified. Of an Egyptian king it is said, the sun god "has not given him to Osiris. He has not died the death. He has become a great and glorious one on the horizon." Such texts evi-

dently use the word death in a much narrower sense than the modern western world; by it they mean a way of dying which leads to the underworld as opposed to another way which translates to the world of the gods in heaven or even to the sun disk. The antithesis is so strong in India that Yama, who might be called the god of death, is not there regarded as a god because he' died and gods do not die. On the other hand, the Buddha, although a man according to western notions, does not die but passes away, "sees Nirvana," that is, extinction. The antithesis between Nirvana, the fruit of enlightenment, and death, the ever recurring fate of the unenlightened, is one of the cardinal doctrines of Buddhism. The idea of extinction as opposed to death is doubtless obscure because it is based on some practise that disappeared before the beginning of the records. This practise was possibly the bloodless putting to death of the king before he could die of sickness or old age. This was not accounted death. This suggestion is borne out by a south Indian myth of "an age when men did not die, but simply dwindled, from sheer age, until it became necessary to get rid of them by shutting them up" in stone lined graves with food, water and light (Cammiade, L. A., in Man, vol. xxx, 1930, p. 187-89).

Methods of disposing of the corpse have called forth a variety of explanations. A desire to get rid of it is generally accounted a sufficient reason for simple interment. It is not a sufficient reason, for the simplest method of disposal is to leave the body to rot. Modern western squeamishness must not be attributed to other groups. Many are content to let animal carcasses rot in frequented places rather than take the trouble to remove them. True, the sight of a human corpse is not merely repulsive but distressing; but the dwellers in a sparsely populated country can easily remove the corpse to an unfrequented spot, as some tribes are still content to do. Interment was practised as early as palaeolithic times, and there could be no question then of a dense population. One possible reason for interment is an idea we know to have existed from very early times, that of planting the body in the earth like a seed for rebirth. In India the site of the tumulus "is ploughed with six oxen after a prayer, 'May Savitri grant thy bones a place in the earth.' Seeds representing all herbs are sown, then the cremated bones are poured out with the prayer, 'Savitri strews thy flesh in the lap of thy mother the earth," Savitri is a

sun god: thus the sun sows the flesh of the deceased as a seed in the womb of the earth. The idea is used by St. Paul: "So also is the resurrection of the dead. . . . It is sown a natural body, it is raised a spiritual body." Basing his sermon on this passage a modern preacher says, "The Church sprinkles the dead body with holy water. She censes it because it was the organ of expression, and is the seed of the spiritual body which we shall wear hereafter." He then proceeds to refute scientific objections by showing how the green stalk grows out of the little brown seed. In the Vedic passage just quoted the idea of seed is coupled with that of the earth as mother and the grave is the womb. It is impossible as yet to say whether these two conceptions represent two independent streams of thought that have coalesced. The womb idea by itself would account for the embryo position.

It may be the same idea of planting the body in the earth that prompted the custom of dismembering the corpse for burial. Just as the ear of corn is broken up to sow, so the body is broken up before being committed to the earth, a practise which existed in prehistoric Egypt. There are abundant memories of it in Indian ritual. Myths relating how the world was created out of a dismembered human victim are found all the way from Germany to the Gilbert Islands at least.

Cave burial seems at first sight to require no explanation: men lived in caves, therefore nothing seems more natural than digging a hole in the floor to stow away the body or than continuing the practise after cave dwelling was given up. This hypothesis, however, does not explain why in some cases, for instance in Fiji, cave burial was the privilege of chiefs nor why so much labor was incurred in excavating caves where natural ones were lacking. Furthermore, as early as palaeolithic times the innermost recesses of caves most difficult of access and unsuitable as habitations had their walls painted with figures which to the minds of archaeologists were not a mere exercise of the aesthetic faculty. The use of caves for burial seems therefore to be derived from their religious associations rather than the other way around.

Long barrows would appear to be imitation mountains with caverns inside. They cannot be explained on grounds which moderns would consider utilitarian, as a mere method of disposing of the body, since they involve a labor far in excess of what is needed for that purpose. The reason for them may be known when the

beliefs that are now associated with long barrows in the countries where they are still piled up and the legends centering around the prehistoric ones are collected. A new set of ideas came in with the bronze age to alter the shape of the barrow to a circle. Round barrows still survive in Buddhist countries as shrines containing the cremated relics of the Buddha. In Ceylon they were built to receive the ashes of kings and are still built for priests. Stone or brick has taken the place of earth. The Sanskrit term is stupa, corrupted in Hindustani to tope. Round barrows belong to eastern India. Western India favored the square shape on the ground that the round one does not distinguish the four cardinal points. The Indian evidently regards the square and the round barrows as merely variations of the same thing: the function is essential, the form a matter of opinion. We are thus justified in assimilating the pyramid to the genus barrow. All three forms, long, round and square, still occur in some places side by side.

Bas-reliefs of Indian topes show that these originally carried a small shrine. Evidence from other countries points the same way. The Indian tope represents the universe: the top surface is the sky, the ground the earth and the intervening space the atmosphere; the square masonry on the top of the dome is adorned with the disks of the sun and moon, and the drum of the pinnacle above is called the rampart of the gods. The relative positions in Buddhist cosmogony are thus reproduced in the tope. The Persians placed a similar construction on their cave temples. In this connection it is significant that the Latin mundus means both the world and an underground shrine. The tumulus or the shrine must then have been regarded as an epitome of the universe from very ancient times. The idea survives in Europe as an artistic device: domes are commonly painted inside with scenes of heaven and occasionally studded outside with stars.

Elliot Smith places the original home of mummification in Egypt. Nowhere did climatic conditions so favor attempts to insure continued existence after death by preserving the flesh as well as the bones, and nowhere was the technique so highly developed. He supports his theory by pointing to cases of imperfect mummification in other lands and of purposeless technique which can only be explained as misunderstandings of a complete and purposeful mummification as practised in Egypt. Most significant are the cases in which some sort of embalmment is followed by cremation, an addition

which takes away the whole point of the original process (see Levin, Mary, in *Man*, vol. xxx, 1930, p. 29-34, 44-48, 64-66).

Such cases further disprove the idea that cremation is merely a convenient way of disposing of the corpse; instead of simplifying the procedure it complicates it, for it is often followed by interment. Its origin must lie then not in convenience but in ideas concerning the properties of fire. As yet only the lines of inquiry can be suggested. Fire is believed to be latent in trees (among the Turks, Indians, Polynesians and others), stones and even in water. It is present underneath the earth; the sun and stars are heavenly fires. The wide distribution of these ideas shows that the pervasive nature of fire was recognized at a remote period. Fire is immaterial. These properties make it a very convenient vehicle for the immaterial essence of things. A Solomon Islander says, "If you destroy the offering in the fire the spirit can eat it. Just as a man when he rots goes to the land of spirits, even so if you destroy a little pudding the spirit in the land of spirits can eat it." Compare the Vedic address to the body on the pyre: "Let the eye go to the sun, the breath to the air. Go to the sky and to the earth according to fitness; go to the waters. If it is pleasing to thee, there abide in plants with thy limbs." Matters are here complicated by the idea of man as a microcosm: fire conveys each part to the corresponding part of the universe. The precremation practise of dismemberment seems to have left traces here.

Cremation and burnt offerings have the same roots. They go together in Greece, Rome and elsewhere, but we often find cremation combined with unburnt offerings and natural putrefaction with burnt offerings. In such cases it is sometimes possible to prove that two different traditions have been fused owing to the interaction of two cultures or two classes of society. For cremation is not always common to all ranks but seems to have been originally aristocratic, as it is still in India (in Ceylon only kings and priests are cremated). Cremation has recently gained ground in Europe under classical influence, but the offerings remain unchanged, hence the inconsistency.

Rarer methods of disposal include throwing the body into the sea, eating it, removing the flesh from the bones, leaving it for animals to devour. This last was no doubt the original method, but not every occurrence of it must be mistaken for a survival from the most primitive ages. The Parsees have substituted it for crema-

tion, a custom which, it is shown by comparative evidence, their forbears have practised.

Not all death customs can be derived from rebirth. Inversion, one of the commonest features, cannot as yet be linked up with it. It takes all kinds of forms, not all found always together: returning in inverse order from the burial ground, wearing the Brahmanic thread on the left instead of the right side, "backward speech," inverting weapons and the like. The living are by inversion imitating the dead, among whom everything is inverted: our day is their night, black men become brown and brown men black. This inversion is limited to the underworld. Thus Indians walk clockwise round the shrine of those who have not died, viz. the gods and the Buddha; but counterclockwise round the pyre of those who go to the underworld. It seems that under the earth everything is upside down.

Many death customs are due to the supernatural powers of the spirits. Consecration ceremonies bestow supernatural powers; death rites being the highest confer them in greatest measure. Further, they set free the immaterial part of man completely and thus enable it to act at a distance without visible contact, which is the essence of magic. In many religions this power is enhanced by identification with heavenly bodies, especially the sun, the source of life. It is disputed when the dead were first connected with the sun, but it is older than our earliest records, since Osiris, the Egyptian king of the dead, is solar. Yama, his Indian counterpart, is the son of the sun god. The sun and death are associated, sometimes identified, doubtless because the sun yearly grows faint.

Offerings are made in order to maintain the dead in vigor and friendliness. The Egyptians went further than any other people in filling their tombs with all the objects or models of objects which a man requires in his lifetime. The climate facilitated this tendency as it did mummification.

Fear of harm inspires devices for driving out ghosts: making a noise, hurling stones, kindling fires, burying in earth instead of merely exposing and so on. This is especially the case with evil ghosts, e.g. women deceased in travail, who are widely considered dangerous. Various devices are used to prevent the ghost from returning, such as carrying out the body foremost with toes tied, carrying to the other side of a river, blazing a false trail near the grave, tying a clog to the foot. The custom of burying suicides at

crossroads was possibly designed to mislead the ghost, who does not know which way to turn. Many of these customs assume incredible stupidity in the ghost. The reason for this stupidity is not known, but it has descended to the devil, who often takes the place of the earlier ghosts.

Death customs in their earliest known forms are designed to be useful in the narrow sense of the term; for instance, they influence the food supply by increasing the potency of the ghosts and by directing this into channels which will promote life and wealth. Some of these practises turn out to have some psychological value as well. They arouse emotions which tend to transform the customs. There is a continual conflict going on between the reasoned necessities of society and the personal emotions of the relatives. A sensitive soul is compelled to endure buffoonery and obscenity because the tribe holds it to be necessary to the welfare of all. If public opinion weakens because the utility of the custom has been disproved, then the private emotions see their opportunity to tone down and finally abolish what offends. It is painful to a parent to see his suicide son buried in unconsecrated ground. Society insists that for the public good the necessary measures shall be taken against a maleficent ghost, but when increasing knowledge discredits the old idea affection is able to gain ground inch by inch. We see the conflict going on in the burial scene of *Hamlet*. It has not ceased altogether, although affection has practically won the day by recourse to the fiction of temporary insanity. Verdicts of felo de se have become exceedingly rare. This is merely one example of a process that has completely remodeled the death customs of Europe, divesting them of almost everything that has not a psychological value.

This value is twofold. The rites are in harmony with the mourner's frame of mind; for instance, dark colors are congenial. Secondly, they give scope for activity—nothing is more dangerous to a lacerated mind than the feeling of impotence. Washing, originally inspired by eschatological ideas, has been retained as a last performance of a daily service. Offerings, once thought to be useful, have become a continuation of those acts of generosity that brought pleasure during life. Outward signs of mourning also act as a protection: they are a warning to others to avoid anything that may hurt. In small communities where everyone knows everyone else this is not as important as in large communities where the mourner constantly meets those who do not know the news of the death. Observances also satisfy public opinion as to the presence of grief. The sincerest grief is not insensitive to public approval or censure. This tends to elaborate death customs, but this tendency is counteracted among peoples of greater sensitiveness and introvert disposition by an aversion to much outward display. In ages of great emotional development, like the present, quiet funerals accord better with the mood.

A. M. Hocart

See: Funerals; Birth Customs; Deification; Religion; Magic; Tabu; Totfmism; Animism; Ancestor Worship; Secret Societies; Cults; Retual.

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DEATH DUTIES. See INHERITANCE TAXATION.

DEATH PENALTY. See Capital Punishment.

DEATH RATES. See MORTALITY.

DEBATE, PARLIAMENTARY. Debate has been historically and is still theoretically a determinant of legislative action. Only through discussion and the expression of opinion by rank and file as well as by leaders can a legislative assembly secure the necessary information, isolate issues, determine the "sense" of the body and proceed to an intelligent decision.

Freedom of parliamentary debate was of great importance in the evolution of representative government. The House of Commons struggled for a long time before it finally secured satisfactory safeguards. The Bill of Rights, for example, declared "That the freedom of speech, and debates or proceedings in Parliament, ought not to be impeached or questioned in any court or place out of Parliament." The office of speaker was finally created because debate was not free and the Commons wished to have an official who would be able to present their grievances to the crown.

As representative government developed, however, assemblies were forced to create safeguards against their own members rather than against kings. Necessary regulation of debate has been secured by formal rules of procedure and by customary usages. Members participating in debate must receive recognition from the speaker or from the presiding officer and must address themselves to him and not to fellow members. On almost all questions more orators wish to speak than can be heard in the time available; the power of recognition which the speaker usually enjoys may consequently be of considerable importance at times. In the House of Commons a new member always has first rights for his "maiden speech." For important debates the speaker usually has lists of those who wish to speak on both sides and preference is given to ministers and ex-ministers. In the House of Representatives the number of hours for debate is usually fixed in advance. The time is then divided between, and parceled out by, the chairman and the ranking minority member of the committee having the measure in charge. The ability of individual speakers to limit their own speeches is not relied upon as it is in Great Britain. In France the rules give preference to ministers, reporters of the parliamentary commissions and orators mandated by the political groups of the chamber.

Most standing orders stipulate that debate must be germane to the pending subject, that personalities must be avoided and that motives may not be questioned. When language used in debate is alleged to violate the rules, the presiding officer may intervene or the words objected to may be "taken down" by the clerk and repeated to the House, which decides whether they are offensive. Lord Balfour once declared that in parliamentary debate the opponents beat each other over the head with torrents of words, resulting in a maximum of noise and a minimum of damage. It occasionally happens, however, that the verbal quarrel fails to satisfy the participants, that avoirdupois is substituted for argument and that Marquis of Queensberry rules would be an appropriate addition to the ordinary procedural regulations.

As a factor in influencing the decisions of legislative bodies parliamentary debate has during the last half century been of rapidly dwindling importance. This is true whether the business in hand is a pending bill or criticism and dismissal of the ministry. In cabinet systems the continuous duel between executive and legislature makes debate more important than it can be under other forms. But as government has had to reach out into the economic field, legislative business has become so complex and technical that all debate is necessarily less informing and influential. In the United States the system of standing legislative committees makes debate in the House of Representatives extremely unreal. In England also the grand committees have contributed to the lowering of the level of debates in the House of Commons. Even when debate is still informing and interesting, votes are rarely influenced thereby. The increasing power of party organizations determines the opinions of legislators long before debate begins. Many members, to paraphrase W. S. Gilbert, vote at their party's beck and call and never think of thinking for themselves at all. Even where there is a good deal of non-partisan voting, as in the United States Congress, debate has but a shadow of its former importance in influencing the result. Local situations, the wishes of constituents and the personal convictions of the representative or senator are more influential than what may be said on the floor. In the Chamber of Deputies, on the other hand, eloquence can on occasion be highly important in determining the fate of a ministry. The reason for this is that many deputies of the center groups are always teetering between support of or opposition to the ministry. Frequently they cannot decide which way to fall and abstain from voting. When there is such an absence of conviction and when a

handful of votes is important, eloquence may have more immediate and far reaching results than in other assemblies.

For all major legislatures complete publicity prevails and full stenographic records of what is said in debate are available. One or two secret sessions of the Chamber of Deputies and of the House of Commons were held during the war but the experiment did not prove to be a happy one.

The growth of a cheap press and of other means of communicating intelligence has helped to decrease the importance of parliamentary debate. There is much less education of the nation by the legislature. Newspapers pay less and less attention to legislative proceedings; they are interested in drama and not in debate. Public sessions with the fourth estate in attendance. however, mean that a speaker can address a nation as well as his fellow members of the legislative body. Frequently therefore he is inclined to think more of the effect of his speech on his constituents than on his immediate audience. Sooner or later legislative debates will be broadcast. Politics is in such a state of flux and parliamentary tempers are so mercurial that any prophecy as to the effect of broadcasting upon debate is likely to be far wide of the mark. In part the tendency may be for broadcasted debates to be more decorous and businesslike in order to make a favorable impression on the country. On the other hand, many orators will undoubtedly ignore their immediate hearers and speak only to their "great unseen audience." The printing press, the telegraph, the complexity of governmental business and the power of party organizations have combined in robbing parliamentary debate of its former interest and importance. The radio may be another thief or may serve as a returner of stolen goods.

LINDSAY ROGERS

See: LEGISLATIVE ASSEMBLIES; PROCEDURE, PARLIA-MENTARY; IMMUNITY, POLITICAL; INTERPELLATION; SPEAKER; CLOSURE; PARTIES, POLITICAL; CAUCUS; COMMITTEES, LEGISLATIVE; GOVERNMENT REPORTING. Consult: Luce, Robert, Legislative Assemblies (Boston 1924), and Legislative Procedure (Boston 1922); Mac-Donagh, M., The Pageant of Parliament, 2 vols. (New York 1921); Barthou, L., La politique (Paris 1923); Rogers, L., The American Senate (New York 1926); Ilbert, C., "Secret Sittings of the House of Commons" in Political Science Quarterly, vol. xxxii (1917) 28-35.

DEBENTURES. The term debenture is commonly used in Great Britain to designate all classes of certificates or written instruments is-

sued under seal and evidencing indebtedness of companies (i.e. corporations). Its English use is thus largely equivalent to the word bond in the United States, where debenture is ordinarily restricted to certificates of corporate obligations having no special security such as mortgage, lien or assignment of property. The common British expression, debenture stock, designates "borrowed capital consolidated into one mass for the sake of convenience" (see Lindley, N. L., A Treatise on the Law of Companies, 2 vols., 6th ed. London 1902, vol. i, p. 346) and partakes somewhat of the nature of preferred stock. A similar usage sometimes occurs in America and Canada, as in General Motors Corporation 6 percent cumulative debenture stock and Canadian Pacific Railway 4 percent irredeemable consolidated debenture stock. Debenture is rarely used in connection with governmental or individual indebtedness, although the first mortgage bonds against German industry issued in connection with the Dawes plan are called debentures.

A specialized use of the term occurs in connection with the collection of customs, to designate certificates representing an amount of customs duties paid on imported commodities and refundable when the same or other commodities are exported. It is thus a "drawback certificate." The proposal for an export debenture in connection with the McNary Farm Relief Bill in the United States is derived from this meaning of the term.

The origin of the use of debenture in corporation finance is uncertain. Sir Francis Palmer, who has traced the use of the word, finds it mentioned in the Parliamentary Rolls in the year 1415 and in 12 and 13 Edward IV, 1472. The common significance of the term is of relatively recent origin. The word does not appear in the British Companies Act of 1862 but is first mentioned in British company law in the Directors' Liability Act of 1890. It occurs, however, in its present day sense in the British Stamp Act of 1870 and in the Bills of Sale Amendment Act of 1882. In the United States there is no evidence of its use in corporation literature prior to the Civil War, and it is only since 1900 that the term has come into general use to designate unsecured corporate obligations.

Although American debentures are without special security, it has become customary since 1900 for the debtor corporation to execute an indenture or deed of trust for the convenience and protection of the bondholders. The change is illustrated in the General Electric Company's

debenture issues, the issue of 1912 being accompanied by a trust agreement where the issue of 1892 was not. The deed of trust frequently contains a provision prohibiting the debtor corporation from mortgaging its property or requiring that the debentures are to be prior or equal to future issues of mortgage bonds. In this way a number of American railroad debenture bond issues are now secured by mortgages. Among these are the debentures of the New York, New Haven and Hartford, the Boston and Maine and the New York Central railroads. Mortgage restrictions do not as a rule prevent the renewal of existing mortgages or the assumption of mortgages already existing on property acquired through the creation of the debentures.

Even when issued with restrictions debentures do not generally have as high investment standing in the United States as mortgage bonds. This is due to the possibility of the creation by a debtor corporation of an indebtedness, either funded or unfunded, which ranks equally in claim against assets and earnings with the debenture bonds. In the event of default in payment of interest or principal ordinary creditors as a rule have the same rights and claims against the debtor as the debenture holders, since the latter, having no lien, pledge or assignment of property, have no rights of foreclosure. To protect debenture bondholders against the adverse effects of excessive indebtedness by the debtor corporation, the deed of trust under which the bonds are issued generally provides that the corporation must always maintain its current assets above its current liabilities and in some cases above the amount of outstanding debentures as well.

As a matter of financial policy debentures are preferable to mortgage bonds for the acquisition of capital inasmuch as the creation of liens on assets tends to impair the current borrowing on open account or on unsecured notes and other certificates of indebtedness. Nevertheless, general credit conditions or the restrictions imposed by investment bankers or by investors directly may force a business corporation to secure its obligations by a mortgage. Borrowing on mortgage bonds presents the compensating advantage of securing capital at considerably lower cost. Thus many American railroad companies have preferred such bonds, when permitted, as a means of obtaining capital, although they could readily sell debentures at somewhat higher interest rates. With the constant trend toward larger mortgage indebtedness, particularly among the

railroads, the limitations on the amounts of bonds outstanding have compelled recourse to debentures as a means of obtaining additional capital. In order to make these debentures, which are second grade investments, attractive to security purchasers, some privilege, such as the right to convert the bond into stock or the right to purchase stock at a fixed price, is frequently attached to the issue. Obligations of this nature have had a wide appeal to investors desiring speculative opportunities as well as a fixed income return.

A. M. Sakolski

See: Corporation; Corporation Finance; Bonds; Stocks; Mortgage; Investment.

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DE BOW, JAMES DUNWOODY BROWN-SON (1820-67), American editor and statistician. He was the founder of the Commercial Review of the South and West, later known as De Bow's Review, at New Orleans in 1846. Rescued from early financial difficulties by Maunsel White, a rich New Orleans merchant, the magazine came to have the largest circulation of any in the South. It was a journal of fact and opinion, devoted to the practical economic and political interests of the South, and it exerted a wide influence. De Bow was appointed to the chair of political economy and commercial statistics, subsidized by his friend White, in the University of Louisiana. Since, however, he had no students he took charge for a year of the state Bureau of Labor Statistics and also issued a three-volume work with statistical appendix, The Industrial Resources . . . of the Southern and Western States (New Orleans 1852-53), based upon materials in the Review. These two publications form a veritable encyclopaedia of the old South and are valuable source materials for economic historians. Appointed superintendent of the United States census by President Pierce he edited and compiled the census report of 1850 and issued a compendium of that work, the Statistical View of the United States (Washington 1854), in which he advocated maintenance of a permanent census staff between decennial periods. He was president of the Knoxville Commercial Convention in 1857 and served as chief agent for the purchase and sale of cotton for the Confederate government. Despite his other activities he published the *Review* monthly until 1862 with but few interruptions; it was revived in 1866 and existed spasmodically until June, 1880. The *Review* showed throughout De Bow's attachment to the principles of Calhoun and its partisanship contributed to hurry on the Civil War. Nevertheless, De Bow refused to exclude such nationalist policies as a protective tariff and federal aid to internal improvement.

BROADUS MITCHELL

→ DE BROSSES, CHARLES (1709-77), French writer on history and the social sciences. De Brosses was born of a family of lawyers, was educated in local schools and became first president of the parliament of Dijon. His prodigious literary activity fills fifty-two volumes and ranges in subject matter from an account of the excavations at Herculaneum to a treatise on the origin of language, Traité de la formation méchanique des langues (2 vols., Paris 1765). His minute erudition is never pedantic and his writings are marked by penetration, originality and sanity of judgment. President de Brosses' posthumously published letters from Italy, Lettres familières écrites d'Italie en 1739 et 1740 (3 vols., Paris 1799), have been pronounced by Beyle the best account of Italian society in the eighteenth century and are still read for the brilliancy of their style and their searching analysis of social conditions. At the suggestion of Buffon, de Brosses collected the available material on Australia and Polynesia, names which he was the first to bestow on those regions, and published it in his Histoire des navigations aux terres australes (2 vols., Paris 1756). His edition of Sallust with elaborate commentaries, Histoire de la république romaine dans le cours du septième siècle (3 vols., Paris 1777), he regarded as his literary testament. De Brosses was a pioneer of the science of comparative religion. In his memoir Du culte des dieux fétiches (Geneva 1760), reprinted in the Encyclopédie, he combated the then prevailing tendency to interpret ancient mythologies and religious systems, notably that of Egypt, as profound symbolism and upheld the thesis that ancient Egyptian religion did not differ substantially from the primitive cults of native Africa. The work, which the French Academy refused to print in its transactions and which gave rise

to violent attacks, anticipates the modern anthropological method of approach to the history of religions.

ROBERT BRIFFAULT

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→DEBS, EUGENE VICTOR (1855–1926), American labor and socialist leader. Originally a railroad worker, Debs rose to be national secretary of the Brotherhood of Locomotive Firemen, a powerful conservative craft union. He was one of those conservative unionists who after the events of 1892, when strikes were broken ruthlessly and bloodily and state organs put themselves at the disposal of employers, concluded that labor must revise its tactics. He resigned from the brotherhood and launched the American Railway Union, an industrial organization of all railroad workers, of which he became president. After winning a significant victory over the Great Northern Railroad in April, 1894, the new union in June instituted a boycott of Pullman cars involving twenty-four roads, to assist the striking Pullman employees. Debs' appeal to American Federation of Labor leaders for a sympathetic general strike was rejected, and those leaders even urged the strikers to return to work. By means of a sweeping federal court injunction (which established the injunction firmly as an antilabor instrument) and United States troops sent to Illinois by President Cleveland over the protest of Governor John P. Altgeld, the companies broke the strike and smashed the American Railway Union. Debs was jailed and his career as a trade union leader came to an end. After campaigning for W. J. Bryan in 1896 he joined forces with the Socialists, who had approached him while he was in jail. Convinced of the necessity of political action to advance labor interests he helped form the Socialist party of America in 1901 and became its outstanding popular leader and agitator through his nation wide speaking tours and his writings in the Appeal to Reason and other radical journals. He was five times Socialist candidate for president of the United States: in 1900, 1904, 1908, 1912 (when he received over 900,000 votes) and 1920 (when he was in prison and polled 919,799 votes).

Debs helped organize the Industrial Workers of the World with William D. Haywood and Daniel De Leon. While he had no faith in Haywood's sabotage tactics he regarded himself as a "revolutionary unionist," and his break with the I. W. W. was on the ground of opposition to their antipolitical attitude. He continued to oppose American Federation of Labor tactics and to favor a policy of "boring from within and without."

In 1918 Debs was sentenced to ten years in prison for making an antiwar speech. Despite an international campaign for his release Woodrow Wilson refused amnesty. Because Debs had declared himself a Bolshevik from head to foot and because of his record of ultraradicalism the Communist party tried during and after his prison term to win his support. Although he criticized the Socialist party for a loss of revolutionary tone and aims and a tendency to chase votes he never joined the Communists. Released by President Harding in 1921 without restoration of citizenship rights, broken in health, Debs returned to a socialist movement disintegrated by the inroads of patriotic antiradicalism and communism.

His greatest importance was probably as a trade union leader who developed the industrial union idea with wide if fleeting success. To American socialism he contributed nothing new in the way of policy or procedure. Although he appreciated the value of political activity denied by "pure and simple" unionists and the value of struggle in the economic field neglected by most American socialists he made no such close synthesis of his ideas as was achieved by Daniel De Leon. He brought to vast audiences a hopeful evangelical socialism based on a deep feeling for the oppressed. As a native American he made socialism for a time a domestic and hence respectable if vague ideal. He brought internal harmony and a rallying point to the party in a personality sufficiently beloved to attract numerous non-proletarians but insufficiently integrated to build a firm working class movement.

J. B. S. HARDMAN

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DEBT. Debt is that relationship which exists between two persons when one, the debtor, can be compelled in some fashion to furnish services, money or goods to the other, the creditor. It may be created by failure to pay wergild or damages to an injured party or a fine to the community. But ordinarily debt implies that the debtor has received something from the creditor in return for which he is to make repayment at a later time. Debt therefore generally arises when economic development has advanced sufficiently to show decided differences in wealth between different members of the community. As a rule debt is not an isolated phenomenon in a particular society: there is a large class of persons who are constantly, almost permanently, in debt to a smaller class, although these classes in most cases do not constitute the entire communal group.

The loan of property which the borrower is under moral obligation to return when and if he can is a form of philanthropy which must have shown itself sporadically in many parts of the world, particularly in societies in which the sense of kinship is very strong. The Epavos among the Greeks and similar associations among the Hebrews were based upon the principle of contributions by a group for the temporary support of a person who was obligated to make repayment when able. In the eastern Mediterranean, as in other parts of the world, philanthropic loans were considered the only justifiable loans. This attitude is reflected in the ethical philosophy of Plato and Aristotle and in Christian, Jewish and Mohammedan ethics.

But of far greater significance for economic development were advances made with the understanding that an amount greater in value would be returned at some future time. The excess of the payment made over the credit extended is called increase in the Old Testament. The term usury, which implied that a charge was made for the use of the loan, gave way in the Renaissance to interest and has since been used to indicate excessive interest charges.

The prevalence of loans for profit implies that the possession of accumulated property beyond that needed for immediate or prospective consumption has become increasingly important economically and socially. It does not necessarily demand a direct connection between property and political power. But there has been a marked tendency in western Asia and Europe for holders of property to become the holders of political power even in communities theoretically controlled by a hereditary aristocracy. An elaborate system of lending at interest, such as the curious potlatch system so fully developed among the Kwakiutl Indians, may even be the means of establishing and maintaining social prestige. The recurring opportunities for redistribution provided by the potlatch hindered its use for the accumulation of large amounts of property. But where lending for profit is much developed in precapitalistic societies it generally tends to become the most certain and consequently the principal method of accumulating wealth, thus emphasizing the existing economic inequalities.

In the case of the charitable loan or the potlatch, repayment was insured only by public opinion or the sense of propriety, sanctions powerful enough in small and primitive communities. The debt created by unpaid wergild or default in some other penalty developed a type of sanction which went beyond mere public disapproval. The debtor was subjected to retaliation or to being held for ransom by the person or clan injured. Outlawry, such as the Greek $\alpha \tau \iota \mu \iota a$, seems to have been a common penalty for default on such debts.

But when the debt was created by a loan for profit, public opinion tended to be on the side of the debtor. A sanction more certain than public opinion and less penal than outlawry or retaliation was needed. Among the Iroquois, it is said, a defaulting debtor was publicly beaten, which may illustrate the transfer of an existing sanction for debt created as a penalty to debts of this nature. Usually, however, sanction was provided by pledging the property or the person of the debtor for the payment of his debt. Property pledged was obviously less immediately needed by the debtor than the thing borrowed. The value to the creditor of pledges such as a ceremonial blanket or a ring lay in the sense of honor which would impel the debtor to redeem them. In most cases, however, the pledge was utilizable property—cattle or slaves—from which the debtor could derive profitable services.

As the money economy became fully established and the economic structure grew in complexity, debtors increased in number and were less likely to have property to pledge. The resulting increased use of the person of the

debtor or members of his family as a pledge caused debt to be associated with slavery in primitive and ancient societies, for in case of default these persons were turned over to the creditor to perform compulsory service. Their status approximated that of slaves captured in war with tribes outside the kinship bond, and in many parts of the world the term slave was unhesitatingly applied to them.

Among the tribes of Washambala and Wasove in east Africa, for example, defaulting debtors seem to have become slaves in the fullest sense of the word, to have lost their personality and to have become as freely usable and alienable by their owners as other property. The same situation is found among the ancient Textons and Celts as well as in the society depicted in the Vedas. The debts specifically mentioned, however, are almost always penalties imposed for some infraction of law or custom, although in a few instances it is clear that the origin of the debt had no consequences in its nomenclature or treatment. Such apparently was also the case in the few instances of debt slavery which are to be met with in America.

But in the Mediterranean countries, in Mesopotamia, Syria, Egypt, Greece and Italy, a distinction was always maintained between debt slavery and ordinary slavery. Some practical distinction was inevitable, since the debt slave had free kinsmen and friends who would actively resent abuse, although it is probable that abuse of slaves of any kind was extremely rare in ancient communities. There was also a theoretical distinction in accordance with which the debt slave was inalienable, at any rate outside the community, and he could be held only for a limited time. After a period of three years in Mesopotamia and six years at a maximum in Palestine he was to be set free. In Greece and in Italy there was apparently no limit of time, but a vague understanding existed that he was to be released when the accumulated value of his services equaled the debt and accrued interest. These restrictions were constantly evaded and more and more openly disregarded as a money economy became an increasingly marked feature of the community. Especially obnoxious was the frequent sale of debtors into foreign slavery, a practise into which creditors were readily enough tempted by the fact that it was the readiest way of obtaining a real repayment and much the most profitable form of disposing of what was an irksome security.

The fact that a large part of the free popula-

tion was thus constantly threatened with reduction to a servile condition colored the political history of Mediterranean nations. The Solonic reorganization in Athens in the sixth century B.C. was based upon the demands of debtors for protection and relief, and even the highly idealized accounts by Roman historians depict the civil disturbances of the state as the direct outcome of movements to relieve oppressed debtors. In both Rome and Athens the relief ultimately took the form of a complete abolition of debt slavery and the prohibition of loans on the security of the debtor's person. If it is true that the half mythical lawgiver King Bocchoris of Egypt abolished debt slavery in the eighth century B.C., it was only as a regular incident of debt. Apparently a debtor could still contract in advance that judgment be taken against his person if he failed to pay. Documents prove convincingly the presence of debt slavery in Egypt throughout Ptolemaic and Roman times in a form deprived even of the ancient safeguards, since such slaves were freely alienable except in Alexandria where, as in very ancient Rome, they might be sold abroad but not within the city itself.

Credit on the security of land or chattels had always been found side by side with loans on personal security and was doubtless preferred by creditors. Bad harvests or periodic depressions would result in many defaults and cause the dispossession of the small holder, who thus increased the number of the landless proletariat and created new economic and political problems.

But in Rome, for example, when this process of dispossession was nearly complete and debt slavery legally abolished, the increase of wealth by loans for profit ceased to be an important form of acquisition (about the second century A.D.). The great Roman fortunes were built on agriculture, on foreign commerce and above all on financial speculation in tax farming. Lending of money at interest was freely practised, largely by Greeks and Syrians but also by Romans; it was, however, of relatively minor economic importance.

None the less, the exactions of petty creditors in the later empire were sufficiently oppressive to contribute to the general wretchedness of the economically weakest classes. Personal execution after legal judgment had long existed; and while it was not debt slavery, since the debtor's services could neither be used nor his person disposed of, it enabled the creditor by arresting the debtor to obtain the same result as though he held him for ransom. There were also abundant traces in Rome, as in Europe until recent times, of an ancient custom of scizing the corpse of a defaulting debtor as a means of enforcing payment from his heirs. But all the later imperial legislation and jurisprudence tended toward lightening the physical burden of debt. Exemptions and a system similar to that of bankruptcy barred personal execution in most cases; its continued use was probably due to laxity or corruption in the administration of justice.

Under the system of the colonate and under feudalism money and commerce receded as primary factors in the life of the people and credit was insignificant. The principal way in which debt arose was from penalties and amercements for infractions of law, and this type of debt was always enforced by seizure and detention of the person. In the tenth and eleventh centuries, however, credit showed itself in two fields. The countless military organizations required by the feudal states and the multiplication of military enterprises, which culminated in the grandiose undertakings of the crusades, involved larger accumulations of money than were readily available. The growth in northern Italy and later in western Europe of large scale commerce as distinguished from local fairs and markets also required credit.

But the new credit arrangement did not create a powerful creditor class facing a weaker debtor class. Power was still associated almost exclusively with ownership of and and the church prohibition of all lending for profit made the credit risk very high. As long as this prohibition restricted money lending to foreigners-Jews, Lombards, Caorsini—the creditor class could rely in case of default only on the possibility of future retaliation. But as commerce increased in each particular country and the feudal organization decayed, credit transactions within the community itself became frequent. How were creditors to be assured that the engagements of their debtors would be fulfilled? The mediaeval practise of pawning signet rings and jewelry could not be widely extended. The most obvious form of security was landed property and the widespread use of mortgages on land as security for debts was inevitable.

The essence of the mortgage is that the debtor remains in possession and enjoyment of the land until the debt is due. The instruments that created or proved the debt generally provided that upon default the land at once became the prop-

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erty of the creditor (the mortgagee). The special importance of land in the feudal system created an intense repugnance to any such easy forfeiture. Land was still essentially the basis for social rank and the paternalism that succeeded the feudal relation of lord and serfs in England and France offered marked resistance to any easy change of personnel. Mortgage forfeiture was granted only reluctantly and redemption was favored, as it had been under Roman law.

Creditors were favored by an extreme rigidity in the interpretation of formal contracts. In general a man was bound by what he had signed or sealed and excuses or explanations were given slight attention. This was emphasized by the growth of bills of exchange, in which the tenor of the instrument was conclusive and claims of fraud and overreaching were rare, once the bill was issued and current.

Obviously a debtor class that can offer land as security is not a proletariat. Indeed, debt was rarely found among the economically poorest of the population—the tenant farmers whose leases were usually for short periods or terminable at will and the agricultural laborers. The system of imprisonment for debt, which existed throughout the post-mediaeval period well into the nineteenth century and which has left substantial vestiges, primarily affected the ruined members of the middle and upper classes. The mass of the people was unaffected. As far as England is concerned, this is evident from Dickens' Pickwick Papers and Little Dorrit as well as from scattered references by other English writers of the eightcenth and nineteenth centuries. It was even more true on the continent, where conditions in many countries remained feudal until recent times. Men burdened or ruined by debt normally belonged to the fringes of the propertied classes and their displacement made no great impression on the country as a whole.

It must have come as a distinct shock to those to whom the moral implications of debt were paramount to realize that constant and permanent indebtedness of large numbers of the community was an essential element of capitalist organization. Security in capital investments did away with the necessity for periodic repayment, since the capital would merely be reinvested. Therefore money loaned out on mortgages need never be called in, even though the mortgage was for a definite period of time. The landowner was fully compensated for permanent indebtedness by the increased profits which flowed from wise use of borrowed capital. Unwise use of the

capital, however, might add a constant burden to the land and make it inadequate as a source of livelihood. The debtor would then be in danger of being dispossessed and forced into the proletariat.

The large scale enterprises of the post-Renaissance period gathered capital from many individuals for terms which tended steadily to increase in length. These enterprises continued and expanded the practise of "bottomry loans" -speculation on the successful voyage of a sailing ship—which already had a long history. The fact that these companies were all engaged in trade with distant ports is an indication of the part played by imagination and the desire for adventure in the advance of credit. Men who would be loath to lend money except on ample and visible security at home readily entrusted their accumulated wealth to a few men, with power to use it as they chose in lands thousands of miles away. The Virginia Company, the East India Company, the Muscovy Company and the Hudson's Bay Company were the models followed by many other companies which promised magnificent returns to all who would entrust money to them. The disastrous failure of the South Seas scheme in England and of Law's financial enterprise in France checked only temporarily the willingness of people to provide money for enterprises which promised profit.

The tendency to look upon debt as a more or less normal characteristic was aided by the example of the public debts. Such debts increased enormously in size while the view gained strength that they need not be repaid immediately since so long as interest requirements were met they furnished the safest form of investment for funds. Debts similar to those of the state in size and duration were increasingly contracted by the large corporations which developed after the first part of the nineteenth century. Corporate bonds were frequently secured by mortgages on tangible property but their value came increasingly to depend upon the earnings of the corporation. Similarly corporate stockholders have tended to lose their control over the corporation and have become more and more like lenders of funds to the corporation. No effective means have yet been found to insure that corporations will manage their borrowed money with that reasonable, prudent and honest management which alone can offer anything approaching security to the

The recognition of several standards in which

payment may be made lends uncertainty to debt agreements. Ancient contracts therefore frequently stipulated payment in a particular currency- the Aeginetan, the Euboic or the Alexandrian stater, for example. Modern provisions for payment in gold partake of a similar nature, but their primary function is to guard against changes in the value of legal tender in a particular country. In Roman history such changes were rarely abrupt enough seriously to affect private debts, which were usually of short duration. Prices mentioned in Greek papyri indicate, however, that a marked change did take place in the second half of the third century. The Iewish rabbis provided for an adjustment of debts in accordance with changes in the purchasing power of money. The debasement of the coinage by public debtors during the Middle Ages had little significance for the question of credit in general, which was of relatively slight importance at that time. Not until the end of the eighteenth century in the era of political and industrial transformation did the notion of relieving the debtor class by varying or multiplying the forms of money obtain its extraordinary hold on great masses of people. It is around this question of inflation or cheap money that the modern struggle between debtor and creditor has been waged.

The history of the United States during the nineteenth century illustrates the large scale operation of the debtor-creditor relation. The rapid construction of railroads and the sudden rise of large communities after the middle of the century caused a feverish speculation in agricultural investments in the states on both sides of the Mississippi. Since the resources of the land were unquestioned, money was readily forthcoming from banks that were directly or indirectly controlled by eastern banks and by European financiers. The depression of 1873 left most of these newer communities in a condition of insolvency, burdened with debts which the profits of their crops could not amortize and for which they could barely meet the interest charges. This large scale indebtedness, however, did not produce movements directed to social and economic reform; rather, the fact that entire states were involved made other and simpler devices seem feasible. The peculiar political organization of the United States might have enabled debtor states to deal rather summarily with obligations owed by its citizens to citizens of other jurisdictions, if the full faith clause of the constitution and the federal control

of bankruptcy had not interposed a check. Repudiation of state debts was attempted by a number of states, chiefly in the south. In general, however, financial legislation, particularly the multiplication of paper and silver money to make money "cheap" and thus facilitate discharge of obligations, seemed the easiest way of removing the financial pressure. Whatever may have been the economic soundness or unsoundness of these proposals, their social and psychological bases are clear enough. Communities that had grown rapidly and had, perhaps prematurely, developed a sense of local unity and pride of accomplishment found their plans of development checked or rendered possible only under an onerous and galling control by outside forces.

It was primarily the accumulation of individual debts rather than state obligations that created the notion of burdened communities in the United States. But state obligations also involve an increase in private burdens through taxation and when very large may hamper the important function which the state normally assumes in facilitating the growth of the community. This was never fully and drastically illustrated until after the World War. After 1918 the public debts and obligations of most European nations reached the crushing total of many billions of dollars superimposed upon the normal national debts, which had become one of the commonest and most popular forms of investment. Except for Russia, which a cataclysmic revolution placed in a wholly separate class, the process of rehabilitation in all European communities was obviously hindered by the need of carrying this huge total of debt as a first lien on all the resources of the respective countries. It was feared that these resources would be permanently drained in paying the debts. If the creditors were nationals of the debtor countries, the matter could be handled by a virtual repudiation of the internal debt, however the operation might be disguised. The creation of a wholly new currency in Germany was a practical repudiation of its entire internal debt, public and private. The process of inflation caused the almost complete ruin of what had been Germany's middle class. The stabilization of the French franc at one fifth its former value in gold was a somewhat similar measure, which did not result in the elimination of the small creditor class only because inflation had been more gradual than in Germany.

But the war debts were owed largely to other governments, especially to the United States Debt 37

They could thus be neither repudiated nor manipulated. The effect has been to create in Europe what had previously existed in the debtor section of the United States, an almost intolerable sense of debt servitude to foreigners, and to give rise to all the emotional outpourings which such a feeling carries with it. The picture of the United States as a relentless creditor has seriously impaired unified cooperation in an economic restoration in Europe. The expressions capitalist and proletarian have been applied to countries as a whole, and not merely demagogues but responsible leaders of opinion have left no doubt that they regard the situation as abnormal and unstable. Refunding processes have removed the immediately coercive character of the creditors' demands, but they have not taken away the attitude of resentment and hostility that are inevitable under the circumstances.

In ancient society all the risks of the credit relation were borne by the debtor. His need was urgent; he could rarely stipulate for favorable terms; he regularly pledged his freedom or his livelihood; and a single untoward accident was certain to result in default and forfeiture. If governmental aid was desirable, it was the debtor who could claim it. Measures of various sorts were devised for his relief—the abolition or limitation of interest, the Biblical sabbatical year, compulsory remission of debts or of accrued interest. A system of exemptions withdrew from seizure for debts certain goods which the debtor required for the sustenance of himself and his family—his plow, his cow, his harness. In Roman law an exemption, which came to be called the beneficium competentiae and whose extent was left to the magistrate's discretion, appeared fairly early. These systems of exemption greatly multiplied in the United States. Nearly every state has a list of such exemptions, some of which indicate clearly enough the date at which they were introduced and imply an obsolete social background. The most extensive is the homestead exemption, which protects the property actually used as a home, although its value may be relatively high.

In the eighteenth century the spectacle of small tradesmen ruined by improvident extension of credit must have been frequent enough to suggest that not all the burden rested on the debtor. But it was reserved to the nineteenth century to increase many fold the insecurity of the creditor by removing imprisonment and other penalties for debt and by facilitating discharge in bankruptcy.

The agitation in England against imprisonment for debt was chiefly humanitarian and was countered by arguments based on the immorality of encouraging extravagance and fraud. The economic implication of the system did, however, appear to some extent in newspaper discussion and parliamentary debate. The agrarian classes, both landholders and farmers, were indifferent or opposed to repeal on the ground that the risk of imprisonment acted as a restraint on incurring debts. It was taken as an economic axiom that credit was an evil, to be kept within the narrowest possible limits. It is noteworthy that the parliaments before the Reform Bill, largely composed of landowners, showed no interest in the matter, and that the reformed parliaments, with their much greater percentage of business men, almost immediately took steps to remedy what seemed an ancient abuse. Arrest in mesne process, that is, imprisonment of the debtor to insure his appearance, was abolished in 1838 against vigorous opposition, and at the same time a Judicial Commission reported in favor of abolishing entirely imprisonment for debt. This recommendation was repeated in 1842, and a law to that effect was finally passed in 1869 as part of a general bankruptcy act. This law has been amended several times but its general purpose is to distinguish between an ordinary contract debt, which may not be enforced by threat of imprisonment, and a debt involving fraud or wilful disobedience of court orders, which may be so enforced.

The effect of the Debtors' Act was to remove from the operation of imprisonment for debt most persons of the type depicted in literature as victims of this institution, the insolvent members of the middle and upper classes. But a relatively large number of small debtors continue to suffer imprisonment, since the local courts not infrequently find fraud or contumacy when a judgment remains unpaid. Thus in 1905, 11,427 debtors were imprisoned by the county courts; in 1927 the number fell to 2875. The fraud required is usually far short of the penal offense of that name, and the court regularly finds contumacy present when it is satisfied that the debtor could raise the money if he tried; it is thus evident that the agitation which condemned imprisonment for debt in toto has not quite attained its object. E. H. Parry in The Law and the Poor (London 1914) cites numerous instances which demonstrate that the residue of the system is still sufficiently oppressive.

In the United States a great many state con-

stitutions undertake to wipe out imprisonment for debt by a single sentence, but in almost every case the qualifications—very much like those mentioned in the English debtors' acts—have produced the same results as in England. A certain number of poor debtors—the indefiniteness is due to the hopeless inadequacy of American judicial statistics—are annually committed to jail for failure to meet obligations which in popular view are indistinguishable from ordinary contract debts.

Agitation against imprisonment for debt took the same tone in both Germany and France as in England. In France the Convention abolished it in 1793, but the revolutionary assemblies promptly reintroduced it; it was finally abolished in 1867. It was eliminated in the North German Confederation and in Austria in 1868 and in the whole German Empire by the Code of Civil Procedure of 1877. The only vestige in France is in connection with judgments for damages obtained as an incident to criminal prosecutions, which include a great many cases that would be classed as torts under the English common law. In Germany imprisonment for debt is retained only in cases which indicate what amounts to wilful contumacy on the part of the debtor.

Bankruptcy as originally known in Roman law and in mediaeval Italy was primarily concerned with preventing the defrauding of creditors by concealment of inequitable distribution of the debtor's assets. It was not until the eighteenth century that a few carefully safeguarded cases enabled an honest bankrupt to make a fresh start, wholly or partially relieved of his debts. In England and on the continent, however, the law and practise of bankruptcy are chiefly concerned with the interests of the creditors and debtor relief is incidental. Some slight changes in the debtor's favor have recently been made in France but not enough to alter the character and tone of the system.

In the United States the bankruptcy statutes have almost from the beginning been designed to aid the debtor rather than the creditor, although courts profess to have the interests of both equally in mind. Discharge of the bankrupt is in most cases obligatory. The check on repeated bankruptcies is slight and inadequate. The privilege of bankruptcy is not confined to merchants, as it is abroad. Farmers and wage earners are favored by making it impossible to force them into bankruptcy, although they may voluntarily take refuge in it. The result is that

most persons may repudiate their accrued debts almost at will and suffer only a relatively slight loss of credit by so doing. The amount thus repudiated, far over a billion dollars a year, must somehow be carried by debtors who do meet their obligations.

Even where there is no formal discharge, the burdens and difficulties of enforcing collection from an unwilling debtor are often great enough to induce the creditor to write the debt off rather than attempt to collect it. In the absence of body execution the creditor's only resource is execution against property. When the property was an interest in tangible goods or immovable landed estates, a certain amount of security for the creditor was created by that fact. But an enormous fraction of modern wealth consists of intangible rights easily transferable and far more elastic in value than goods or lands. The property owned by a debtor is itself likely to be obligations of other persons, stocks, bonds and bank accounts, which can be readily concealed or disposed of rapidly and secretly and which when seized may turn out to be worth much less than their face value.

Speculation, economic instability, the corporate structure, inflation and bankruptcy are as important in the modern debt problem as was the reduction of the debtor class to a semiservile condition in ancient society. It has been seriously maintained that existing conditions are inevitable and that any change is undesirable since it would slow up social progress considerably. International economic cooperation, however, may remove many of the elements of instability from our system; with the elimination of many of the most effective stimulants to speculation and unwise expansion, the debtor-creditor relation may acquire a totally new aspect.

Max Radin

See: Credit; Financial Organization; Property; Contract; Mortgage; Negotiable Instruments; Investment; Loans, Personal; Pawnbroking; Small Loans; Instalment Selling; Public Debt; Foreign Investment; Inflation and Deflation; Bankruptcy; Homestead Exemption Laws; Moratorium; Slavery; Peonage; Indenture; Agrarian Movements.

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DEBT, IMPRISONMENT FOR. See DEBT.

DEBT, PUBLIC. See Public Debt.

DEBTORS, RELIEF OF. See DEBT.

DECADENCE is a concept which signifies the descending swing of the cycle of change. It is applied to the apparent decline of any social phenomenon for which observation or philosophy suggests a serial development: races, nations, institutions, religions, manners, techniques, arts. Similar periods of decline in the phenomena of the natural sciences may be analogous to decadence but fundamentally they involve different problems. A progressive decline in vigor which results from physical or biological changes represents degeneration (q.v.) rather than decadence. The latter is primarily a term of description and evaluation for certain aspects of social change.

There may be profound social changes, however, without decadence in the forms which those changes affect. Mechanical inventions,

discoveries, cultural innovations, supplant or alter the old way of life while it is frequently still in its full vigor. Sailing ships may be considered decadent today, but the vessels produced by the old shipbuilders when the first steamship made its ominous appearance were in every way true to the traditions of the craft, and the sailing ships of the present although they are diverted to the whim of sportsmen have never been surpassed in craftsmanship. Decadence is not always involved even in insalutary changes. The latter may be of short life and small significance; they may result from chance, violence, an authoritative fiat, an accidental blunder. The concept of decadence premises a continuous state of inaction or debility.

Occasionally entire cultures have been described as experiencing a state of decadence -imperial Rome, for example, or Bourbon France. But the complexity and diversity of cultural activities are so great that it may be doubted whether all forms of a culture are ever likely to undergo decline simultaneously. It is true that they are largely interdependent, but the decadence of one form of activity may merely point the direction for the development to be taken by another form. The decadence of Rome's political power and of her economic competency in the fourth century furnished issues with which her religion might struggle, but Christianity in Rome was certainly not decadent at that time. Paganism was in its decadence while Rome was still a powerful state. A particular cultural form, moreover, can be considered decadent only in the context in which it has developed. The Roman administrative system, for example, was decadent at Rome, its base, because the requirements put upon it were too severe for its machinery; but that same system transplanted to Constantinople continued to function satisfactorily for another thousand years. The term decadence can safely be applied only to the gradual decline in a particular environment of a particular cultural institution or technique.

As an aspect of historical change the problem of decadence has figured indirectly in the efforts of scholars to construct a philosophy of history, and its ultimate significance has been variously suggested, although seldom examined as a problem in itself. To the early Christian historians, their followers in the Middle Ages and their ultimate exemplar, Bossuet, the course of history was explained in theological terms and decadence was thus an irrevocable punishment

inflicted by God. To the philosophers of progress and of universal law—Bodin, Montesquieu, Turgot, Kant, Condorcet, Comte, for example—periods of decadence were only incidental aberrations from an indomitable advance. To Voltaire decadence was the accident of chance and to Rousseau all civilization was decadent and would become increasingly so as it departed from the state of the noble savage. And to a long list of scholars, from Ibn Khaldun through Vico, Hume and Burckhardt to modern German philosophers of history, notably Oswald Spengler, decadence is part of a ubiquitous process of cyclical fulfilment and decay, of birth, adolescence, maturity and death.

Thus a search for the significance of decadence gives historians, as critics, a disguised outlet for their moral prejudices and it furnishes them, as philosophers, with one of the premises for their favored interpretation of events. The logic of decadence can more profitably be considered without reference to a philosophy of history. When a phenomenon gradually disappears or passes into a new phase, what are the causes and what the characteristics of that transition?

In the utilitarian items of culture-those forms which exist to serve a practical purpose, such as political, economic and social institutions-there are two principal reasons for decadence to which all minor causes can be referred: functional debility and inadequate leadership. The first may mean a decline in functional efficiency, as in the political decadence of seventeenth century Spain; or a disappearance of function leading to decay of the form, as in the replacement of feudalism as a way of life for western Europe; or a growing inability to compete with other means for fulfilling the same function, as in the decline of monarchy in favor of democracy. Inadequate leadership led to the dissolution of the commercial supremacy of Venice and also of Spain and was a factor in the decay of feudalism. Obviously a particular cause can seldom be found operating in vacuo. Neither are these generalized causes of decadence in themselves the complete explanation. The causes and the characteristics which develop from them are scarcely separable. Inertia and the grip of tradition, overelaboration of procedure, unearned privileges, tyranny and corruption, exaggerated individualism, absence of curiosity and of hardy experimentation, are equally stigmata, whether causal or consequential. They become obvious in institutions which

are merely traditional and no longer functionally necessary, in sovereignties which can neither control nor protect, in administrative machineries which are cumbersome and ineffective, in economic structures which are an imposition on the masses of the population, in pervading philosophies of self-indulgence and of disregard for the future.

The bitterly fought concept of racial degeneration, whose advocates cite such disabilities as decline in stature, liability to disease and infertility as evidence of its reality, has been valiantly advanced as a cause of social decadence. Scientific proof, however, shows a conspicuous lag behind the claims of the faithful. Racial degeneration depends on the biologists for proof and until something more is known of it than at present its cultural implications are merely conjectural.

Contemporary institutions may have some of the familiar evidences of decadence, and history may suggest that they have run their course. Capitalism, the family, democracy, Christianity, are frequently described as approaching their ruin. Spengler is the foremost contemporary prophet of decadence and his thesis of the impending doom of the entire western civilization, coming appositely on a war ridden and discouraged world, found thousands of sympathetic readers. But Spengler posited inscrutable laws which work majestically and, unless circumvented by almost superhuman energies, inevitably toward a cyclical progression of all cultures. If this premise is doubted his argument of contemporary decadence may also be doubted, for we have not the perspective to evaluate shorter cycles. It is possible, for example, that it is merely our familiar form of capitalism that is decadent and that there is in preparation a new capitalist economy, such as Wells' world state; or it may be that capitalism is only in its adolescence and that what looks like its death agony is no more than growing pains.

Whether a civilization or a nation can avert an imminent decadence, whether an institution or a religion, an art or a complex of manners, can be diverted from an impending disintegration, are questions that have always interested students of society. The impossibility of their solution makes them only the better adapted to speculation. Inadequacies and corruptions in a current scheme of things can perhaps be reformed. Improvement and adaptation are as much a part of the course of events

as are paralysis and collapse. The extent to which improvement and adaptation come of themselves, as a result of a process of laissez faire and muddling through, or the extent to which they can be imposed by brilliant administrators, the extent to which even these administrators are themselves only the fortunate instruments of favorable circumstances, are questions probably forever moot.

Those forms of culture which are primarily intellectual, emotional or creative rather than practical—such as religion, morals, art, science, thought—are shaped to purposes which are uncertain of definition and they are therefore less susceptible of pragmatic evaluation.

In reference to these forms decadence has been used with various connotations. Any departure from traditional standards, for example, implies a state of decadence to those persons who believe in the permanent value of established norms. To the fundamentalist and the authoritarian new banners of thought and new explorations of creative energies are symbols of decadence, whether they be indicated in liberal religious doctrines, the moral codes of younger generations, revised patterns of conduct, innovations in the arts, counter-Biblical theories in the sciences or any other form of progressivism.

On the other hand, a mere absence of interest, of whatever quality it might have been, or a protracted dearth of significant production is sometimes considered an indication of decadence. There was a widespread intellectual apathy, for example, in the Scandinavian countries during the early nineteenth century; the early American frontier, actively concerned with the business of keeping alive, produced no great art and showed little interest in art; there is at the present time a growing indifference toward religious dogma and moral standards. But a mere inhibition of creative energies or suspension of general interest implies decadence only superficially. There are other and more significant connotations of the word which derive from positive and integral characteristics. These are most easily illustrated in the arts, although there are obvious analogies in other related forms of culture.

There seems to be an inner katabolism in specific art forms which brings them to decadence after the complete expression of that form has been stated and exhausted. The process in its simplest terms is first groping and experimentation, then a flowering in full creative vigor and finally a consolidation of the

tradition, characterized by creative sterility. The stigmata of this decadent period are various. Subject matter may become the artist's central interest rather than a search for appropriate expression, and thus in his desire for novelty he may reach for the abnormal, the exotic, the sentimental or the melodramatic. Or great refinement of perception and of expression develops and the artist becomes merely precious. Or the appearance of quality is simulated by a competent technique, while the work remains superficial and insincere. Or dead rules and standards are made out of what was once a body of craft wisdom and the artist becomes a virtuoso. But whatever manifestation it takes, the decadence implicit in such works arises from the fact that the specific form has reached the limits of its expression and until a new development is evolved there can be only elaboration and exaggeration of the old.

The prevalence of such qualities in the work of any period or their presence in the work of any particular artist does not of necessity indicate a condition of decadence. They may be only incidental aberrations or they may be the essential tradition of the craft, as careful following of rules held to be divinely inspired was an integral function of early Indian art and as excessive delicacy and refinement were the very substance of Japanese art until about the seventeenth century. The progress toward decadence, in fact, is seldom a neat sequence of easily discernible rise and decline. The cycles of various arts are seldom in harmony with one another, and even in a single art some forms may be in a state of decadence while others are developing with primitive vigor. The arts, moreover, are not free to develop in isolation their various methods of expression, for they are always affected in their development by prevailing cultural conditions. In a time when the elements of contemporary life—its preoccupations, interests, ideals, its tempo, prejudices, tendencies, values—are in a state of readjustment the artist will reflect the unrest around him and an art nominally decadent becomes equally the instrument of a new synthesis.

But with a proper hesitation about applying it too easily and with a careful statement of the problem the concept of decadence is a valuable critical tool. There is reason in seeing integral decadence in later Greek sculpture when it exploited the horrible or the sentimental; in the elaboration and whimsicality of later Byzantine and later Gothic architecture; in much of

the literature and painting of the seventeenth and eighteenth centuries with their slavery to classical "rules"; in the precious classicism of the French parnassiens; in nineteenth century American architecture when it copied classical forms with no regard to their functional appropriateness.

The most vivid example of artistic decadence, however, and the one most commonly considered archetypical is found in the work of a group of French writers in the later nineteenth century. Gautier, Huysmans, Verlaine, Mallarmé, Baudelaire, were the leaders, and the Yellow Book circle in England proved that their radius was not confined to France. With this group the essential qualities of decadence were consciously exalted as ends in themselves. Decadence became a philosophy of art. Seventeenth and eighteenth century historians-Bossuet, Montesquieu, Gibbon-had enunciated the idea of decadence in reference to the disintegration of the Roman Empire, and all aspects of later Roman culture came to be described in those terms. Thus when a form of literature developed in the nineteenth century having certain resemblances to the work of the obscure group of Latin poets of the fourth century the epithet of decadent was applied by the critics and even accepted as a shibboleth by some of the writers. Baudelaire expressed the philosophy of the group when he wrote that "the language of the later Latin decadence—the departing sigh of a robust person already transformed and prepared for the spiritual life—is singularly appropriate to express passion as it has been understood and felt by the modern poetic world."

The resemblance between the two periods, however, was not due entirely to an imitation of the first by the second. In both the tradition had become familiar and a little jaded; artists were either incapable of breaking away and carving new life out of new conditions or their environment was not sufficiently stimulating to demand a new expression. Thus the old approaches were retained and creative vigor was expended in elaborating them to their full capacity. The result was a style characterized by one of its own practitioners, Gautier, as "ingenious, complicated, learned, full of shades of meaning and research, always pushing further the limits of language, borrowing from all the technical vocabularies, taking colors from all palettes, notes from all keyboards, struggling to render what is most inexpressible in thought and in form the vaguest and most fleeting contours; listening, that it may translate them, to the subtle confidences of the neuropath, to the avowals of ageing and depraved passion, and to the singular hallucinations of the fixed idea verging on madness. This style of decadence is the ultimate utterance of the Word called upon to express everything, and pushed to the utmost extremity."

The fin de siècle group represented the final stages of the romantic movement. Its characteristics—a disgust for the commonplace, a search for strange sensations, an interest in the morbid, the exotic, the mystic, the shocking (in Baudelaire's phrase, the "phosphorescence of putrescence"), a philosophy of defeatism and inaction, an extreme subtlety in style and novelty in vocabulary, a perfection of detail rather than unity of the whole—can be easily understood as an exaggeration and distortion of the elements of romanticism, the final expression of a tradition lingering over into an age in which it had no roots. It was decadent not because of its philosophy or subject matter or method but because it pushed to its farthest extremes a way of art which had developed under other conditions.

Decadence is not of necessity a term of derogation. Within its limits a decadent art may be one of high integrity. There are elements of decadence in some of the greatest masters of art and in some of its most majestic ages. A decadent art in the hands of a master is, in fact, likely to contain the elements of a new synthesis in its very exhaustion of the old. Thus Aristophanes, Ovid and Tacitus, Watteau, Inigo Jones, Flaubert, Baudelaire, Debussy, Proust, D. H. Lawrence--these and many others although implicitly decadent have fashioned an art of integral validity.

The concept of decadence is in all its applications merely an aid in evaluating historically the vigor of cultural forms. Its standards are not moral but practical or philosophical. An age of conspicuous decadence, such as the later Roman Empire or France before the revolution, may contain a richer heritage for the individual than will another period of more primitive vigor, just as a decadent art may be subtler and more sophisticated than an archaic one. Only those cultures or those aspects of culture which are in a state of flux have in them the possibilities of greatness. There is neither decadence nor grandeur in a placid stability.

Elizabeth Todd

See: DEGENERATION; CHANGE, SOCIAL; EVOLUTION,

Social; Progress; Culture; Civilization; Art; Literature; Taste; Morals; Tradition; Conventions, Social; Royal Court.

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DECENTRALIZATION. The process of decentralization denotes the transference of authority, legislative, judicial or administrative, from a higher level of government to a lower. It is the converse of centralization and should not be confused with deconcentration, a term generally used to denote the mere delegation to a subordinate officer of capacity to act in the name of the superior without a transfer of authority from him.

Although modern states have been chiefly influenced by the trend toward centralization in the last century, there are persistent counter tendencies. The clue to many of these is to be found in the political self-consciousness of specific groups or in divergence of economic interests within a political unity. The sudden rise of a number of new states, fragments of the former Russian Empire, is a striking case of decentralization carried to the point of complete rupture; the establishment of the Irish Free State and the steady improvement in status of the dominions of the British Empire offer one of the most important contemporary examples of what may be called political decentralization.

The Standing Committee on Scottish Bills in the House of Commons and special administrative agencies, culminating in 1926 in the office of secretary of state for Scotland, have long preserved a degree of autonomy for Scotland within the United Kingdom. The pressure of imperial, foreign and general economic problems in the House has so diminished the time available for consideration of domestic problems that a strong demand has been made for the establishment of separate parliaments for Scotland, Wales and England. On June 4, 1919, the House of Commons signified its approval of this program and established a Conference on Devolution, the report of which (Cmd. 692, 1920) presented alternative plans. No action had been taken as late as 1930.

The degree of centralization which has characterized France since Richelieu has often provoked a desire for some degree of local self-government. The marked trend toward decentralization in the early years of the revolution proved premature; the efforts of the communards in 1871 failed to dislodge the central authorities; in fact, the Napoleonic structure has not been seriously modified. An extensive literature on regionalism nevertheless testifies to dissatisfaction with the historic centralization of power at Paris.

Strong counter movements against the authority of the German national government in various parts of the Reich have filled the last decade with clamor; and the unparalleled growth of the influence of the Deutscher Städtetag suggests that German cities as well as *Länder* may furnish points of resistance to overcentralization in the Reich. Repeated but fruitless conferences have been held in Germany to reconsider the present distribution of power.

Between the American states and the federal government no such pronounced shift has occurred as in Germany. While the general tendency is in the same direction, counter movements are clearly in evidence. Among these is the tendency to develop regional organizations of states, sometimes informal, sometimes of a legal character. The conferences of governors of the New England states and the conferences of governors of the Rocky Mountain states are cases in point, while the Port of New York Authority illustrates interstate organization of a legal character. The growth of organizations of state officials and the contemporary development of related staff agencies, such as the American Legislators' Association, tend to strengthen

the power of resistance of the states against the general drift.

The enforcement of the Eighteenth Amendment, vested concurrently in the United States and the states, was thought by some to impose an obligation on the states to enact enforcement statutes. This view has been rejected by the Supreme Court, and changes in opinion in some states now illustrate a type of decentralization resulting in the repeal of the enforcement statutes and formal refusal on the part of the states to cooperate in enforcement.

Within the states there is a steady movement in favor of constitutional home rule for cities, which, inaugurated in 1875 by Missouri, had extended by 1930 to fifteen states. In other states the legislature authorizes cities to choose one of several optional forms of charter or grants a limited statutory home rule.

The establishment of public or quasi-public corporations for the purpose of administering public enterprises is an interesting type of decentralization, varying in degree from those activities undertaken *en régie*, in which the control of the corporation by a public body is immediate and in which the latter's budget includes the budget of the corporation, to independent corporations endowed with legal personality separate from that of the parent authority.

The advantages claimed for decentralization are: relief of national legislatures from a constantly increasing burden, which is destroying their effectiveness equally in local, national and imperial spheres; promotion of citizen interest in government by means of wider popular participation; retardation of conditions favorable to bureaucracy by breaking the administrative hierarchy at specific levels of government; closer adaptation of legislative and administrative methods to the needs and opinions of given areas; enlargement of the opportunity for experimentation; and, so far as the use of public corporations is concerned, protection against political interference in the conduct of administrative operations.

In a decentralized state the delineation of power between central and local agencies is difficult to adjust in the first place and to modify in the light of advances in social organization and technology. Flexibility is ordinarily sacrificed to stability. A delicate adjustment of governmental machinery is needed to provide for the necessity of coordinated action in some directions, minimum standards in others and the

widest diffusion of knowledge in all. Special means must be employed to secure the necessary coordination and to stimulate relatively weak and backward areas, whose deficiencies fall not only upon themselves.

Under the doctrine of pluralism the state becomes primarily a great coordinating agency, its existing centrally administered activities being distributed among functional groups. G. D. H. Cole foresees also a geographical devolution within the functional and political groups by means of which the great bulk of administrative work, both political and economic, will be performed by regional bodies.

LEONARD D. WHITE

Sec: Centralization; Burfaucracy; Organization, Administrative; Fldfralism; Local Government; Home Rule; Administrative Areas; Government Corporations; Pluralism; Regionalism.

Consult: McBain, H. L., The Law and the Practice of Municipal Home Rule (New York 1916); Fawcett, C. B., Provinces of England (London 1919); Stamp, Josiah, and others, "The Principles Which Should Determine Whether a Service Requiring Local Organization is Best Administered by a Central Government Department or by a Local Authority" in Journal of Public Administration, vol. iii (1925) 342-78; Chiao, Wan-Hsuan, Devolution in Great Britain (New York 1926); Hauriou, Maurice, Etude sur la decentralisation (Paris 1892); Cadilhac, P. E., Les projets de régionalisme administratif (Paris 1921) Barthélemy, J., "Le mouvement de décentralisation" in Revue du droit public, vol. xxvi (1909) 115-55 Hauser, Henri, Le problème du régionalisme (Paris 1924); Braun, Otto, Deutscher Einheitsstaat oder Föderativsystem (2nd ed. Berlin 1927); Brecht, Arnold, "Entwurt eines Gesetzes über die Reichsreform nach den Geschlussen des Verfassungsausschurges der Länderkonferenz" in Reich und Länder, vol. iv (1930) 135 39; Great Britain, Parliament, Conference on Devolution, Parliamentary Papers, Cmd. no. 692 (1920).

DE CESARE, CARLO (1824–82), Italian economist. De Cesare occupied a number of important posts in the Neapolitan and central Italian governments. He was a member of the first and second Italian parliaments and was made senator for life in 1876. His most important appointment was to the position of controller of credit institutions and other joint stock companies for the central government in July, 1866. During his tenure of office De Cesare published two reports, Il sindacato governativo, le società commerciali e gli istituti di credito nel regno d'Italia (2 vols., Florence 1867-69), which are among the best sources for the history of credit, cooperation, joint stock companies and speculation in a fateful period of Italian eco

nomic history. De Cesare is merciless in exposing the sins of promoters and untrustworthy or careless directors, and the discontinuance of the central controllership in September, 1869, was probably due to his ruthless supervision. He defended the idea of a central bank against unlimited freedom of issue in a tract, Le banche di emissione (Rome 1874), which derives value from his official experience. De Cesare also wrote a textbook on political economy (Manuale di economia pubblica, 2 vols., Turin 1862), an essay on the economics of his native region, Intorno alla ricchezza pugliese (Bari 1853), and a biography of Antonio Scialoja (La vita, i tempi e le opere di Antonio Scialoja, Rome 1879). He ranged himself with Scialoja and the moderate interventionists in their warm disputes in the sixties and seventies with Ferrara and other adversaries of the intervention of the state in economic affairs.

Luigi Einaudi

DECKER, SIR MATTHEW (1679–1749), merchant and economic pamphleteer. Decker was born in Amsterdam and settled in England in 1702. He became director of the East India Company and represented Bishops' Castle in the House of Commons.

Decker wrote two tracts: Serious Considerations on the Several High Duties which the Nation in general, as well its Trade in particular labours under (London 1743, 7th ed. 1756) and An Essay on the Causes of the Decline of the Foreign Trade, consequently of the Value of the Lands of Britain and on the Means to restore both (London 1744, 4th ed. Dublin 1751). In the former he advocates the raising of the whole revenue by means of a single excise duty on houses and claims for the tax the merits of justice, convenience and economy. In the latter he urges the replacement of all customs and excise duties by a single tax on the consumption of luxury goods a kind of income tax with the merit, as it was conceived in the eighteenth century, that the taxpayer voluntarily assesses himself by choosing to consume such articles and to such an extent as he wishes. J. R. McCulloch on what appear insufficient grounds expressed some doubt as to Decker's authorship of this work. In both essays Decker argues strongly against restrictions on trade, emphasizing the significance of industry and trade to the welfare of the country. He would exempt the houses inhabited by the poor from all duties—not on grounds of social sympathy but because it would necessarily

lower their wages and consequently increase the competitive strength of British exports; he advocates the luxury tax because it would check luxury, the bane of virtue and industry. Decker's works reveal a forceful individualism. He was opposed to monopolies and bounties and was skeptical as to whether trade can ultimately be forced into "an unnatural channel," thus anticipating the discussion on the operation of natural laws in the economic world.

J. F. REES

Consult: Seligman, Edwin R. A., The Shifting and Incidence of Taxation (5th ed. New York 1927) p. 91-94.

DECLARATION OF INDEPENDENCE. On June 7, 1776, R. H. Lee on behalf of the Virginia delegation presented to the Continental Congress three resolutions, the first of which stated that "these United Colonies are, and of right ought to be, free and independent States, [and] that they are absolved from all allegiance to the British Crown, and that all political connection between them and the State of Great Britain is, and ought to be, totally dissolved" (Journals of the Continental Congress, ed. by C. F. Ford, 21 vols., Washington 1904-12, vol. v, p. 425). This resolution was voted by Congress on July 2 (ibid., p. 507). Meantime, June 11, a committee composed of Jefferson, Adams, Franklin, Roger Sherman and R. R. Livingston was appointed to "prepare a declaration to the effect of the said first resolution . . . " (ibid., p. 428-29, 431). Jefferson was authorized (for conflicting accounts on this point, Works of John Adams, ed. by C. F. Adams, 10 vols., Boston 1850-56, vol. ii, p. 512, 515; Writings of Jefferson, ed. by H. A. Washington, 9 vols., Washington 1853-54, vol. vii, p. 304) to prepare the preliminary draft. Many years later Jefferson said (ibid., p. 305) that in preparing this draft he "turned to neither book nor pamphlet." But it appears that he had before him a paper written by himself entitled "Constitution of Virginia first ideas of Th. J.," from which some parts of the Declaration were copied verbatim (Daughters of the American Revolution Magazine, vol. lv, 1921, p. 363). The first draft, entitled "A Declaration by the Representatives of the United States of America, in general Congress assembled," was submitted by Jefferson to Franklin and Adams, both of whom made and additions. several corrections Thus amended it was submitted by the committee to Congress on June 28. Congress after making

further alterations and adding the resolution of July 2 finally voted the Declaration on July 4 (Yournals, vol. v, p. 491, 510. For detailed study of the drafting, Becker, Declaration of Independence, ch. iv). The New York delegation, failing to obtain instructions, refrained from voting; but the Declaration was formally approved by the New York Provincial Congress on July 9 (American Archives, ed. by P. Force, 9 vols., Washington 1837-53, ser. v, vol. i, col. 1391). On July 19 Congress ordered that the Declaration be "engrossed on parchment with the title and stile of 'The Unanimous Declaration of the 13 United States of America,' and that the same when engrossed be signed by every member of Congress." The secret Journal for August 2 states: "The Declaration of Independence being engrossed and compared at the table was signed by the Members" (Hazelton, Declaration of Independence, ch. ix).

Aside from the last paragraph, which incorporates the resolution of independence voted on July 2, the Declaration consists of two parts: a preamble which formulates a general political philosophy and a list of grievances against the king of England designed to justify the separation from Great Britain.

The preamble states: "We hold these truths to be self-evident; that all men are created equal; that they are endowed by their Creator with certain unalienable Rights; that among these are Life, Liberty, and the pursuit of Happiness. —That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed.— That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or abolish it, and to institute new Government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness." Many years later John Adams wrote to Pickering: "There is not an idea in it [the Declaration] but what had been hackneyed in Congress for two years before" (Works, vol. ii, p. 514). R. H. Lee asserted that the ideas were taken from Locke. To these strictures Jefferson replied: "I did not consider it as any part of my charge to invent new ideas." The essential thing was to harmonize the "sentiments of the day, whether expressed in conversation, in letters, printed essays, or in the elementary books of public right, as Aristotle, Cicero, Locke, Sidney, etc." (Writings, vol. vii, p. 305-407). The preamble

was indeed no more than a brief and effective formulation of the generally accepted theories of natural right and popular sovereignty.

After affirming the abstract right of a people to abolish a form of government destructive of its natural rights the Declaration proceeded to enumerate the actions of the king which justified the colonies in resorting to that right in the present case. The grievances charged are stated in general terms: "He has refused his Assent to Laws, the most wholesome and necessary. . . . He has obstructed the Administration of Justice. . . . He has kept among us, in times of Peace, Standing Armies," etc. These charges, about twenty-four in number, refer to acts of the British government, but in the Declaration they are alleged against the king alone. It is significant that although for ten years past the colonial leaders had justified their resistance on the ground that Parliament had infringed their rights as British subjects the Declaration mentions neither Parliament nor the rights of British subjects. The explanation of this anomaly is to be found in the fact that as the controversy proceeded the colonial leaders modified their theory of colonial rights to suit the exigencies of the situation. In 1765 they were content to deny the right of Parliament to tax the colonies "internally," admitting its right to tax them "externally." In 1768-69 they denied the right of Parliament to tax the colonies in any way, admitting its right to legislate for them otherwise. But as early as 1768 Franklin shrewdly perceived that it would be difficult to maintain such fine distinctions, at least "clearly [and] with intelligible arguments. Something might be made of either of the extremes: that Parliament has a power to make all laws for us, or that it has a power to make no laws for us; and I think the arguments for the latter [are] more numerous and weighty, than those for the former" (Writings of Franklin, ed. by A. H. Smyth, 10 vols., New York 1905-07, vol. v, p. 115). In 1770 James Wilson prepared an elaborate pamphlet (not published till 1774) designed to prove that the colonies were in no way subject to Parliament, being bound to the empire only through voluntary allegiance to the king (Works of James Wilson, ed. by B. Wilson, 3 vols., Philadelphia 1804, vol. iii, p. 199). When the colonies decided upon a complete breach with Great Britain this was obviously the most convenient theory for justifying their action: if the colonies as free peoples had voluntarily acknowledged allegiance to the king, they might for good

reasons voluntarily withdraw it without laying themselves open to the charge of rebellion. In Jefferson's original draft of the Declaration this theory was explicitly suggested in the following passage: "We have reminded them [our British brethren] . . . that in constituting indeed our several forms of government, we had adopted one common king, thereby laying a foundation for perpetual league and amity with them; but that submission to their parliament was no part of our constitution." This passage, except the first four words, was struck out by Congress (Becker, p. 182); but the theory which it explicitly suggested was implicitly maintained throughout the Declaration. Parliament was not mentioned because, according to this theory, the colonies, not being subject to Parliament, had no quarrel with it. The rights of British subjects were not mentioned because, according to the theory, the colonies were not British subjects but free peoples—free peoples who had hitherto for good reasons acknowledged allegiance to the king, but who now withdrew that allegiance in view of the numerous acts of the king which have "in direct object the establishment of an absolute Tyranny over these states" (Becker, ch. iii).

The immediate importance of the Declaration of Independence was that it provided the patriot party with a most effective justification for the war with Great Britain. After the war was ended the major part of the Declaration (the list of grievances against the king) ceased to be of great significance. But the influence of the famous preamble long survived the events which gave birth to it. Like its French counterpart, the Declaration of the Rights of Man and the Citizen, it served discontented peoples throughout the world as a charter of human liberty. During the nineteenth century it was accepted by radical and revolutionary parties in every European country, in South America and in the United States as a classic and semi-sacred formulation of the fundamental democratic doctrines that governments derive "their just Powers from the consent of the governed," and that when "any form of Government becomes . . . destructive of the natural rights of man it is the Right of the People to alter or to abolish it" (Becker, ch. vi).

CARL BECKER

See: DECLARATION OF THE RIGHTS OF MAN AND THE CITIZEN; NATURAL RIGHTS; REVOLUTION; EQUALITY; LIBERTY; DEMOCRACY.

Consult: Friedenwald, H., The Declaration of Inde-

pendence, an Interpretation and an Analysis (New York 1904); Hazelton, J. H., The Declaration of Independence (New York 1906); Becker, C. L., The Declaration of Independence: a Study in the History of Political Ideas (New York 1922); Fitzpatrick, J. C., "The Manuscript from Which Jefferson Wrote the Declaration of Independence" in Daughters of the American Revolution Magazine, vol. lv (1921) 363-67; Becker, C. L., "The Spirit of '76" in Becker, C. L., Dodd, W. E., and Clark, J. M., The Spirit of '76 and Other Essays (Washington 1927) p. 9-58.

DECLARATION OF LONDON. This Declaration was an early attempt in the direction of codification of international maritime law by a conference of duly commissioned official delegates. Article 7 of the proposed convention for the establishment of an international court of appeal in matters of prize, The Hague, 1907, stated that in absence of treaty provisions the international prize court should apply "the Rules of International Law," and if no such rules existed the court was to give judgment "in accordance with the general principles of justice and equity." The question immediately arose as to what were the rules of international law.

Great Britain, realizing that naval policy and practise would be influenced by the wide divergence among nations upon questions of the law of maritime warfare, proposed in February, 1908, that a conference should be held with the object of agreeing "as to what are the generally recognized principles of international law" relating to prizes. The invitation to the conference was issued to the naval powers: Austria-Hungary, France, Germany, Italy, Japan, Russia, Spain and the United States of America. Later the Netherlands was with concurrence of the other powers asked to participate. The conference assembled in London December 4, 1908, and its sessions continued until February 26, 1909. More than one third of the delegates were naval officers of long experience. The American delegates were Rear Admiral Charles H. Stockton, U.S.N., and George Grafton Wilson. The delegates recognized the difficulties of formulating law adapted to the differing national legal systems represented in the conference. These difficulties were at once made evident by the Red Book presented to each delegate at the opening of the conference as a basis of discussion and containing the views of the several powers.

The program proposed for the conference had related to contraband, blockade, continuous voyage, destruction of neutral ships, un-

neutral service, conversion of merchant vessels to vessels of war, transfer of flag, and nationality or domicile of owner. A degree of agreement was reached except upon the questions of conversion and domicile. Upon the other subjects the preliminary provision states: "The Signatory Powers are agreed in declaring that the rules contained in the following Chapters correspond in substance with the generally recognized principles of international law." In the final provisions, due to the fact that rules had been drawn in face of great diversity of usage, which sometimes necessitated a degree of compromise, it was agreed that "the provisions of the present Declaration form an indivisible whole" (article 65).

The Declaration of London was signed February 26, 1909. Naturally its seventy-one articles attempting to formulate rules on practise varying among nations met with much criticism, some of which, as was stated by Sir Edward Grey, showed little understanding of the Declaration and some a failure to read its articles. The Declaration was not ratified by the signatory powers and never became operative as law for these powers, although it was adopted in special cases, as in the Turco-Italian war of 1911.

It was endorsed by some states during the World War, as in the Chilean note of August 8, 1914, in regard to the observance of neutrality and in the note of Salvador of December 4, 1914; and some of the rules published by belligerents followed textually the Declaration of London. As the war progressed, however, the departure from the rules became wider, although throughout the war the Declaration remained a standard to which reference was made in testing rights of belligerents with regard to neutrals. The diplomatic representatives of the United States were instructed in August, 1914, to inquire whether the belligerent governments would agree that the rules of the Declaration of London should be applicable. Austria-Hungary and Germany agreed to apply the stipulations, conditioned on "like observance on the part of the enemy." The Allied Powers, following the lead of Great Britain, accepted the Declaration with reservations in regard to contraband and some modifications as to blockade. As by article 65 the Declaration was to form "an indivisible whole," the United States withdrew its suggestion that it be regarded as the accepted code.

The twenty-one articles of the Declaration relating to blockade (article 2 reaffirmed the

Declaration of Paris, 1856) were applied in some instances, as on the coasts of Africa, and disregarded in others, as on the coasts of Europe. Articles 22 to 44, which related to contraband and in the main followed the lists approved by the Hague Conference in 1907, were in face of World War conditions found to be too restricted; the lists of contraband became almost all inclusive, involving the abolition of the distinction between absolute and conditional contraband. Many other provisions of the Declaration of London were, however, cited in close decisions as evidence of the law and were followed widely in actual conduct of the war and in courts. Experience since 1909 has once more demonstrated that rules drawn up at one period may require modification in a codification adapted to changed conditions of later periods.

GEORGE GRAFTON WILSON

See: Maritime Law; Declaration of Paris; Prize; Contraband of War; Beockade; Continuous Voyage; Belligerency; Neutrality.

Gonsult: For text, reports and proceedings: London International Naval Conference 1908-09, Declaration of London, ed. by James B. Scott, Carnegie Endowment for International Peace, Division of International Law (New York 1910); "Correspondence and Documents respecting the International Naval Conference Held in London" and "Proceedings of the International Naval Conference Held in London" in Great Britain, House of Commons, Parliamentary Papers, Cd. 4554-55 (1909); United States, Naval War College, Newport, International Law Topics; the Declaration of London of February 26, 1909 (Washington 1910). See also Hall, John A., The Law of Naval Warfare (2nd ed. London 1921).

DECLARATION OF PARIS. The Treaty of Paris of 1856, which put an end to the Crimean War, was accepted "without enthusiasm, but without opposition." There was a lively hope that the Congress of Paris might do something worthy of world approval, and to this end it was proposed that it establish the bases of uniform law for maritime war as far as neutrals were concerned. The liberal treatment of neutrals during the war, due perhaps to geographical reasons rather than to changed attitude, seemed to lend approval to such principles prior to the deliberations which resulted in the Declaration of Paris as signed on April 16, 1856. This Declaration stated that the regrettable controversies as to the law of maritime warfare, uncertainty as to neutral rights and need of uniform doctrines were among the reasons which led the plenipotentiaries to adopt "the following solemn

declaration: 1. Privateering is, and remains, abolished; 2. Neutral flag covers enemy's goods, with the exception of contraband of war; 3. Neutral goods, with the exception of contraband of war, are not liable to capture under enemy's flag; 4. Blockades, in order to be binding, must be effective—that is to say, maintained by a force sufficient really to prevent access to the coast of the enemy." It was further stated: "Convinced that the maxims which they now proclaim cannot but be received with gratitude by the whole world, the undersigned Plenipotentiaries doubt not that the efforts of their Governments to obtain the general adoption thereof will be crowned with full success."

Privateering had before 1856 come to be looked upon with growing disfavor. The doctrine, "free ships free goods, free goods always free," had been advocated for many years and had been embodied in some treaties. There was general consensus that paper blockades should no longer be tolerated. By a protocol the indivisibility of the four principles of the Declaration was to be maintained. Other states than Austria, France, Great Britain, Prussia, Russia, Sardinia and Turkey, the signatories, were invited to accede to the Declaration. Within a year more than forty states had signified their adherence; the United States of America, Spain and Mexico were among the powers which did not accede at that time although the latter two countries formally accepted the Declaration in 1908 and 1909 respectively. The correspondence of the United States on the subject indicated that the Declaration to be acceptable should provide for the general immunity of all innocent private property at sea, a contention which the signatories were unwilling to admit. The United States, however, observed the provisions of the Declaration during the American Civil War, even though the principle as to exemption of private property from capture was not embodied, and both the United States and Spain agreed to respect the Declaration in the Spanish American War of 1898.

Many objections have been raised against the Declaration of Paris. Some of these were on technical grounds, as, for example, that the negotiators at a peace congress had no authority to sign such a declaration. Other criticisms were to the effect that the Declaration of Paris multiplied "deplorable disputes"; it was regarded by Secretary Marcy as a half way measure and it was bitterly attacked in Great Britain on constitutional and other grounds. The use of subsi-

dized vessels and volunteer fleets was at times regarded as contrary to the provision of the Declaration of Paris in regard to privateering. When question was raised concerning the Prussian voluntary naval force in 1870, the law officers of the British crown found "substantial distinctions" between that force and the system of privateering, and gradually such vessels came to be considered as different from privateers. In the section of the Declaration regarding blockades the words "really to prevent access" have usually been interpreted as "rendering actually dangerous." The provisions relating to contraband although somewhat loosely drawn were generously accepted.

While some authorities do not regard the Declaration of Paris as setting forth principles of international law, nevertheless courts of the Allies and of the Central Powers during the World War rendered decisions based upon the Declaration. Sir Samuel Evans, president of the British Court in the prize case of the *Marie Glaeser*, September, 1914, in his comment said: "This Court accordingly ought to, and will, regard the Declaration of Paris, not only in the light of rules binding in the conduct of war, but as a recognized and acknowledged part of the Law of Nations, which alone is the law which this Court has to administer."

GEORGE GRAFTON WILSON

See: MARITIME LAW; NEUTFALITY; PRIVATERING; CONTRABAND OF WAR; BLOCKADE; DECLARATION OF LONDON.

Consult: Great Britain, Parliament, House of Commons, General Treaty between Great Britain, Austria, France, Prussia, Russia, Sardinia, and Turkey, for the Re-establishment of Peace, and Protocols of Conferences Held at Paris Relative to the General Treaty of Peace, and Declaration respecting Maritime Law, Accounts and Papers, State Papers, nos. 2072-74 (1856); Piggott, F. F., The Declaration of Paris, 1856 (London 1919); Bowles, Thomas C., The Declaration of Paris of 1856 (London 1900).

DECLARATION OF THE RIGIITS OF MAN AND THE CITIZEN. This Declaration in its final form was adopted by the French National Assembly on August 26, 1789, as a preamble to the new constitution. It had been drawn up in committee from twenty-one projects, the work of La Fayette, Mounier, Mirabeau, Rabaut Saint-Étienne and others. It contains seventeen articles and about five hundred words. Article 1 asserts that "men are born and remain free and equal in their rights." These "natural and imprescriptible rights of

man" are enumerated in article II as liberty, property, security and resistance to oppression. The rest of the Declaration further defines or guarantees these rights. Liberty is defined as "the power of doing whatever does not injure another." The individual is to be subject to uniform laws, in the making of which he may take part either directly or through his representatives; punishments obviously must be necessary; no one is to be molested for his opinions, even religious opinions; freedom of speech and of the press is guaranteed, subject to necessary legal restrictions; taxation must be equitably apportioned and must be determined by the citizens or their representatives; public officials may be called to account; property is an "inviolable and sacred right" and can only be taken from the individual in case of public necessity and with due indemnity. Freedom of association, it should be noticed, is not mentioned in the document.

There has been much controversy as to the origins, both proximate and ultimate, of this Declaration. Jellinek maintained that the immediate source was the American Declaration of Independence and more especially the bills of rights embodied in various state constitutions drawn up between 1776 and 1783, and that the ultimate source was the Calvinist idea of individual freedom of conscience against any earthly authority. Boutmy and others have, however, denied or minimized American and Calvinist influence and found the sources of the Declaration in the Contrat social, in the general philosophical movement of the eighteenth century and in practical necessity. That the American state constitutions were known to the alert bourgeois intellectuals of France—that is, to the kind of men who drew up the Declaration—is quite clear. They were circulated in pamphlet form in English and in translation as early as 1783. Franklin himself brought out an edition. Indeed, an anonymous pamphlet of 1791 (Déclaration des droits de l'homme . . . comparée . . . principalement avec les déclarations des États-Unis de l'Amérique, Paris, an troisième de la Liberté) anticipates Jellinek, compares the different declarations textually and concludes that the French have made succinct the diffuse American declarations. On the other hand, the makers of the French Declaration were certainly steeped in Rousseau. The controversy here has a twofold issue: is the Contrat social individualist or collectivist; is the French Declaration really concerned with protecting the individual or is it not rather a new

definition of the powers of the centralized state? To Jellinek the Contrat social is a collectivist work, where the individual gives himself over body and soul to society, and the Declaration of Rights is a great charter of individual sovereignty over a definite part of human consciousness and activity. To him, therefore, Rousseau could not have had a hand in the Declaration. To Redslob also the Contrat social is a collectivist work, but so too is the Declaration. Examined closely that document seems to him to make no Anglo-Saxon or Calvinist assertions that the individual is ultimately sovereign over part at least of his actions. It rather defines, in order to enlarge and make more efficient, the competence of the law. It destroys feudal variety to make way for modern centralization. To Boutmy the Contrat social is an individualist work because in it the individual surrenders himself not to a government but to a society embodied in a General Will; against the government the individual still needs protection and that protection is given him by the Declaration. Both Redslob and Boutmy, then, for very different reasons are agreed that the origins of the Declaration are in the Contrat social.

An even greater controversy has been carried on ever since 1789 as to the real value of the Declaration. Burke, Taine and many others have condemned the document as harmful, inexpedient and as bad politics. According to this school the Rights of Man were drawn up by metaphysicians for an abstract pattern man. They attempt to assert eternal, unvarying truths about human beings and to erect these truths into laws. Their methods are the methods of mathematics, not those of the experimental sciences. Since the truths deduced had no relation to concrete historical conditions, an attempt to apply them as laws designed to govern real men, creatures of habit and tradition, led to disaster. Old laws were discredited, the new laws could not possibly be obeyed and the anarchy of the first French Revolution was the result.

The Declaration has not, however, lacked defenders, from Thomas Paine to Bourgeois. Among the many lines this defense has taken two may be emphasized here. The first insists on the historical context of the Declaration. In 1789 France was inefficiently ruled by a feudally privileged court nobility and king, who had brought her close to bankruptcy. The Declaration was simply the assertion by a competent bourgeoisie that such privileges should no longer exist. Its phraseology may be abstract, since that

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was the fashion of the time, but each of its articles is really meant to protect the progressive, hard working and efficient modern Frenchman from exploitation by drones and sentimentalists. A second way of defense admits that the Declaration is concerned with universal truths and glories in the admission. These truths are not, however, empty mathematical formulae; they are ethical and hence pregnant truths. They are universal and, if you like, abstract, but only in the sense that the Decalogue and the golden rule are universal and abstract. They belong in politics because politics without ethics is inconceivable. They may indeed set up an ideal not immediately attainable, but the National Assembly none the less showed highest wisdom in asserting them.

The great historical influence of the Declaration is incontestable. It was the inspiration of most nineteenth century bills of rights in Europe, even in Prussia. The Weimar constitution has a bill of rights recognizably French in origin. Even the Bolshevists in Russia, although they condemn the French Declaration of Rights and its imitations as mere tools to bourgeois supremacy, issued in January, 1918, a Declaration of the Rights of Workers and Exploited Peoples. In France the Declaration has played in the creation and maintenance of French nationalism a role analogous to that of the Declaration of Independence in the United States. It has been a symbol, a focus for patriotic sentiment, a sacred text of the cult of la patrie.

Crane Brinton

See: Bills of Rights; Declaration of Independence; French Revolution; Natural Rights; Social Contract; Individualism; Constitutions.

Consult: Tenne (WITH MORE OR LESS EXEGESIS): Bourgeois, L., and Métin, A., La déclaration des droits de l'homme et du citoyen (Paris 1902); C'hantavoine, H., Les principes de 1789 (Paris 1908); Aulard, A., and Mirkine-Guetzevitch, B., Les déclarations des droits de l'homme 1780-1852 (Paris 1929); English translation of text in Paine, Thomas, The Rights of Man in Works, 10 vols. (New Rochelle 1925) vol. vi, p. 145-49.

REDACTION: Walch, E., La déclaration des droits de l'homme et du citoyen et l'assemblée constituante (Paris 1903); Klövekorn, F., Die Entstehung der Erklärung der Menschen- und Bürgerrechte, Historische Studien veröffentlicht von E. Ebering, vol. xc (Berlin 1911).

Origins: Jellinek, G., Die Erklärung der Menschenund Bürgerrechte (4th ed. Munich 1927), tr. from 1st ed. by M. Farrand (New York 1901); Boutmy, E. G., "La déclaration des droits de l'homme et du citoyen et M. Jellinek" in his Études politiques (Paris 1907) p. 119– 82; Redslob, R., Die Staatstheorien der französischen Nationalversammlung (Leipsic 1912); Bourne, H. E., "American Constitutional Precedents in the French National Assembly" in American Historical Review, vol. viii (1903) 466-86; Borgeaud, C., Établissement et révision des constitutions en Amérique et en Europe (Paris 1893); Aulard, A., "La révolution américaine et la révolution française" in his Études et leçons, 9 vols. (Paris 1893-1924) vol. viii, p. 59-134.

CHARACTER AND INFLUINCE: Paine, Thomas, The Rights of Man in Works, 10 vols. (New Rochelle 1925) vols. vi-vii; Burke, E., Reflections on the French Revolution (London 1910); Taine, H., La révolution, 2 vols. (8th ed. Paris 1878) vol. 1, p. 273-79; Ritchie, D. G., Natural Rights (London 1805) ch. i; Ruggiero, G. de, Storia del liberalismo europeo (Bari 1925), tr. by R. G. Collingwood (London 1927) p. 66-73; Meier, E. von, Französische Einflusse auf die Staats- und Rechtsentwicklung Preussens im XIX. Jahrhundert, 2 vols. (Leipsic 1907-08); Robinson, J. H., "The French Declaration of the Rights of Man" in Political Science Quarterly, vol. xiv (1899) 653-62.

DECLARATORY JUDGMENT. The declaratory judgment may be defined as a binding determination or declaration of legal rights which will be made by the courts in cases where legal relations are in controversy. It differs from an executory judgment in the fact that it does not carry as an appendix a decree of execution. It declares the existence of a legal relation arising out of a legal instrument or transaction, and the plaintiff is not granted relief beyond that. Since it constitutes a finally binding determination of rights it can be rendered only when there are adverse parties in litigation and when all parties in interest have been cited. The court must be convinced that the declaratory judgment will serve a useful purpose in settling the issue, and its grant is therefore discretionary, a discretion which, however, by long practise has partly hardened into rule. These necessary conditions to a declaratory judgment sufficiently indicate that it differs radically from an advisory opinion, which binds no one, not even the court that renders it, and requires no adverse parties or litigated issues; and from the moot case, which involves issues that are fictitious, abstract, hypothetical, academic or dead.

The common law had long proceeded on the assumption that it was necessary to commit or threaten the immediate commission of a legal wrong before the protection of the courts could be invoked. It did not sufficiently recognize that injury or loss might be sustained by the mere assertion of claims which threw rights into doubt and uncertainty. Yet the fact is that there are numerous situations in which a legal declaration of rights can prevent damage—as when there is a dispute as to the existence of a marriage, as to the legitimacy or sanity of an individual, as to

the title to property or as to the construction of legal instruments such as contracts, deeds, leases or wills. Not only the freedom of action or disposition of private individuals but also the social equilibrium is disturbed when parties have to act at their peril upon their own interpretation of their supposed rights as to questions of civil status or property rights. It is to remedy this situation that the declaratory judgment has been adopted as an efficient instrument of preventive justice in the codes of procedure of many civilized countries. It also performs other functions by enabling issues to be narrowed and quickly determined.

The principle of the declaratory judgment is not new and has been often recognized where ideas of equity have prevailed in legal systems. The Roman law was familiar in a limited way with the declaratory function of courts in the actiones praejudiciales. The declaratory judgment was used in the Middle Ages and from France spread to Scotland, where it has been in use since the sixteenth century. In the system of the common law the courts of equity have long granted some forms of preventive relief, as when they have allowed actions to quiet title to property or to construe wills or declare a marriage or a legal instrument void. These forms of equitable relief have, however, not been coextensive with the benefits of the declaratory judgment, and in 1852 the latter was formally introduced into England, receiving constant extension there, notably in the court rules of 1883 and 1893. Approximately two thirds of English cases in equity now arise on actions for a declaratory judgment. It is now used in practically all the British colonies and possessions, notably in India. In 1877 it was adopted into the German code of civil procedure and it is also in force in most of central Europe.

Since 1919 the movement for the declaratory judgment has spread rapidly in the United States. About half of the states have now enacted authorizing statutes, of which some fourteen have adopted the Uniform Declaratory Judgments Act. The reform has been endorsed by most state bar associations and by judges who have had practical experience with it. Some 300 decisions of the higher state courts construing the declaratory judgment have been recorded up to 1930. On the whole, the liberal views of the English courts as to practise have been followed. Only two courts of the many who have passed on the question have thought the declaratory

judgment unconstitutional: the Michigan Supreme Court in Anway v. Grand Rapids Ry. Co. [211 Mich. 592 (1920)] and the United States Supreme Court in various dicta, for instance in Liberty Warehouse Co. et al v. Grannis [273] U. S. 70 (1926)] and in Willing v. Chicago Auditorium Association [277 U.S. 274 (1927)], which intimate that an action for a declaratory judgment would not be regarded as presenting a "case or controversy" within the meaning of the constitution. It has been assumed in these cases that the declaratory judgment involved either an advisory opinion rendered without the presence of litigating parties contesting a genuine issue or else a moot case. That such misconceptions cannot prevail, however, is shown by the fact that the Michigan Supreme Court overruled the Anway case in 1930 [Washington-Detroit Theatre Co. v. Moore, 249 Mich. 673 (1930)]. The United States Supreme Court now stands alone. Its attitude has prevented the enactment of a federal declaratory judgments act which has twice passed the House of Representatives. However, if one may judge from a recent dictum of the Supreme Court in Piedmont and Northern Ry. Co. et al. v. U. S. et al. [280 U. S. 469] (1930)] to the effect that there is as yet no statutory authority in the federal courts to render declaratory judgments (which of course is true), it is possible that the court may yet withdraw from its position and that a federal statute will before long be enacted.

Since the principal purpose of the declaratory judgment is to enable disputed rights to be litigated without the necessity of first doing irremediable damage, it may be said to be especially necessary in an industrial society which operates under long term contracts and where social and economic relations are becoming ever more complicated. As a procedure it represents a response to the demand for security in legal relationships. It merely extends to new fields and to all legal relations a judicial function which was well recognized in older forms of action.

EDWIN M. BORCHARD

See: EQUITY; JUDICIAL PROCESS; ADVISORY OPINIONS. Consult: Sunderland, E. R., "A Modern Evolution in Remedial Rights, the Declaratory Judgment" in Michigan Law Review, vol. xvi (1917–18) 69–89; Borchard, E. M., "The Declaratory Judgment—a Needed Procedural Reform" in Yale Law Journal, vol. xxviii (1918–19) 1–32, 105–50, where authorities on the Roman and European Law aspects are cited; Maynard, Michel, Les jugements déclaratoires (Paris 1922).

DECORATIVE AND INDUSTRIAL ARTS.

See Industrial Arts.

DECRETALS. See CANON LAW.

DE FACTO GOVERNMENT. A government de facto, as distinct from a government de jure, is a government which has gained control of a state or a portion of a state by overthrowing the regularly constituted authorities but has not as yet been recognized as legally qualified to represent the state in which it has assumed power. It may come into existence as a result of revolutionary action within the state or as a consequence of hostile occupation by a foreign army. It cannot be a mere pretender to power but must be actually in control of people and territory. The so-called Irish Republic, for example, was never more than a revolutionary organization continually on the run [cf. Irish Free State v. Guaranty Safe Deposit Co., 222 N. Y. S. 182 (1927)]. On the other hand, the Confederate States of America, the Paris Commune of 1871 and the Bavarian and Hungarian soviets of 1919, although never recognized by the de jure authorities or by foreign states, exercised effective control in their respective territories during a number of months and were therefore genuine de facto governments. Similarly, the German military authorities constituted the de facto government of Belgium during the Great War. The British forces which occupied the town of Castine in northern Maine from September, 1814, to February, 1815, formed the de facto government of that town.

In the instances cited, both of military occupation and of revolution or insurrection, the de jure authorities eventually recovered control and thus terminated the de facto regime. In the event of its success, however, such a regime may become the de jure government by securing recognition as such. The revolutionary governments formed in Argentina, Peru and Bolivia in the summer of 1930 and headed respectively by President Uriburu, President Sanchez Cerro and General Blanco Galindo were granted diplomatic recognition by the United States and other powers in September of that year and thus became de jure governments for those countries extending recognition. In such instances of successful revolution the legal status of the new regime, as far as other states are concerned, depends upon the action of the latters' political authorities in granting or withholding recognition.

The existence of a de facto government gives rise to a number of politico-legal problems. There arises first the question of the validity of the internal acts of a de facto government in relation to subsequent de jure governments and to outside states. If the de facto government subsequently secures de jure status, the problem is simple. Since recognition is retroactive to the time of the establishment of the government or state recognized, all its acts from its inception are validated for foreign states and for its possible successors. If, however, the de facto regime is replaced by the former de jure authorities, the situation is more complex. The general rule followed by American courts and most foreign tribunals is that all acts of a de facto government having to do with police protection, contracts, property rights, marriages, estates and the like remain valid but that acts in support of rebellion are void. Following the American Civil War the federal courts upheld the validity of most of the judicial and legislative acts of the seceded state governments [Texas v. White, 74 U. S. 700] (1868); Horn v. Lockhart et al., 84 U. S. 570 (1873)]. The acts of the central Confederate government, however, were held to be without legal effect on the ground that they were all in support of an unsuccessful insurrection against the United States [Hickman v. Jones, 76 U. S. 197 (1869); Williams v. Bruffy, 96 U. S. 176 (1877)]. In the case of the Russian Soviet government European courts generally held its acts, such as its nationalization decrees, invalid within their own jurisdictions prior to recognition but conceded their validity after recognition was accorded [Aksionairnoye Obschestro A. M. Luther v. Sagor & Co., (1921) 1 K. B. 456 and (1921) 3 K. B. 532]. There has been a tendency, however, to grant the validity of acts of a de facto government, even prior to its recognition, to the degree necessary to avoid injustice to innocent parties [Russian Reinsurance Co. v. Stoddard, 240 N. Y. 149 (1925)]. These problems have become acute in American courts because of the prolonged refusal of the Department of State to extend recognition to the de facto government of Russia. The acts of that government are nullities and it is unable to appear in American courts, which are obliged to deal only with the agents of the provisional or Kerensky government, defunct since 1917, as representatives of the Russian state.

A somewhat different type of problem centers about the power of de facto governments to bind the state and succeeding governments by their

acts and obligations. In general, a de facto government in firm control of the entire state can bind it by its treaties and contracts [Phillips v. Payne, 92 U.S. 130 (1875)]. Succeeding de jure governments usually recognize their liability for injuries to persons or property of foreign nationals arising out of the acts of de facto authorities. Loans contracted for legitimate governmental purposes are binding [Keith v. Clark, 97 U. S. 454 (1878)]; contracts in aid of revolution, on the other hand, are void [Kennett et al. v. Chambers, 55 U.S. 38 (1852)]. In Latin America succeeding governments have occasionally nullified the acts of their de facto predecessors on the ground of usurpation or illegitimacy. When such action affects rights of foreign nationals, their states uniformly hold the government in question liable on the principle of state continuity. Where the de facto authorities are only in local control there is considerable question of their power to bind the state. But there is general agreement on the international responsibility of the state, and therefore of succeeding or restored governments, for the acts of a general de facto government.

Frederick Lewis Schuman

See: STATE SUCCESSION; RICOGNITION, INTERNATIONAL, STATE LIABILITY, SOVERFIGNTY; REVOLUTION; CIVIL WAR; INSURRECHON; MILITARY OCCUPATION.

Consult: Moore, J. B., Digest of International Late, 8 vols. (Washington 1966) vol. i, p. 40–60; Borchard, E. M., "International Pecuniary Claims against Mexico" in Yale Late Journal, vol. xxvi (1917) 339–48; Houghton, N. D., "Responsibility for Acts and Obligations of De Facto Governments" in United States Late Review, vol. Isiv (1930) 242–56, and "The Validity of the Acts of Unrecognized De Facto Governments in the Courts of Non-Recognizing States" in Minnesota Late Review, vol. xiii (1929) 216–41; Schuman, F. L., American Policy toward Russia since 1917 (New York 1928) p. 262–67.

DEFENDER, PUBLIC. See Public Defender.

DEFENSE, NATIONAL. See National De-FENSE; AGGRESSION, INTERNATIONAL.

DEFLATION. See Inflation and Deflation.

DEFOE, DANIEL (c. 1659-1731), English novelist and publicist. In addition to being the founder of popular journalism and the creator in English of the novel of character and adventure Defoe was also the first social reformer of the modern age and the author of numerous pamphlets of an occasional nature dealing with

contemporary political and economic problems. To the fervor of a Puritan moralist he joined a genius for observing and interpreting in plain language the daily concerns of business life and family affairs. With incessant curiosity, with stores of information drawn from study, men and travel, with unsurpassed versatility of interests and with a deep instinct for speculation on ways of human progress he proved that the true journalist is the historian of his own times and the guide for current living. As editor of the Review (1704-12) he divorced journalism from the narrow partisanships or literary preoccupations of previous periodicals and made his paper a forum of debate on politics, economics, religion and morals. He abandoned academic themes for life itself, discovered that gossip and human interest are the leaven of news, provoked readers to write letters to the editor and invented that timely comment on life which we now call the editorial. His correspondence from all over England and Scotland showed a happy combination of precise data, local color and stimulating comment. To his genius as a journalist we must add his consuming interest in the welfare of plain people. Poverty, unemployment, old age, discrimination against women, moved his heart; nothing was too humble or sordid to engage his interest, whether the training of children, the control of servants, the abuses of sex in marriage, the London police, obscene books or prostitution. In his early An Essay upon Projects (London 1697) his modernity is revealed by his consideration of education, insurance, pensions and insane asylums. His pamphlet Giving Alms No Charity (London 1704) argues that relief works merely divert capital from one channel to another. In economics he considered the problem of state credit and recommended the establishment of national banks; his own experiences in business and speculation inspired studies of England's overseas commerce; he foresaw the importance of free trade and the coming competition of the colonies. His scrutiny of the salesmanship of his time is based on the bitter logic of success by any means. For the economic historian A Tour thro' . . . Great Britain (3 vols., London 1724-27; ed. by G. D. H. Cole, 2 vols. London 1928) is a priceless source book of information on fairs, industry, resources, trade methods and statistics. Defoe has been rightly called "the greatest of plebeian geniuses." He believed in democracy and religious toleration and the melioration of life through education. Although far from being a constructive political

philosopher he exerted a strong influence on political thinking in England by his popularization of Locke's recent works. His pen was valiant on the side of the plain people and his fame was secure even without the gift of his immortal novel.

LEON WHIPPLE

Consult: Levett, A. E., "Daniel Defoc" in The Social and Political Ideas of Some English Thinkers of the Augustan Age, A. D. 1650-1750, ed. by F. J. C. Hearnshaw (London 1928) ch. vii; Dottin, P., Daniel De Foe et ses romans, 3 vols. (Paris 1924) vol. i, tr. by Louise Raugan (New York 1929). See also introduction by G. D. H. Cole in his edition of ATour thro' . . . Great Britain; Pollert, Hubert, Daniel Defoes Stellung zum englischen Kolonialwesen (Quakenbruck 1928); Jacob, E. G., Daniel Defoe Essay on Projects (1697) eine wirtschafts- und sozialgeschichtliche Studie, Kölner anglistische Arbeiten, vol. viii (Leipsic 1929); Ritterbusch, Paul, Parlamentssouveränität und Volkssouveranität in der Staats- und Verfassungsrechtslehre Englands, vornehmlich in der Staatslehre Daniel Defoes, Leipziger rechtswissenschaftliche Studien, vol. xli (Leipsic 1929), with bibliography, p. 188-92.

DE FOREST, ROBERT WEEKS (1848–1931), American philanthropist. De Forest, a lawyer and capitalist, was the chief figure of his generation in the field of social service. As the leadership in social work passed from philanthropist to professional worker, he took on the activities of the latter without stinting his function as contributor. He was sensitive to social needs before they became articulate and plunged into the task of meeting them with a hard headed and practical enthusiasm, organizing and conducting militant campaigns and using his entrée to wealthy society to draft the cooperation of large resources and many persons. As a coworker of Josephine Shaw Lowell he helped organize the Charity Organization Society of New York City —one of the pioneer agencies of this type in America—and as its president from 1888 to his death largely guided its development. An early advocate of housing reform, he was chairman of the New York State Tenement House Commission in 1900 and first commissioner of the New York City Tenement House Department in 1902-03. His advice led to the establishment of the Russell Sage Foundation, one of whose first grants was to the famous Pittsburgh Survey of 1907-09, and he was president of the Foundation until his death. He was also an active leader and officer of the Metropolitan Museum of Art, the American Federation of Art, the Welfare Council of New York City, the American Red Cross, the National Housing Association, the National Conference of Social Work, the Provident Loan Association and other civic and welfare organizations.

PHILIP KLEIN

Consult: Kellogg, P. U., "The Founder of Survey Associates" in Survey, vol. lxvi (1931) 262-63.

→DEGENERATION signifies progressive deterioration the final result of which is a state of degeneracy. Degeneration may occur in the hereditary traits of a family or a race, in the physical, mental or moral traits of an individual or in social organization or culture. The term is popularly and loosely used in such a way as to identify the results of degeneration with behavior which is merely abnormal, defective or deficient. Before 1850 numerous writers used it to designate various departures from the normal, with the range of normal variation defined subjectively rather than objectively. At that time, moreover, religious beliefs, especially the belief in the fall of man, caused some writers to view all mankind as degenerate and to consider mental deficiencies or abnormalities as due to punishment for sin or to demoniacal possession. Before the writings of the social evolutionists changed the outlook of students of primitive society the dominant opinion was that primitive mentality represented mental degeneration, a hypothesis recently revived by Allier. Morel in his epoch making treatise looked upon primitive man as distinctly inferior to modern man and upon degeneration as hereditary physical or mental deterioration extending over two or more generations. He suggested that modern degeneration might be due to the emergence of primitive traits but rejected the view that it was due to atavism. Moreau de Tours identified degeneration with mental abnormality and pathology and their physical accompaniments. Subsequent writers so broadened the concept that it included nearly every anomaly, physical, mental or moral. Many students busied themselves devising categories of degenerates and lists of stigmata for their identification. By the early eightics the idea of degeneration had been generally accepted in biology, anthropology, criminology, psychiatry and medicine. While interest centered primarily in the feebleminded, insane, epileptic and criminal, the designation was extended to include egotists, clever liars, eccentrics and men of genius. Degeneration was generally conceived to be progressive hereditary deterioration often culminating in sterility, but the term was also applied to a wide range of individual

abnormalities. Knowledge of causal factors involved in degeneration was not only deficient but was vitiated by a general belief in the inheritance of acquired characteristics and an implicit acceptance of von Baer's doctrine of organic development and of the concept of embryological recapitulation of racial evolution. Degeneration was therefore variously conceived in terms of atavism, of arrested development and of parasitism.

The anthropological school of criminologists accepted most of these views. While Lombroso originally held the "born criminal" to be an atavism he later attributed great influence to arrested development and disease and ended by regarding atavism itself as a form of degeneration. His school considered the criminal sometimes a savage, sometimes a child and sometimes merely a member of uncultured social classes. It gave names to special types of so-called degenerates, designating as "infantiles" those whose degeneracy was due to arrest of development at puberty, as "effeminates" those believed to be offspring of tuberculous or alcoholic parents and as "seniles" those in whom involution had occurred prematurely. It is to be held largely responsible for the popular view that the terms "criminal" and "degenerate" are synonymous and that aments, epileptics, neurotics and psychotics are likewise degenerate. Members of this school and their predecessors represent an early stage in the development of criminology and psychiatry and their terminology has been largely superseded in scientific writings by more apt designations.

The doctrine of degeneration was taken over by Max Nordau, a disciple of Lombroso, who in his Entartung (2 vols., 2nd ed. Berlin 1893; tr. as Degeneration, 4th ed. New York 1895) declared that "degenerates are not always criminals, prostitutes, anarchists and pronounced lunatics; they are often authors and artists" (vol. i, p. vii). He saw degeneration in nearly every phase of European culture, especially among the upper urban classes, in the character of dress, manners, morals, taste, art, poetry, fiction and philosophy. He attributed what he considered the temporary degeneration of his time to nervous exhaustion and mental aberration resulting from too rapid social evolution. He singled out for special attack the English pre-Raphaelites, the French symbolist poets, Tolstoy, Wagner, Ibsen, Nietzsche, Zola and their respective schools of thought. These he viewed variously as examples of degenerate mysticism, of egomania and of decadent

realism; as seekers after sensationalism, ego exploitation, lubricity, vulgarity and ugliness. Nordau's work found many imitators, but most of the men whom he criticized have attained places of distinction in artistic and literary history. Since there is no objective standard whereby degeneration in the immaterial phases of culture can be readily determined, assertions of it usually resolve themselves into statements of taste and subjective standards of value. Each new movement in painting, sculpture, architecture, music, poetry and the novel as well as in sex morality and religion has been denounced as degenerate by various writers. Prophets of the decline of European culture have flourished, especially among the Aryanists and Nordicists; in their wake has followed Oswald Spengler, who in his Der Untergang des Abendlandes (2 vols., rev. ed. Munich 1922-23; tr. by C. F. Atkinson as Decline of the West, New York 1926-28) reaches the same general conclusion by an impressive rationalization of universal history.

While the word degeneration is still loosely used, its current biological usage clearly signifies progressive hereditary deterioration of structure in the evolution of a species. Such degeneration is found wherever an organism fails to attain the complexity of development promised by its ancestral or its embryological stages. The evolution of certain parasites, for example, reveals a progressive simplification of structure, often of the entire organism, sometimes accompanied by the development of special organs for attachment to the host. Degeneration may also affect single organs, which then become atrophied or vestigial. Biological degeneration is a result of adaptation to relatively simple conditions of existence which are brought about by the same processes that produce evolution in general. Biological degeneration is thus clearly distinguished from atavism.

In medical pathology the term is used in two distinct senses. It is employed to characterize a progressive deterioration of cellular structure in consequence of abnormal chemical action within the individual organism which may lead to cellular destruction, as in tuberculosis, or to cellular homogeneity in consequence of chemical infiltration or substitution, as in fatty, albuminous, calcareous or other types of degeneration of an organ. This category includes a great variety of cases due to malnutrition, alcohol, drugs, communicable diseases, fatigue, nervous exhaustion, physical injury during gestation, birth or matu-

rity, shell shock and psychosis. The second broad class of pathological cases includes all those where parental degeneration in the above sense is believed to produce similar or related deleterious effects on the offspring. Causal sequences are not entirely clear in all these cases. The progress of research has tended to discredit belief in the inheritance of bodily modification due to use, habit, injury or disease. There are at present no grounds for supposing that poverty, malnutrition, excessive fatigue, nervous exhaustion, physical injury, shell shock and similar parental modifications have any effect on the genetic constitution of offspring. The cases usually cited seem explicable on the basis of gene mutation, new genetic combinations or selective elimination of non-adapted types. In experiments on animals gene defects appear under both good and bad living conditions, and the defects may or may not bear any observable relation to the conditions. The only established causes of mutational change are radiations, especially X-rays, but the experimental evidence thus far relating to mammals does not clearly establish the contention that defects associated with X-ray radiation are due to the rays; they may be due to recessive defective genes already present. The claim that alcohol results in degeneration of stock seems to be controverted by controlled experiments on fowls, rats and guinea pigs which show that alcohol destroys the weaker germs, producing in the end a more vigorous stock through selective elimination. Alcohol may be a factor in individual degeneration both physically and mentally; it may be a factor in poverty and family degradation; but that it is a factor in biological degeneration of stock is extremely doubtful.

The literatures of Aryanism and Nordicism and of eugenics have stressed the probability of a present degeneration of racial quality among western nations. The former writers base their views largely on belief in the gradual inundation of supposedly pure Nordic types by the westward push of Slavic elements and the assumed deleterious effects of race mixture. Both schools argue that beneficial natural selection has been checked through the preservation of weaker strains by medical science and humanitarianism and reversed through the relatively lower fertility of the more able strains, biological ability being measured in terms of cultural achievement. Both have argued that degeneration of stock would involve a deterioration of culture. Persons who are defective or abnormal in any

way through inheritance are not degenerates; but if their stock increases relatively to others and the inheritance of the defect persists, racial degeneration will result. The increased frequency of death from degenerative diseases of the vital organs, which is attributed by some writers to reduced lethal selection during early years of life, may indicate some decline in the average vitality of the population due to adaptation to easier conditions of existence. It is not impossible that a rich and humane civilization may permit the undue multiplication of defective and parasitic types ill adapted to more primitive societies.

Frank H. Hankins

See: Evolution, Social; Criminology; Aryans; Race; Heredity; Eugenics; Mental Disease; Decadence.

Consult: Morel, B. A., Traité des dégenérescences physiques, intellectuelles et morales de l'espèce humaine (Paris 1857); Moreau, J. J. (de Tours), La psychologie morbide dans ses rapports avec la philosophie de l'histoire (Paris 1859); Allier, Raoul, Le non-civilisé et nous (Paris 1917), tr. by F. Rothwell as The Mind of the Savage (London 1929); Dohrn, Anton, Ursprung der Wirbelthiere (Leipsic 1875); Lankester, E. Ray, Degeneration (London 1880); Féré, C. S., Dégénérescense et criminalité (Paris 1889); Laurent, E., L'anthropologie criminelle et les nouvelles théories du crime (2nd ed. Paris 1893); Maudsley, II., Pathology of Mind (2nd ed. London 1895); Dallemagne, J., Les stigmates anatomiques de la criminalité (Paris 1896); Hirsch, William, Genie und Entartung (2nd ed. Berlin 1894), English translation (New York 1896); Magnan, Valentin, and Legrain, M., Les dégénérés; état mental et syndromes episodiques (Paris 1895); Talbot, Eugene S., Degeneracy, Its Causes, Signs and Results (London 1898); Demoor, Jean, L'évolution régressive en biologie et en sociologie (Paris 1897); Goring, Charles, The English Convict (London 1913); Anon., Regeneration; a Reply to Max Nordau (London 1895); Hansen, Georg, Die drei Bevölkerungsstufen (Munich 1889); Gorst, J. E., "Physical Deterioration in Great Britain" in North American Review, vol. clxxxi (1905) 1-10; Kellogg, J. II., Tendencies toward Race Degeneracy, United States, 62nd Cong., 2nd Sess., Senate Doc. 648 (1912); Stoddard, T. L., The Revolt against Civilization (New York 1922); Schallmayer, W., Vererbung und Auslese (4th ed. Jena 1920); Grant, Madison, The Passing of the Great Race (4th ed. New York 1921); Barker, L. F., and Sprunt, T. P., The Degenerative Diseases; Their Causes and Prevention (New York 1925); Jennings, H. S., The Biological Basis of Human Nature (New York 1930).

DEGENKOLB, HEINRICH (1832-1909). German jurist. After attending various German universities Degenkolb became professor of law at Berlin, Freiburg, Tübingen and Leipsic successively. A part of his academic career was spent in foreign countries, particularly France

and Italy. From 1879 to 1893 Degenkolb was one of the editors of the Archiv für die civilistische Praxis.

His earliest researches were legal and historical in character and clearly show Mommsen's influence. The more significant of them are Die Lex Hieronica und das Pfändungsrecht der Steuerpächter (Berlin 1861) and Platzrecht und Miethe; Beiträge zur ihrer Geschichte und Theorie (Berlin 1867).

Degenkolb later became interested in modern law, particularly in the fields of contracts and damages, but instead of playing an important part in the drafting of the German civil code, as he might have done, he was decidedly hostile to the project and remained so after its execution. In 1877 he entered the field of civil procedure, in which his most noteworthy contributions to legal science were made, with his *Einlassungs*zwang und Urteilsnorm (Leipsic 1877). His opposition, expressed in this work, to the Wach-Hellwig theory of the relationship between state protection and private causes of action was not entirely successful but was the foundation for his subsequent researches on declaratory actions. Degenkolb's position as a teacher and his procedural treatises, particularly the Beiträge zum Zivilprozess (Leipsic 1905), which contained studies of the concept of the cause of action, of confession of judgment and of the Roman law referee in bankruptcy, make his work with that of Oskar Bülow the foundation upon which the present German procedural system is built.

A. ARTHUR SCHILLER

Consult: Geib, Otto, in Archiv für die civilistische Praxis, vol. evi (1910) 1-51.

DE GREEF, GUILLAUME (1842-1924), Belgian sociologist. Originally a barrister and editor of radical journals, de Greef occupied for some years the first chair of sociology at the Université Libre de Bruxelles, where he became known as the leading sociologist of the classificatory type. Aroused by the dismissal of the geographer Reclus on a charge of anarchism de Greef led an exodus from the university and founded the Université Nouvelle, committed to freedom of thought and to close cooperation with the workers' educational movement. There he taught quietly until his death. Besides numerous and repetitious works on formal sociology de Greef wrote works on occupational representation, on a project for a state bank of free credit. on government ownership and group operation of coal mines by workers and technicians and on

trade unionism. In his theoretical writings, abstract though they seem, de Greef was attempting to erect into a valid scientific system what was later to become syndicalism. He drew upon Comte and Spencer for the framework of his system, but the inspiration for his content came from Proudhon. His elaborate "hierarchy of the seven social factors," running from the economic up to the political—avowedly an extension of Comte's classification of the sciences—was intended to show the basic and eternally penetrating nature of economic influences; his Spencerian formula of progress in terms of increasing differentiation and coordination of parts culminated in the Proudhonian concept of "contractual," voluntaristic association; his original theory of frontiers illustrated the growth of "contractual" ties across even national boundaries. De Greef believed that the essence of the social process is group pressure and accommodation; at first this is authoritarian, but with increasing contacts, especially of an economic nature, it breaks up into débat, higgling, of equal interest groups. Some forms of association pass from the "contractual" into the habitual stage, while others are in the process of becoming "contractual." "Natural" interest groups are ultimately occupational groups.

DOROTHY W. DOUGLAS

Chief works: Introduction à la sociologie, 2 vols. (Brussels 1886–89); Le transformisme social (Paris 1895, 2nd ed. 1901); La structure générale des sociétés, 3 vols. (Paris 1908); La constituante et le régime représentatif (Brussels 1892).

Consult: Douglas, D. W., Guillaume de Greef: The Social Theory of an Early Syndicalist, Columbia University, Studies in History, Economics and Public Law, vol. cxix, no. 1 (New York 1925), and "Social Purpose in the Sociology of De Greef" in American Journal of Sociology, vol. xxxi (1925–26) 438–54; Institut des Hautes Etudes de Belgique, Hommage à la mémoire de Guillaume de Greef (Brussels 1925).

DEIFICATION is here defined as a conceptual union between god and man which leads to the treatment of the man as equivalent to the god. Other types of union historically called deification, such as that established between God and the communicant in the Christian communion, are excluded, however, only because it is necessary to limit the subject.

Some would limit deification to those cases in which the man is in himself a god, not merely the *locum tenens* of a god. These are cases where the doctrine of the divinity of kings has been pushed to an extreme and which ap-

pear usually at the acme of monarchical power and herald its decline. This undue limitation has led to much argument concerning the existence of divine kings. Except in the exaggerations mentioned the people are perfectly aware that the god and the man are distinct, that the god is in the man and that worship is addressed to the god through the man. The position of the man is analogous to that of a colonial governor who is regarded as the king's substitute and as such enjoys many of the king's honors, although every one realizes that he is not the king.

Gibbon's misconception of deification as a "servile and impious mode of adulation" still prevails. Smith's Dictionary of Greek and Roman Antiquities similarly declares that deification prevails among "a people who are inclined to submission and among whom accordingly great social distinctions arise." This is not the case; divine kingship can and does exist where social distinctions are far less marked than in Europe or America. Deification is consistent with a spirit of sturdy independence, for although representing the god the king may be treated with scant respect combined with much etiquette. Classical scholars have evidently formed their opinion from late Near Eastern monarchies which are debased and not typical examples. They have been loath to believe that the free Greeks ever maintained an institution so servile in appearance.

Among deified men are priests as well as kings, but the two classes are clearly to be distinguished only in the later stages of development. In the earliest stages it is so obviously impossible to differentiate them that the term priest-king has been coined to designate the type. It is, however, necessary here to draw the line at kings in order not to range over such personages as chieftains, magicians, rain makers and the like.

Deification is an essential constituent of the carliest recorded religions. At the present day it is so widely distributed that its extreme antiquity cannot be doubted. It is only in comparatively recent times and among a minority of the peoples of the earth that religion has become entirely divorced from the idea of a god present in a man. Unfortunately, the democratic tendencies of the nineteenth century have blinded historians to the importance of divine kingship in history, so that neither its distribution nor its contents are as well known as they might be.

The land of origin of the belief in divine

kingship is not known, but it lay most probably in the Near East. In Egypt the belief was already in existence when our earliest records begin. In Sumer the earliest kings are said not to have been deified yet to have been divinely sent redeemers and vicars of the gods. Later they were actually worshiped. It has been denied that kings were divine in ancient India, but that is flying in the face of the most explicit statements by Manu and the theory of the coronation ceremony as given in the ritual books. The divinity of kings is so rooted in the Indian world that it has often been transferred even to European officials. Divine kings are also to be found in Indo-China, Japan and throughout Polynesia. The so-called culture heroes of Melanesia turn out on examination to be merely immigrant divine chiefs, the ancestors of the present or of an extinct dynasty. In Peru and parts of North America the presence of the custom is unmistakable. It occurs in Africa, as is only to be expected since Egyptian influence is known to have spread up the Nile. Here divine kings shade off into rain makers, witch doctors and the like. Homer regarded his kings as divine. In royal Rome the evidence is more meager and we are reduced to inference, but Frazer has established the inference on a firm basis (see The Magical Origin of Kings, London 1920, p. 197-200, 249-50). Deification was revived in imperial Rome under oriental influence. The movement was a popular one, for the people, not satisfied with abstract gods, required a present one, and as the emperor had superseded the local kings he succeeded to their divinity. The Roman aristocracy may have complied with this either from fear or from flattery, but with the masses it was rather the continuation of a long and congenial habit which persisted even under the rule of the Christian emperors.

Mediaeval kingship has a twofold root: the Roman imperial dignity and the Germanic kings, who traced their lineage back to individual gods and were, in some cases at least, termed demigods. Monotheism, but still more the ambition of the popes, prevented the kings from being recognized as gods; but the spirit of God is present with them and the line that divides them from divine kings is very thin. It became thinner with the progress toward absolutism, until in the seventeenth century the high point of monarchical claims was reached when a bishop of Chartres could maintain that kings are not only ordained by God but are

themselves gods. In western Europe the divine character of kings dwindled into little more than a formula. It survived in eastern Europe, and in Russia it was still very strong in the nineteenth century. The Great War has everywhere dealt it a fatal blow.

The king is frequently not one but many gods; according to Manu he partakes of the elements of eight guardians of the world (see Law Treatise, bk. v, verse 96). As far back as we can trace this institution he is more specially related to the sun god. It is not clear whether this solar character is original or whether the diffusion of sun worship cults transformed an institution which originally had nothing to do with the sun. At any rate, the sun dominates divine kingship among the more advanced peoples, and where this domination is absent survivals sometimes indicate that it once existed but has disappeared.

From earliest times the principle of heredity plays some part in so far as kingship is usually limited to a certain family or caste; but the rigid modern rule of succession is a later development which many peoples of the earth never reached. In the earlier forms a man may be qualified by descent for kingship, but he does not automatically become a god on the demise of his predecessor. He has to go through a consecration which makes him into a god and as long as he has not undergone the coronation rites he is not a king, although he may be de facto ruler. Any other man who secures the royal consecration will become king. In prehistoric times the succession seems to have been decided by ritual combat or tests, for survivals of such a method occur in most coronation ceremonies, although they may be mere forms such as the challenge at the English coronation. The idea seems to have been that the god gave success to the man whom he favored as his representative or else that the man who possessed the most vigor was the best qualified to represent the god.

The theory that the king is reborn as a god in the coronation ceremonies is explicitly stated in Egypt and India and by mediaeval theorists. It has left traces elsewhere. In the more primitive ceremonies the rebirth is carried out with great literalness. Thus in India the king's three robes are identified with the three membranes of the womb. Many constituent elements of the coronation are remarkably constant throughout the world, e.g. the oath, communion, robing, lustration, unction, investiture, enthronization,

final feast and procession. Some have a solar significance, e.g. the crown. With automatic succession to kingship coronation ceremonies cease to have any point and they become mere pageantry or drop out altogether.

The union of the king with the sky or sun is no mere play of fancy. It gives the king control over the weather and the universe generally, and through him a good food supply can be insured with consequent prosperity. This, and not ruling, is the essential function of primitive kings. If prosperity fails the people blame the king and in many cases depose or slay him. In rarer cases the king is put to death if his health fails, for his weakness is held to react upon the course of nature. Orientals still look to European officials for good weather. Belief in this power of the king survived in England in the nineteenth century.

The king's life giving powers extend to healing. This gift became extinct in England only with the Stuarts, in France not until the nineteenth century. His supernatural power depends in general on his respecting and enforcing custom, law and order. If he does not do this the gods leave him. Hence he is commonly a judge and thus also arise judicial and legislative powers which survive his divinity. Further as vice god the king receives offerings which in course of time become tribute. The religious offerings develop into a royal revenue. The invention of currency makes the assessment more precise. As this revenue becomes increasingly devoted to works of public utility it shades into taxation in the modern sense.

A. M. Hocart

See: Ancestor Worship; Sainthood; Death Customs; Hero Worship; Mythology; Messianism; Kingship.

Consult: Frazer, J. G., The Golden Bough, 12 vols. (3rd ed. London 1907-15) vols. i-ii; Hocart, A. M., Kingship (London 1927); Lippert, J., Kulturgeschichte der Menschheit, 2 vols. (Stuttgart 1886-87) vol. ii, p. 463-504; Williamson, R. W., The Social and Political Systems of Central Polynesia, 3 vols. (Cambridge, Eng. 1924); Moret, A., "Du caractère religieux de la royauté pharaonique" in Musée Guimet, Annales, Bibliothèque d'études, vol. xv (1902); Kornemann, E., "Zur Geschichte der antiken Herrscherkulte" in Klio, Beiträge zur alten Geschichte, vol. i (1901) 51-146; Bevan, E. R., "The Deification of Kings in the Greek Cities" in English Historical Review, vol. xvi (1901) 625-39; Holtom, D. C., The Political Philosophy of Modern Shinto (Chicago 1922) chs. vi-viii; Bloch, M., Les rois thaumaturges, Strasbourg University, Faculté des lettres, publication no. xix (Strasbourg 1924); Woolley, R. M., Coronation Rites (Cambridge, Eng. 1915).

DEISM is the name commonly applied to a critical movement within the Christian tradition which arose in the early seventeenth century and lasted into the nineteenth, until religious life was transformed by romantic thought and feeling. Strictly speaking, deism is the position that natural theology and rational morality, as understood in the age of reason, are a sufficient content of religion. It is thus to be distinguished both from more conservative reinterpretations of tradition and from more radical skepticism and atheism. But deism is also widely used to signify all manifestations of the enlightenment spirit in religion from the reputed orthodoxy of Samuel Clarke to the anti-Christian zeal of Voltaire. Although technically inaccurate this usage shows deism to be one particular compromise expression of rationalistic, humanistic and secular tendencies permeating eighteenth century religion.

The deist movement was the spread of a certain attitude, not an organized sect. It was an affair of the intellectual classes and scarcely affected the masses, in whom the same tendencies appeared as religious indifference or formalism. It was not so much a religious movement as a philosophical and ethical criticism of the Christian tradition in the light of the growing secular spirit of the day. It expressed the increasing confidence in the intellectual power of human reason and the moral power of human nature which has since entered so deeply into the modern spirit. It was thus the first serious attempt to adapt the religious tradition to the forces and the attitudes of the modern world.

Although foreshadowed in the work of the sixteenth century humanists, the Socinians and the Dutch Calvinists of the seventeenth century the notion of a strictly rational religion, based upon the certain deliverances of the light of nature, was primarily a product of the theological disputes and religious wars of the Puritan era. Disgust with such quarrels and the desire to turn to commercial expansion hastened the general secularization of life implicit in Protestantism, especially in Holland and England. In 1624 Lord Herbert of Cherbury and in 1627 Grotius offered a common set of religious tenets on which all rational men might agree to live in peace. Thereafter there arose in England a long line of religious rationalists culminating in Locke, men far more concerned with ending religious controversy than with promoting the religious life, increasingly secular in their interests and ethical in their religious emphasis. They sought in the tradition an irreducible

minimum that could cause no social disturbance and proposed to tolerate difference of opinion on non-essentials. Their attitude triumphed in the English Toleration Act of 1689.

Thus the "religion of reason" had formulated its tenets and won wide acceptance before it was reenforced by the scientific rationalism of the Newtonian age. The new mechanical science brought strong intellectual support to a rational religion already worked out in the interest of social harmony Newton's Principia in 1687 loosed a flood of books stripping the religious tradition of all that could not pass the twin tests of scientific rationality and social utility. The aim of religion, from their secular point of view, was simple: to make good citizens; the means, a brief set of rational propositions offering an incentive to the virtues of an individualistic and commercially minded society. The universal reason of man revealed the existence of God, the presence of a natural moral law and the certainty of future rewards and punishments based on its observance. This was "natural religion"; everything else in Christianity was revelation.

Men differed not as to the fundamental importance of this natural religion but only as to whether revelation was also necessary. Orthodox rationalists insisted on both elements of tradition; the radicals, who assumed the name of deists, rejected revelation and reduced religion to these three tenets. The deists found themselves involved in two successive debates. They had first to maintain against rational supernaturalists like Tillotson, Samuel Clarke and Locke that God had added no further revelation to what Arthur Bury in 1690 called The Naked Gospel. Natural religion had always been perfectly complete. The God who created the Newtonian order of nature would not ask of men more than universal benevolence; above all, He would not impose the welter of superstitious religious rites and doctrines. The deists went on to attack vigorously all that distinguished Christianity from natural religion and especially to assail the two supports of revelation, prophesies and miracles. Tindal and Morgan pointed to the irrationalities and inhumanities of historic Christianity; Chubb declared that Jesus Himself had been a pure deist. Anthony Collins undermined the argument from the fulfilment of prophesy, while Woolston and later Hume marshaled the Newtonian world order against the credibility of miracles. Before this first debate had been won, however, the deists found themselves attacked from another quarter by men

who criticized the tenets of natural religion as having no firmer logical basis than those of revelation and concluded with Hume that "our most holy religion is founded not on reason but on faith." In England the attack on natural religion itself was made, by men like William Law, Joseph Butler, Henry Dodwell and Hume, in the interests of faith. The English deists were unable to stand up against the combined onslaughts of orthodoxy and fideism, and as a serious movement deism disappeared by 1750 before the rising tide of evangelicalism.

In France, however, these deistic ideas were transformed into the weapons of a bitter anticlerical attack on the Catholic church. Secularism and rationalism had already found expression in the seventeenth century alliance between the Cartesian scientific philosophy and the Gallican church; and Malebranche, Bossuet and Fénelon had worked out a rational supernaturalism comparable in motive and spirit to that of Tillotson and Clarke. But the next century saw an unparalleled onslaught upon the traditional political and economic system, upon the power of the church as its chief bulwark and upon Christianity as the foundation of clericalism. It was Voltaire who brought deism to France and opposed rational religion (théisme) not only to Catholicism but to all forms of Christianity, however purified. As the source of his effective satire and as the weapon of Diderot and the encyclopédistes French deism, although similar in content to English deism, shows a much more critical and biting spirit. The French used deism to attack a corrupt and entrenched clerical system, but the English in opposing sectarian fanaticism and doctrinal disputes found no real enemy in the easy going and subservient Establishment. Even when French deists had a serious positive interest in the religion of reason it was still as a political instrument; Voltaire, who never followed the later fashion into atheism and materialism, felt it a necessary club to enforce the social virtues on the masses. Rousseau alone seems really to have felt the natural religion in which his Savoyard vicar, in the *Émile*, confesses his faith. Rousseau's deism offers no new doctrines; it no longer is a keen weapon against Christianity and its inner, emotional mystical quality foreshadows the religious feeling of the romanticists.

Entering Germany also about 1750 deism found congenial soil in the reigning Wolffian philosophy, a combination of Protestant scholasticism and Leibnitz's cientific rationalism. But

far from being a revolutionary weapon German rational religion enjoyed the patronage of the courts, the upper class and the university circles. Not only supernatural rationalism of the Tillotson type but also much more radical forms of deistic thought were strong in the pulpits and theological faculties well into the nineteenth century and greatly affected all subsequent German theology. The most outspoken German deist was Reimarus; Lessing edited his posthumous attack on all Christian revelation in 1774 as Wolfenbüttel Fragments. Lessing himself, the greatest literary exponent of deism and religious toleration, foreshadowed like Rousseau the turning toward romanticism, especially in his notion of progressive religious development. The classic German expression, however, was Kant's Die Religion innerhalb der Grenzen der blossen Vernunft, in 1793. Kant remained a faithful adherent of the deistic tenets of God, freedom and immortality, although in founding them on the needs of human nature rather than on a rationalistic metaphysic he paved the way for the great romantic philosophies of religion.

Although deism disappeared even in Germany by the opening of the nineteenth century it left a permanent deposit. Its ideal of religious toleration in the interests of secular social peace has never been seriously assailed outside Catholic lands. The critical study of the Scriptures and of church history which it initiated, as well as its interest in comparative religion, bore fruit in the work of the Tübingen school and their many successors in religious scholarship. The failure of its natural theology drove theologians to another form of religious apologetic; but the secular tendency it represented, its strong emphasis on the ethical and social content of religion, its identification of religion with a form of rational belief which must be harmonized with science, above all, its criticism of the religious tradition in the interests of present intellectual and moral needs, have played an increasing part in subsequent religious reconstruction. Its very failure served but to provoke a renewed attempt to bring religion into line with the forces of the modern world, and in that attempt much that the deists expressed in the form of eighteenth century rationalism and humanitarianism was reworked into newer, nineteenth century molds. The critical movement in religion today is as much the heir of deism as of the romantic reaction against its collapse.

John H. Randall, Jr.

See: RATIONALISM; SECULARISM; ENLIGHTENMENT;

FREETHINKERS; ATHEISM; HIGHER CRITICISM; ANTI-CLERICALISM.

Consult: Lecky, W. E. H., History . . . of Rationalism in Europe, 2 vols. (4th ed. London 1869); Robertson, J. M., Short History of Free Thought, 2 vols. (3rd ed. London 1915), Bury, J. B., A History of Freedom of Thought (London 1913); Troeltsch, Ernst, Gesammelte Schriften, 4 vols. (Tübingen 1912-25) vol. iv, p. 429-87; M'Giffert, A. C., Protestant Thought before Kant (New York 1911) ch. x; Ueberweg, F., Grundriss der Geschichte der Philosophie, 5 vols. (12th ed. Berlin 1923-28), tr. by G. S. Morris from 4th German ed., 2 vols. (New York 1871-73) vol. ii; Leland, J., A View of the Principal Deistical Writers, 2 vols. (4th ed. London 1764); Lechler, G. V., Geschichte des englischen Deismus (Stuttgart 1841); Stephen, Leslie, History of English Thought in the 18th Century, 2 vols. (3rd ed. London 1902); Fabre, [., Les pères de la Révolution (Paris 1910); Bréhier, É., Histoire de la philosophie, vols. i-ii (Paris 1926-30) vol. ii, pt. ii; Hettner, H., Geschichte der deutschen Literatur im achtzehnten Jahrhundert (new ed. by G. Withowski, Leipsic 1929) pts. i-ii; Dilthey, Wilhelm, Gesammelte Schriften, vol. iii (Leipsic 1927) p. 83-205; Brockdorff, Cay L. G. C. von, Die deutsche Aufklärungsphilosophie (Munich 1926).

DEKKER, EDWARD DOUWES. See Douwes Dekker, Edward.

DELANE, JOHN THADEUS (1817-79), English journalist. After studying at Magdalen Hall, Oxford, Delane followed his father's example by joining the staff of the London Times. In 1841 on the death of Thomas Barnes he was appointed to the editorship. Already the chief newspaper in England, the Times soon obtained a position of unexampled political influence. Under Delane it was on the whole politically independent, devoted to the interests and views of the expanding industrial and commercial classes, well informed for its day and dignified in tone, although not above occasional vicious attacks on enemies. By 1855 it is said to have had a circulation of 40,000, a very large one for a time when newspapers were heavily taxed. Delane's influence was due not to his own writing but largely to his skill in obtaining early and accurate information, partly through personal intimacy with leading politicians, partly as a result of technical improvements in methods of news gathering. In 1845 at the height of the railway mania he exposed "the knaves and warned the dupes" and soon after startled the world by announcing the imminent repeal of the corn laws. Under Delane the *Times* supported the political enfranchisement of the Jews; but it was not always tolerant, for it fanned the flame of the No Popery agitation of 1850. In the Crimean War

the revelations of the Times correspondent forced military reforms on the government. Delane was often reproached for subservience to Palmerston by Bright, Cobden and others; but his influence helped to prevent Palmerston from offering armed assistance to Denmark and exposed his relations with Neapolitan revolutionaries. Delane had the gift of attracting first class men to the Times staff. Among those who wrote regularly for the paper were Sir William H. Russell, Charles Greville, A. W. Kinglake, Roundell Palmer, Robert Lowe, Abraham Hayward, Henry Reeve, G. S. Venables, the Reverend T. Mozley, H. S. O. de Blowitz and Leonard (afterwards Lord) Courtney. Delane resigned his post in 1877.

Francis W. Hirst

Consult: Dasent, A. I., John Thadeus Delane, 2 vols. (New York 1908); Cook, Edward, Delane of the Times (London 1915).

DELANY, MARTIN ROBINSON (1812-85), American Negro journalist and agitator. Delany was originally trained in medicine, but in 1843 he began in Pittsburgh the publication of a newspaper, the Mystery, one of the earliest periodicals for Negroes in the United States. Later he was associated with Frederick Douglass in the publication of the North Star and in 1848 was mobbed in northern Ohio. He was an organizer of some of the earliest Negro associations devoted to the uplift of the race and was the author of a small book, The Condition, Elevation, Emigration, and Destiny of the Colored People of the United States, Politically Considered (Philadelphia 1852), which was remarkable in that it laid down so early the idea of adjusting the Negro to a free life by means of industrial education. In this work he attacked the activities of the American Colonization Society, which he viewed as a conspiracy to deport all free and able Negroes to Africa lest they aid in opening the eyes of the American slave. He affirmed the Negro's right to call himself an American. On his call a National Emigration Convention met in 1854 in Cleveland and discussed plans for resettling ex-slaves in Africa. In 1859 he made a trip to Africa as head of the Niger valley exploring party to investigate prospects for emigrants. After serving as a surgeon in the Civil War (he was the first Negro major in the United States Army) and in several government posts he ran for the lieutenant governorship of South Carolina in 1874 but was defeated. He was also the author of Principia of Ethnology (Philadelphia 1879), a book which reflected the growth of a new feeling of Negro race pride. Delany was restless and of provocative temper and his schemes bore little immediate fruit. His work as a publicist, however, contributed to the progress of the Negro in the United States and his educational theory bore fruit in the later work of Booker T. Washington.

BENJAMIN BRAWLEY

Consult: Rollin, Frank A., The Life and Public Services of Martin R. Delany (Boston 1868).

DELBRÜCK, HANS (1848–1929), German historian and political thinker. Delbrück came of a family of influential Prussian government officials. He served as an officer in the Franco-Prussian War and was tutor to Prince Waldemar of Prussia from 1874 to 1879. He was professor of history at the University of Berlin from 1885 to 1921 and editor of the *Preussische Jahrbücher* from 1883 to 1923.

Like the great German historians of the nineteenth century Delbrück combined history and politics and was always striving to make the knowledge of the past useful for the present. Although he was for a time a member of the Reichstag and of the Prussian Diet as a representative of the Free Conservative party, his political influence came from the intellectual force of his personality, from his intimate association with leading statesmen and through his writings rather than from his work as a practical politician. As editor of the Preussische Jahrbücher and through his famous Mittwochabend club, organized in 1914 to discuss political problems arising out of the war and attracting many of the leading German intellectual and political figures, he was able to exercise great political influence. He invariably combated courageously and independently whatever seemed to him politically false or pernicious. During the war he vehemently opposed submarine warfare, Tirpitz and the Ludendorff circle. After the war, although he had been most intimately associated with the monarchy, he ranged himself on the side of the new democratic republic. He also carried on an indefatigable struggle to establish scientific proof against the charge of Germany's war guilt.

Delbrück's work as a historian is peculiarly comprehensive for an age characterized by specialization. His most important contributions were in the field of military history, which he covered from antiquity to the time of Napoleon. Like Ranke he also attempted to write a world history, in which he aimed to draw a picture of

historical development in clear straight lines which keep the purely political and military events well in the foreground. His work always exhibited a tendency toward sharp and occasionally too simplified theses, which were, however, challenging and provocative of further investigation.

WILHELM MOMMSEN

Chief works: Das Leben des Feldmarschalls Grafen Neidhardt von Gneisenau, 2 vols. (Berlin 1880; 4th ed. 1921); Geschichte der Kriegskunst im Rahmen der politischen Geschichte, 5 vols. (Berlin 1900-27); Bismarcks Erbe (Berlin 1915); Der Stand der Kriegsschuldfrage (Berlin 1924; 2nd ed. 1925); Vor und nach dem Weltkriege (Berlin 1926); Weltgeschichte, 5 vols. (Berlin 1924-28).

Consult: Am Webstuhl der Zeit, ed. by E. Daniels and P. Rühlmann (Berlin 1928); Schmidt, F. J., Molinski, K., and Mette, S., Hans Delbrück, der Historiker und Politiker (Berlin 1928).

DELCASSÉ, THEOPHILE (1852-1923),French statesman. After contributing to Gambetta's newspaper, serving in the Chamber of Deputies and acting as undersecretary, then as minister, for the colonies from 1893 to 1895, Delcassé became minister for foreign affairs in June, 1898, retaining this post under successive governments until June, 1905. Although he was regarded as a member of the Left, Delcassé showed no real interest in social problems. He disapproved of the reduction of military expenditure and throughout his life displayed a thoroughgoing nationalist attitude. His interest centered almost exclusively upon colonial and foreign affairs and he appears from the beginning to have set himself the goal of eliminating the friction between England and France and bringing about an Anglo-French-Russian understanding. In the acute crisis resulting from the Marchand mission to Fashoda Delcassé had the courage to yield to England, thus taking a first step toward an entente. In 1900 and 1902 he concluded agreements with Italy which gave France a free hand in Morocco in return for a free hand for Italy in Tripoli besides assurances against Italian participation in any aggressive policy against France. Delcassé's tentative advances to Germany in the years 1898-1901 were probably meant as a means of bringing pressure upon England. Negotiations with the latter power began in 1902 and led to the famous agreement of April 8, 1904, which established the entente cordiale. The agreement gave England a free hand in Egypt in return for a free hand for France in Morocco. Secret clauses en-

visaged the eventual partition of Morocco, and an agreement later in the year associated Spain. Delcassé intended to exclude Germany from a share of the spoils, and his failure to notify her officially of what had been decided resulted in the first Moroccan crisis of 1905 and conflict with his colleagues, in consequence of which he resigned. Delcassé resumed political activity in 1909. From 1911 until 1913 he was minister of marine and for nine months ambassador to Russia, devoting himself to the strengthening of the Franco-Russian Alliance. In August, 1914, he again became minister for foreign affairs. He was instrumental in bringing Italy into the war on the side of the Allies and signed the convention which allotted Constantinople to the Russians. Delcassé miscalculated entirely the Bulgarian attitude and finally resigned and went into retirement October, 1915, because of disapproval of the Salonika expedition. Despite several serious errors he ranks as one of the most significant of French foreign ministers. He founded the entente, reestablished the position of France in international affairs and played an important role in the developments which led directly to the war of 1914.

WILLIAM L. LANGER

Consult: Gooch, G. P., in Contemporary Review, vol. cxxiii (1923) 446-57; Morel, E. D., Ten Years of Secret Diplomacy (6th ed. Manchester 1920); Anderson, E. N., The First Moroccan Crisis, 1904-1006 (Chicago 1930); Mévil, André, De la paix de Francfort à la conférence d'Algésiras (Paris 1909), and "Delcassé et son oeuvre" in Revue politique et parlementaire, vol. cxix (1924) 384-402; Reynald, Georges, La diplomatie française: l'oeuvre de M. Delcassé (Paris 1915).

DELEGATION OF POWERS. Political science has long been concerned with the problem of the proper limits of delegation of powers by governmental agencies. The question has been raised with regard to the right of judges to delegate their powers to commissioners; of executive officers to act through subordinates; of legislatures to grant their legislative powers to administrative officials, to local government units, or to resort to the referendum. Today it has assumed new importance as legislatures are making increasing use of extralegislative agencies to aid them in the exercise of their traditional powers.

A new era of activity and invention for the age old practise of legislative delegation may be said to have begun in England with the establishment of the General Board of Health

in 1848 (11 & 12 Vict. c. 63) and in the United States with the Interstate Commerce Commission in 1887 (24 Stat. c. 104, sect. 11, p. 383). In both countries delegations have been made to administrative rather than judicial bodies, and in the United States the use of special regulating commissions outside the regular departmental organizations has resulted in a striking increase of administrative agencies.

The result is that today administrative regulations and decisions are often more important in daily life than are the terms of the statute book. In the United States alone railroad and tariff rates are fixed, quarantines established, warehouses and grain exchanges regulated, air commerce and radio directed, professional standards established, fair trade practises determined, public resources conserved and countless other activities controlled by extralegislative agencies.

Administrative agencies exercise these powers by making rules and regulations of general application or by following a quasi-judicial procedure in which they render decisions in particular cases. The power of the administrative branch of the government is thus increased apparently at the expense both of legislature and of judiciary. The inevitable cry of "bureaucracy" has further confused the issue.

In England, where the separation of powers has no legal status and Parliament is supreme, effective opposition to delegating statutes is limited to political channels, and there is a growing practise of granting powers in terms so vague that court review under the doctrine of *ultra vires* becomes impossible. The continental theory of the independent ordinance power of executive officers has supported the practise of "skeleton legislation," whereby the legislature may broadly state policies and objectives, leaving all details to the appropriate executive agency. In the United States it is more usual to legislate in detail and to define clearly the limits of delegated power.

Delegation is often a device to make possible the adaptation of rules to varying local needs. It is also resorted to in times of national emergency to bring about necessary concentration of power. During the war of 1914–18 it attained spectacular proportions. It is often regarded as a war phenomenon, but it is perhaps more accurate to say that its normal course was altered by the war and that it was checked at points by the post-war reaction against all forms of governmental control. Probably increased legis-

lative delegation should be considered a phenomenon of the modern positive state. Changing concepts of the function of government in our complex economic world have placed an ever increasing burden upon modern legislatures. The mere volume of business makes delegation necessary. The spread of democracy, which has done away with a ruling class, increased the size of legislative bodies and altered the role of individual members, has made it more difficult for legislatures to deal effectively with their business. The importance of technology in the modern world renders mere intelligence inadequate in solving governmental problems. A rapidly changing economic and social order demands that any scheme of governmental control and regulation be flexible. Administrative agencies offer the services of the expert and are better equipped for experimentation than legislatures.

Discussion of the underlying legal and political issues has been hampered in England and America by the confusion of the problem with the maxim delegatus non potest delegare. This maxim, which originated with the glossators, was introduced into English law through a misreading of Bracton, developed there as a doctrine of agency, was established by Coke in English public law in decisions forbidding the delegation of judicial power and found its way into the writings of English and American publicists in the guise of a fundamental principle of free government. In the United States, partly because of the doctrine that all governmental powers are delegated by the sovereign people, partly because of its logical affiliation with the dogma of the separation of powers, the maxim became identified with the problem of delegation by governmental bodies. Appearing as a corollary of this fundamental dogma it received the sanction of constitutional law, and the problem of delegation was obscured by the foggy concepts that accompany the doctrine of the trinity of governmental powers.

Because of this confusion the legal and constitutional aspects of the problem remain veiled in uncertainty. By arbitrarily defining the word legislative the United States Supreme Court has usually paid lip service to the supposed constitutional doctrine but has in fact sustained each new delegation of powers by Congress. In the state courts a fundamentalist attitude toward the constitutional dogma has at times blocked legislative experimentation in delegation. It has become settled law in the United

States, however, that an administrative officer can make regulations only by virtue of his statutory authority, and in both state and federal courts particular regulations by an administrative agency have been declared "legislative" and therefore *ultra vires*. By reading into all delegations the requirement that regulations be "reasonable" and by invoking the doctrines of due process and *ultra vires* courts have established a far reaching right to review administrative rule making and to control the exercise of delegated powers.

Perhaps because of opposition to a practise the acceptance of which involves substantial modification of traditional modes of English and American constitutional thought proponents of legislative delegation have discussed the problem chiefly in terms of possible safeguards. The usual proposals have been adequate provision for publication; precision in the terms of delegating statutes for the guidance of courts and administrative bodies; consultation of interested parties; legislative control either by providing opportunity for legislative rejection or approval of regulations or by a system of continuous supervision by legislative committees; far reaching provisions for court review under ultra vires proceedings; extension and improvement of civil service standards. The desirability of extension of state liability for torts has also been considered in this connection.

There has been little effort to do more than enunciate these proposals. Few would question that regulations should be as accessible to the citizen who must observe them as are the statutes. That statutes should be clear is a first principle of legislative drafting. How detailed they should be is difficult to determine. Consultation of interested parties may become consultation of powerful organizations. The complex problems of the proper relations between legislative and administrative groups and of the desirable limits of court review of administrative action can never be solved by a formula. There are dangers in judicial review as well as advantages. Submission of regulations to the legislative body has proved inadequate in England and futile when provided for in the United States. No satisfactory machinery for committee supervision has yet been devised. The potentialities of legislative control through the mastery of the purse strings have perhaps not been fully understood.

Definition of the respective roles of legis-

lators and administrators in their joint undertakings, formulation of criteria for deciding when delegation is desirable, determination of the factors to be considered by legislators in preparing delegating statutes—these are major problems to which less attention has been given. For their solution one must undertake such tasks as a comparison of the administrative and legislative processes and of the quality and experience of the personnel of the two groups. The subject matter of legislation, the objectives sought and the groups affected by it must be taken into account. Like most of the problems of political science these matters cannot be considered satisfactorily apart from a particular political system.

ELEANOR BONTECOU

See: Separation of Powers; Decentralization; Administration, Public; Commissions; Boards, Administrative; Courts, Administrative; Expert; Bureaucracy; Judicial Review.

Consult: Laski, Harold J., Grammar of Politics (London 1925) p. 387-97; Freund, Ernst, Administrative Powers over Persons and Property (Chicago 1928); Port, Frederick J., Administrative Law (London 1929) ch. iv, p. 120-87; Gibbon, I. G., Gwyer, M. L., and Andersen, Paul, "The Powers of Public Departments to Make Rules Having the Force of Law" in Public Administration, vol. v (1927) 399-417; Duff, Patrick W., and Whiteside, Horace E., "Delegata potestas non potest delegari" in Cornell Law Quarterly, vol. xiv (1928-29) 168-96; Comer, J. P., Legislative Functions of National Administrative Authorities (New York 1927); Hart, James, The Ordinance Making Powers of the President of the United States (Baltimore 1925); Carr, Cecil T., Delegated Legislation (Cambridge, Eng. 1921); Fairlie, J. A., Administrative Procedure in Connection with Statutory Rules and Orders in Great Britain, University of Illinois Studies in Social Sciences (Urbana, Ill. 1927); Laing, B. M., "The Legislative Functions of Government Departments" in Public Administration, vol. viii (1930) 335-48.

DE LEON, DANIEL (1852–1914), American socialist theorist and labor leader. De Leon was born in Curaçao, Dutch West Indies, and came to the United States in his early twenties. He studied in Holland, Germany and at the Columbia University Law School and later lectured on international law and diplomacy at Columbia. In 1886 he supported Henry George's single tax campaign for the mayoralty of New York, in 1888 he joined the Knights of Labor and in 1890 the Socialist Labor party. In 1891 he became editor of the party's paper, the *People*, first a weekly and later a daily, and was the party's guiding mind until his death. In 1895 he launched the Socialist Trade and Labor Alli-

ance, an organization of trade unions and political groupings of a socialist orientation. In 1905 he took part in the launching of the Industrial Workers of the World (I.W.W.). He advocated the overthrow of the capitalist state and the establishment of a socialist society organized around industrial units of workers. De Leon's theory of the industrial state was accepted by Lenin as a picture of the ultimate form of government in communist Russia. De Leon emphasized the economic essence of political government and the futility of political reform but believed in political action as a means of socialist propaganda and was himself many times the candidate of his party for political office. His Two Pages from Roman History (New York 1903) is an extraordinarily clear and penetrating analysis of the nature of labor leadership under American conditions. Trade unions in his view could not materially improve working conditions, and he regarded the American Federation of Labor, which combated socialist influence, as a servant of capitalism. De Leon was the theorist and outstanding practitioner of dual unionism; from him the later radical wings of socialism and of communism in the United States took their cues. He favored a strongly centralized and militant labor movement, launched bitter attacks on all non-political unionists and caused frequent expulsions of nonconformists from his own party. His pamphlets are valuable for the study of the uncompromising Marxian attitude toward American politics and economics. De Leon made available translations into English of works by Engels, Marx, Lassalle, Kautsky, Bebel and E. Sue.

J. B. S. HARDMAN

Works: What Means This Strike? (New York 1898); Reform or Revolution (New York 1899); Socialism versus Anarchism (New York 1901); The Burning Question of Trades Unionism (New York 1904); As to Politics (New York 1907); Industrial Unionism (New York 1918); Socialist Reconstruction of Society (2nd ed. New York 1919); James Madison and Karl Marx (New York 1920).

Consult: Daniel De Leon, the Man and His Work, a symposium published by the Socialist Labor Party (New York 1919); Paul, William, Communism and Society (London 1922); Brissenden, P. F., The I. W. W. (2nd ed. New York 1920); Fine, Nathan, Labor and Farmer Parties in the United States 1828–1928 (New York 1928) ch. vi; Saposs, David J., Left-Wing Unionism (New York 1920); Fraina, L. C., "Daniel De Leon" in New Review, vol. ii (1914) 390–99.

DELFICO, MELCHIORRE (1744-1835), Italian publicist. Delfico was educated at Naples and came early under the influence of the en-

lightenment and spirit of reform which pervaded that city during the latter half of the eighteenth century. As a statesman occupying high office in the Parthenopean Republic of 1799 and participating in the Bonapartist Kingdom of Naples he strove diligently to introduce political and social reform; the return of the Bourbons in 1815 was the negative response to his hopes and efforts. As a writer he has been called by Gentile the "most faithful Italian representative of eighteenth century French spirit." Borrowing sensationalistic psychology from Condillac and his successors Delfico applied it to ethics (*Indizi* di morale, Naples 1775) and to social philosophy and pedagogy (Reale Accademia della Scienze, Naples, Atti, vol. i, 1819, p. 343-445). Indifferent to the implicit self-contradiction he followed the publication of Memorie storiche della repubblica di San Marino (Milan 1804; 4th ed., 3 vols., Naples 1865) with Pensieri sul'istoria e sull'incertezza ed inutilità della medesima (Forli 1808, 3rd ed. Naples 1814). Primarily this work was a reflection of the antihistorical bias prevalent among the thinkers of the Enlightenment, who, intent on present reform and future perfectibility, regarded history as not only a useless labor but an emporium of bad examples. But the *Pensieri* also evinced a lively sense of the necessity of critical rigor in historiography and insisted upon the primary significance of spiritual and intellectual development. A combination of these tendencies appears in Delfico's erudite but hardly candid arguments that historians, particularly historians of Rome, had exalted the most uncouth barbarism into moral excellence.

In his Ricerche sul vero carattere della giurisprudenza romana e de suoi cultori (Naples 1791; 3rd ed. 1815) Delfico had previously attempted to expose the customary misinterpretation of Roman law, which far from being the consummate expression of justice was to his mind characterized by uncertainty and arbitrariness. Against the jurists wedded to the forensic tradition and the upholders of aristocratic privilege Delfico demanded that Roman as well as all the other antiquated types of law used in Naples should be abolished and replaced by a unified code consistent with the principle of human perfectibility. Delfico's Opere complete (4 vols., Teramo 1901-05) include writings defending free trade, the removal of feudal privileges in agrarian administration and industrial liberalism. The best known of his economic works, Memoria sulla libertà del commercio (c.

1797), was included in the Custodi collection (parte moderna, vol. xxxix).

LUDOVICO LIMENTANI

Consult: Gentile, G., Dal Genovesi al Galluppi (Naples 1903) ch. ii.

DELINQUENCY. See CRIME; JUVENILE DE-LINQUENCY.

DELISLE, LÉOPOLD VICTOR (1826-1910), French historian and bibliographer. Delisle was born in Normandy and studied under Guérard at the Ecole des Chartes. From 1874 to 1905 he was director of the Bibliothèque Nationale and it was largely through his efforts that the organization and cataloguing of the enormous collections contained in the library were begun. In his only general work, Etudes sur la condition de la classe agricole et l'état de l'agriculture en Normandie au moyen âge (Évreux 1851), Delisle assembled a considerable mass of exact facts regarding the material conditions of the exploitation and cultivation of the landed estates during the Middle Ages. In his "Mémoire sur les opérations financières des templiers" (in Académie des Inscriptions et Belles-Lettres, Mémoires, vol. xxxiii, 1889, pt. ii) he showed the leading part played by the orders of the Templars as depository banks in the financial organization of the Middle Ages. Delisle's reputation, however, rests not on his general historical works, which were very few, but rather on his work in opening new lines in palaeography and diplomatic. He published a multitude of memoirs and volumes dealing with the history and criticism of manuscripts of the Middle Ages; and his publications of numerous texts of the utmost importance, preceded in many instances by very comprehensive introductions, afford material for the study of not only the social but also the administrative and intellectual history of mediaeval France.

Louis Halphen

Works: See Lacombe, Paul, Bibliographie des travaux de M. Léopold Delisle, 2 vols. (Paris 1902-11).

Consult: Bémont, C., in Revue historique, vol. cv (1910) 84-91; Perrot, Georges, in Académie des Inscriptions et Belles-Lettres, Comptes rendus des séances (1911) 735-817; Poole, R. L., in British Academy, Proceedings, vol. ix-x (1912) 203-21; Ledos, E. G., "M. Léopold Delisle et la Bibliothèque Nationale" in Revue des bibliothèques, vol. xxxvii (1927) 116-51.

DELITZSCH, FRIEDRICH (1850-1922), German orientalist. He was the son of Franz Delitzsch, one of the most eminent Biblical

scholars of the nineteenth century, and was early attracted to Semitic studies, taking his doctorate at Leipsic in 1873. The same year he became a student of Schrader, who had published the first German treatise on Assyriology in 1872. At that time cuneiform studies were pursued only in England and France, mainly by brilliant dilettantes, so that the scientific character of the decipherment was doubted by many scholars in related fields. Delitzsch proceeded to study Assyrian grammar and lexicography according to the most approved methods of modern philology, and with the aid of his teacher Schrader and a group of gifted pupils was able before 1890 to establish the correctness of the decipherment beyond doubt. This work he supplemented by his Assyrisches Handwörterbuch (Leipsic 1896), which has remained the standard Assyrian dictionary up to the present, and by his epoch making Assyrische Grammatik (with English translation, Berlin 1889; 2nd ed. 1906). He crowned the decipherment of Sumerian by his Grundzüge der sumerischen Grammatik (Leipsic 1914) and Sumerisches Glossar (Leipsic 1914). Delitzsch also published a great many inscriptions, historical, religious, social and economic, and his interest in the reconstruction of the social and economic life of ancient Babylonia may be gauged by his remarkable little book Handel und Wandel in Altbabylonien (Stuttgart 1910). He was one of the founders of the Deutsche Orient-Gesellschaft, the foremost German society for the promotion of archaeological research in the Near East, and he did probably more than any other German scholar to interest the public in ancient oriental archaeology. He was a great teacher and attracted students from all over the world to his seminary in the University of Berlin. Virtually all American Assyriologists have been his pupils or his pupils' pupils. He is now recognized by all Semitic scholars as the greatest Assyriologist since the first decipherment of the Assyrian inscriptions in 1846.

W. F. ALBRIGHT

Consult: Price, I. M., "Friedrich Delitzsch" in Beiträge zur Assyriologie, vol. x, pt. ii (1927) i-xii; Meissner, Bruno, in Deutsches biographisches Jahrbuch, vol. iv (1922) 31-35.

DEMAND.

THEORY. Demand is one of the most elementary concepts in economics and one of the most seriously ambiguous even today. Properly understood it includes the entire complex of condi-

tions, except price, which determines the amount of a commodity salable in a given market at any named price. Demand is indicated by, and is elliptically used to mean, a schedule or curve showing the amount salable at each price along a scale covering the range of probable variation in price. The schedule or curve states in quantitative form, if drawn to a scale of known magnitudes, the hypothetical law of demand: "if any specified price, then the indicated quantity would be sold."

Confusion with reference to demand arises mainly from two sources. In the first place, popular thought and usage do not distinguish between demand as the actual quantity of a commodity bought, which "under given conditions" depends on the price, and the "given conditions" which determine how much the market will take at any named price. Thus in general usage demand is, as J. S. Mill remarked, both the effect and the cause of price. In scientific usage the term is now defined in the latter sense only. Thus a change in demand occurs only when there is a change in sales without a change in price or not explicable by a price change alone. When the reference is to actual quantity bought as a result of a certain price the term to be used is sales or consumption, but this distinction in terminology is not always carefully observed.

The second source of confusion is the apparent symmetry between the concepts of demand and of supply in popular usage as opposed to the asymmetry involved in the strict scientific terminology. In popular as well as scientific usage supply refers definitely and unambiguously to a quantity or rate of flow of a commodity. In a market where already existing goods are to be exchanged without any reference to conditions of production supply conditions in the sense of "reservation prices" merely reflect the demand of the initial owners and are properly a part of the total demand, as Wicksteed, Davenport and others have emphasized. And in the more usual economic problem, where conditions of production are brought into relations with conditions of consumption, supply again refers to the actual amount or rate of production, a quantity or stream of commodity. What corresponds to demand, as defined above, on the supply side of the equation is not the quantity or rate of flow designated by supply but the supply schedule or curve reflecting the conditions of production.

The development of usage and of clarity as to the law of demand from the eighteenth century on has proceeded along two lines. It involved

problems in psychology and philosophy, relating to the basis in human nature of the fact that other things being equal higher prices are accompanied by decreased consumption. It was connected also with the extension to economic theory of the quantitative logic of causality in the form of function and variable, previously worked out in mathematical mechanics and applied in the natural sciences at large. In view of the background of economics in utilitarian moral philosophy the psychological theorizing first took the form of a law that utility, understood as a pleasure, decreases with increasing consumption. But this view was quickly seen to be both vulnerable to criticism and unessential. Demand is a phenomenon of motivation; but the economist dealing with demand is not called upon to choose any particular theory of the ultimate nature of motives, because demand involves motivation merely in the aspect of comparison of the intensity of motives. The demand for one commodity cannot be considered alone; it is a question of the extent to which consumers will choose to spend a limited income in one way rather than in other possible ways. This view is in accord with scientific logic, involving the interaction of many variables. It considers income and consumption in the light of a continuous flow of purchasing power and eliminates the typical illustrations of diminishing utility, such as the eating of successive apples, applying to a single unit of time.

A satisfactory discussion of the demand for a given commodity in a given market must recognize several major factors: first, the psychology of consumers—their relative estimation of different commodities and services, and the ways in which these estimates vary with variations in the quantities; second, the purchasing power, or realistically the money incomes of consumers, including the way in which income is distributed among individuals and classes belonging to the market; third, the prices at which competing or substitute goods are available; and fourth, the prices of complementary goods. For completeness it is well to name explicitly a fifth factor regarding the relations of substitution and complementarism between the given good and other goods; this is a separate variable, liable to change independently of the prices of the goods themselves. Prices for substitute and complementary goods stand in an opposite relation to demand; higher prices for the former increase the demand or move the schedule upward, higher prices for the latter lower it and vice versa. It is important to note that there may be relations of both kinds

at the same time between the same two goods. This fact is especially important because it is typical for the productive services, the various kinds of labor and property uses; these are generally necessary to each other's effective use, yet they are in competition for employment, and this relation sets the problem of distribution theory. Under conditions of complementarism or "joint demand" the relative desirability of the individual commodities is determined by their relative power to increase the usefulness of the combination; the principle employed in this process has been called by Marshall the "principle of substitution" or of "variation in proportions." Consumers value commodities just as producers value labor and other productive services, as increments not merely to a stock of the same kind but to a combination of several kinds used together.

In spite of the fact that the demand for any commodity is essentially a function involving many variables the quantity demanded is commonly much more dependent at any given time on the price of that commodity than upon any other single cause. It is of vital interest to know as much as possible about this relation, and obviously such knowledge would be the first step to a more inclusive understanding. For the guidance of such study it is necessary to describe a demand curve or the relation pictured by it between quantity and price, in terms as simple and general as possible. Long before statistical study was even proposed it was recognized that the crucial property of the demand is the relation between the amounts of change in the two variables. Various writers, among them Malthus and J. S. Mill, had noticed that commodities differ widely in the amount of change in quantity purchased which is associated with a given change in price. With some commodities, generally luxuries, a small decline in price will bring about a large change in consumption, while with others, generally necessities, the opposite holds true. Cournot gave a precise mathematical form to this principle; Alfred Marshall gave it the name "elasticity of demand," and it is through him that economists have become familiar with it. The name is not a good one; "responsiveness of consumption" would be much better.

To measure and compare the elasticities of demand for two or more commodities it is necessary first to express variations in price and quantity in units independent of the accidental commodity and price measures, and second to have a zero point or norm from which to measure up-

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ward and downward and contrast high and low elasticities. The first of these needs is met by stating variations in fractions or ratios and the second by taking "unit elasticity" as the standard. It is readily shown mathematically that the following equations hold good, either of which may be taken as defining the elasticity of de-

mand: (1)
$$e = \frac{dq}{q} \div \frac{dp}{p} = \frac{dq}{dp} \cdot \frac{p}{q}$$
; (2) $p \cdot q = c$, where

q represents quantity, p price, e the elasticity of demand and e a constant. It is evident that if e equals unity or in general is constant, then the second equation directly states that price times quantity is unvarying for all changes in price or quantity. These equations are valid for any point on a demand curve, even if the elasticity varies continuously along the curve.

The essential idea in unit clasticity is that the change in quantity consumed resulting from a given change in price is equal to the change in price. If the change in consumption is greater than that in price, the demand is elastic; and if less it is inelastic. For practical purposes it is accurate enough to say that the elasticity of demand is unity if a 5 percent change in price causes a 5 percent change in consumption. But this form of statement is strictly accurate only for infinitesimal changes, not percentage changes; for a 5 percent change in an upward direction is not really equal to a 5 percent change downward. An accurate statement without recourse to calculus would indicate that the changes must be in reciprocal ratio. Thus a 5 percent increase in price will, if the demand has exactly unit elasticity, be associated with a change in consumption not from 100 to 95 but from 100 to 100/105 of 100. If the elasticity is 2 and the price declines from 100 to 90, the quantity will undergo two successive changes in the reciprocal ratio

of 90 to 100; that is, it will be
$$q \cdot \left(\frac{100}{90}\right)^2$$
.

Similarly, if the elasticity of demand is 1/2, doubling the price will divide the quantity by $\sqrt{2}$; doubling the quantity will divide the price by 4.

Since elasticity is responsiveness of consumption to price, the causal relation in connection with elasticity is considered as running from price to quantity sold. This is purely arbitrary and reverses the notion underlying ordinary demand graphs, where quantity is measured along the base line and considered the independent variable. Either price or quantity may actually be the cause and the other the effect. Many branded commodities are put on the market at a

fixed price and variations in demand express themselves through variations in the quantity taken. With agricultural products, on the other hand, the supply once produced is thrown on the market and competition fixes the price that will dispose of it. There are even cases of the third conceivable type, where within limits both price and quantity are fixed and the demand as such is the variable, being manufactured by high pressure selling methods. The direction of the causal relation assumed in connection with elasticity is important because reversing it would invert the magnitude of the elasticity and produce a measure of what H. L. Moore calls the flexibility of prices. In many cases the inverse relation would be the more natural one to consider.

Since demand is the guide of production, i' goes without saying that any reasonably reliable data on the magnitude and elasticity of demand and probable changes in it form the prime requisite for intelligent business management or for any possible social control. Thus the inclasticity of demand makes the problem of price control especially difficult: if any measure to raise prices meets with success and then if the price increase calls forth even a little increase in production, its effect is likely to be nullified or even reversed. The outstanding case in which the facts of elasticity give rise to a major public problem is that of agriculture, where the interests forcing attention are those of the producer; because of inelastic demand he is confronted with elastic price. Since the World War a relatively small overproduction has meant ruinously low prices.

In other fields of social control, too, the elasticity of demand is likely to be an important consideration. It is a common expedient to levy excise taxes on commodities of mass consumption considered luxurious or harmful, such as tobacco and alcoholic beverages, with the more or less dual objective of raising revenue and of reducing consumption and eliminating waste or damage t consumers. Obviously, the more inelastic the demand the more effective is such a tax from the revenue point of view and the less effective from that of control. Similar issues arise on an even larger scale in connection with customs duties. which serve the twofold purposes of revenue and protection. Since there is almost always some difference between the imported commodity against which protection is sought and the native product, the effects of the duty depend on the elasticity of demand for each as affected by substitution of the other and on the joint clasticity of demand for both. In general, it is commonly agreed that in the very long run the effect of commodity taxes on the organization of industry is more important than their effect on individual incomes, since taxes on commodities are so largely shifted and ultimately diffused. The final effects of any such tax depend on the relations between elasticity of demand and elasticity of supply. The burden of the tax is finally divided between consumers and owners of resources which cannot move to other industries.

Elasticity of demand is closely related to the concept of monopoly of supply. It was early recognized that the more inelastic the demand for a commodity, the more profitable will be a monopoly in its production and the greater the incentive to attempt to secure a monopoly. In fact the connection between the two is much more intimate. The meaning of perfect competition is that the products of any number of other producers are a perfect substitute for that of any particular one. The demand for output of any particular competitive producer is infinitely elastic; at any price above that ruling in the market he can sell nothing and at any price below that ruling in the market he can sell an indefinite amount. Under monopoly there is a distinction between the products of different producers, which reflects itself in some degree of inelasticity in the demand confronting the single producer; this inelasticity measures the amount of his monopoly power, that is, power to raise price by restricting output. It does not matter whether the difference between the product of a particular enterprise and that of its competitors is a real difference in efficacy or in aesthetic appeal, a difference in social prestige conferred by the particular article, or a purely imaginary difference existing only in the mind of the consumer. Thus the significance of advertising, other than pure information regarding the physical character and properties of the product, and of other sales practises commonly referred to as creation of demand becomes clear. They strive to create in the minds of consumers a belief that A's razors, mouth wash, suits or what not are "different," and that those of B or C are not at all an acceptable substitute. When articles become too patently standardized to make this propaganda workable, as in a case like Portland cement, the producers typically form an association to build up the greatest possible psychological distinctiveness between their product and competing products of a different form and name.

FRANK H. KNIGHT

STATISTICAL DEMAND CURVES. In the ordinary use of the term, the demand curve for a commodity is a graphical statement of the relationship between the price and the rate of consumption or purchase of that commodity. The demand curve for a commodity may refer to the quantity purchased in any given market and to any price, wholesale or retail, which is representative of the prices which buyers in that market pay. The difficulty which confronts the statistician is that any single observation of the price and corresponding quantity of the commodity represents only one point on the demand curve. To obtain empirical evidence even for only the important section of the demand curve, a number of observations from a more or less extended period of time must be used, and during this period the demand curve may have changed.

It is interesting to observe that Cournot, who was the first to give a precise mathematical formulation of the demand function, was aware of the difficulties involved in arriving at statistical demand curves. He states that the law of demand "depends essentially on the magnitude of the population, on the existing distribution of wealth, on the tastes and habits of the consumers, on the multiplication of markets, and on the centralization of markets as a result of improvements in transportation. If all of these conditions relating to demand remain the same, and if we assume that the conditions of production change —the cost of production is raised or lowered. monopolies are restored or suppressed, taxes are increased or reduced, competition from abroad is prohibited or admitted freely-then prices will change and the corresponding variations in demand, if accurately set forth, can be used for the construction of our empirical tables. If, on the contrary, prices change because the law of demand itself has changed, because of a change in the causes which influence not only production but consumption, then the construction of our tables would be rendered impossible, since they must express how demand varies because of a change in price, and not because of other causes. And even when the change in the data seems to be caused by variations in the conditions of production, it is still to be feared that the law of demand itself has undergone a change in the rather long period covered by the observations in a country which has not yet achieved a fairly stationary state" (Principes de la théorie des richesses, Paris 1863, p. 100-01).

In the first edition of his *Principles* (1890, bk. iii, ch. iii) Marshall discussed the use of statis-

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tical evidence in judging the elasticity of demand. He dealt at length with the difficulties resulting from the fact that "other things seldom are equal over periods of time sufficiently long for the collection of full and trustworthy statistics" and suggested how these difficulties might, in part at least, be met. But while Marshall's discussion indicates that he may have set up some sort of demand schedules or demand curves from statistical data and while he clearly has used statistical data in drawing conclusions as to the elasticity of demand for certain commodities, he does not present either tables or curves which purport to show the precise nature of the demand for any commodity as determined by statistical data.

If the difficulty confronting the statistician is to be overcome, a way must be found of eliminating from the statistical material the effect of those factors which change the functional relationship between consumption and price. Any other changes in the market situation present no difficulty to the investigator of demand curves. In fact, he can utilize only such statistics as reflect changing market situations; the observations he needs must comprise a wide range of either price changes or consumption changes or both. The demand curve which is the goal of the statistical economist is not actually "instantaneous," based on the "elimination of time" or on the assumption that "all other things are equal," as is sometimes maintained; it is static only in the sense that the influence of factors disturbing the relationship between price and consumption is supposed to be eliminated.

At the beginning of the twentieth century methods of correlation analysis were developed that proved to be useful tools in eliminating to some extent disturbing factors in the construction of demand curves. R. H. Hooker told in 1905 of a study which involved the correlation of first differences of corn prices in Iowa and of corn production in the United States (in Royal Statistical Society, Journal, vol. xlviii, 696-703). In 1910 Warren M. Persons reported similar studies (in American Statistical Association, Quarterly Publications, vol. xii, 287-322). Neither of these writers, however, claimed that the lines of regression of their correlation studies constituted empirical demand curves. They were followed by H. L. Moore and R. A. Lehfeldt, both of whom used correlation methods with an avowed purpose of obtaining demand curves, or "laws of demand."

Moore's methods have been essentially the

same as those of Hooker and Persons. The changing conditions of demand are dealt with partly through the use of data obtained by first differences, percentage changes, ratios to trend or similar devices in place of the original price and quantity statistics. These devices serve to remove the trend inherent in most production and consumption data and in addition to remove any trend which may exist in the price series. In addition, multiple correlation is used in order to take account of the effect of other factors which influence the law of demand and constitute "disturbing elements." The use of these methods marked a long forward step in overcoming the difficulties in the way of obtaining demand schedules.

Following this pioneer work a great deal of attention has been given to the statistical study of demand. Statistical demand curves have been obtained for a very large number of commodities and by many investigators. In general the different workers in the field have followed quite closely the methods used by Moore in his early studies. Whatever changes were introduced were adaptations due in part to significant advances in methodology and in part to the peculiar needs of different investigators or of different problems. Only the method recently propounded by Leontief is outstandingly different. Assuming that demand and supply curves do not change in shape in the course of time and that the simultaneous shifts of these curves are not correlated, Leontief derives by the method of least squares a pair of average demand and supply curves from the same statistical material. An indefinite number of pairs of curves may be obtained from a single set of data, but if the data are divided into two parts there is but one set of curves which is common to both parts of the data. The resultant set of unique curves is consequently dependent upon the arbitrary way in which the data are divided.

The data available for the construction of statistical demand curves are corresponding prices and quantities of the commodity in question. When plotted on coordinate paper each of the price-quantity points may be considered to represent a point of intersection of the demand curve and the supply curve. The scattering of the price-quantity points may be due to the fact that curves have shifted within the period for which the data have been used. If the supply curve shifts through a much greater range than does the demand curve, the resultant points of intersection will tend to group themselves about a sort of

average position of the demand curve. A line of best fit drawn through these points will approximate the average position and contour of the demand curve. Similarly, if the shifts of the demand curve are greater than those of the supply curve, the observations will tend to be grouped about an average position of the supply curve and a line drawn so as to pass through this group of points will tend to represent the average position of a supply curve. The use of unadjusted data, however, is apt to yield such a wide scatter of points that no line can satisfactorily be fitted to them.

The methods of Moore and of those who have followed him are much more likely to yield definitive results. A large part of the shifts in demand curves are due to increasing population, changes in consuming habits and other dynamic factors which result in a more or less continuous and regular year to year shift of the demand curve in one direction. The use of percentage changes, trend ratios or other adjusted data in place of the original data tends to remove the effects of these long continued shifts in demand. These methods also tend to remove the effects of long continued shifts in the supply curve. When applied to agricultural commodities, which because of varying yields exhibit wide year to year variations in the conditions of supply, they are likely to result in curves which approximate more or less closely the nature of demand curves. When applied to other commodities for which there are no such great year to year variations in the conditions of supply the result is not so apt to approximate a demand curve satisfactorily. Indeed, if the conditions of demand are subject to wide year to year fluctuations and the conditions of supply are not, the result may approximate a supply curve instead. This appears to have been the case with Moore's study of the relation between the percentage changes in the price and in the production of pig iron.

Whether the results obtained from dealing with adjusted data are an approximation to a theoretical demand curve or to a theoretical supply curve or represent merely an average line drawn through the points of intersection of demand and supply curves ("path of equilibrium" or "historical trajectory") cannot be ascertained a priori, and no general rules can be laid down in this connection. Two considerations, however, are relevant to an evaluation of the result. First, it is important to know whether the shifting of demand curves and of supply curves is correlated or independent. Second, it is necessary to ascer-

tain whether the adjustments which are made in the original observations in order to obtain a better defined path of equilibrium have not removed from the original data the very relationship for which the investigator is looking or have not distorted that relationship.

If the shifts of the demand curve are causally related to the shifts of the supply curve or vice versa, the statistical demand curve obtained will correspond to a demand curve of theory even though it will not have the same slope as the original shifting curve. If, on the other hand, the shiftings in the two curves are not causally related and if proper adjustment of the original data cannot be made to allow for these shiftings, the result will hardly resemble a true demand curve. This may be illustrated by the example of trading on a speculative market. When a change occurs in the fundamental supply and demand conditions -for example, if news of a frost in Iowa in early fall reaches the cash corn marketboth the demand curve of buyers and the supply curve of sellers shift; when plotted on coordinate paper the demand curve shifts upward and to the right, while the supply curve shifts upward and to the left. The shifts in these curves, by reason of the fact that they represent the supply and demand curves of people who are buying and selling in speculative markets, are necessarily interrelated. If proper adjustment could be made for certain vagaries of demand, the path of equilibrium of these market demand and supply curves would result over a period of ten or twenty years in something approaching a short time normal demand curve for that market.

In considering statistical demand curves the effect of price upon consumption over long and over short periods of time must be clearly distinguished. Whether curves are obtained which correspond to the nature of market demand curves or of short time normal demand curves depends upon both the nature of the original data and the statistical procedure in handling them. It is doubtful, however, whether there is any statistical procedure by which one may expect to obtain definite information as to the nature of long time normal demand curves, i.e. curves which would show the effect of changes in price upon consumption under conditions in which the change in price is of sufficient duration for consumers to alter their consuming habits. For example, over a short period of time the demand for potatoes may be very inelastic; but if the price is raised and continues at a higher level over a period of years, the result may be that after

consumers become accustomed to the substitution of rice, bread or other commodities their consumption of potatoes will gradually be greatly reduced, indicating that the long time normal demand curve is elastic. There is little chance, however, that statistical methods can satisfactorily disclose the nature of this long time relationship. The trend must be removed from both the price and quantity series in order to make adjustments for the growth of population and changes in consuming habits unrelated to the changes in price; but the very removal of these trends removes from the data the evidence which they contain with regard to the effect of a long continued change in price upon consumption.

Another adjustment which may remove pertinent relationships from the original data is that of "holding other things constant" by means of multiple correlation. Thus in the example of corn one of the things which disturbs the relationship between its price and consumption is the change in the price of oats which results from changes in its production. The usual procedure would therefore be to include the price of oats as an independent variable in the multiple correlation and then to remove the effect of changes in the price of oats upon the changes in the price of corn. But the price of oats, in the United States at least, is very largely dependent, and causally dependent, upon the production and price of corn. Hence if the price of oats is "held constant" by means of multiple correlation, there is danger of removing from the fluctuation of corn prices a part of the variation which was actually due to changes in corn production.

There remains a considerable divergence of opinion as to what statistical demand curves actually represent and as to the best methods to use in obtaining them. Recent discussions, however, have brought about a better understanding of the true nature of these curves and have tended to lessen the differences of opinions as to their meaning. The probable consensus at present is that by careful analysis some sort of demand curve of theory can be approximated in the case of many commodities but that the closeness of the approximation is usually uncertain.

The various difficulties and uncertainties involved in constructing statistical demand curves make such curves almost useless unless they are accompanied by a large body of interpretative data indicating how they were obtained and therefore what they mean. In particular, a statement that certain commodities have certain elasticities of demand or the mere presentation of

the curves which have been obtained cannot rightly be used in reasoning about such effects of a tax or tariff or other measures as are supposed to be dependent upon relative elasticities of demand and supply. Ordinarily demand curves are derived from statistics merely as a part of an extended analysis of the price of a commodity. As a part of such analyses they are most useful for purposes of forecasting prices, determining desirable production programs and similar uses.

E. J. Working

See: Consumption; Utility; Value; Price; Supply; Market; Monopoly; Advertising; Curve Fitting; Correlation; Economics.

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DÉMEUNIER, JEAN-NICOLAS (1751-1814), French sociologist and ethnologist. In the treatise L'esprit des usages et des coutumes des différens peuples (3 vols., London 1776), which established his position as a founder of comparative ethnology in the eighteenth century, Démeunier classified the accounts of travelers among "savages" and "barbarians" not simply according to countries, as had Prévost d'Exiles

in his L'histoire générale des voyages (1746-70), but according to a methodical outline of the folkways. In the introduction to his work Démeunier declared that his object was not to point out the "bizarre or ridiculous" in human customs but on the contrary to "discover their spirit" that "instead of inveighing against abuses we must study dispassionately their origins," and that "no matter what the custom be, it had a cause as its principle." Furthermore, he believed that explanations of these customs might be attempted only cautiously and only if the travelers' observations were subjected to criticism. Like Charles de Brosses before him in Du culte des dieux fétiches (1760) Démeunier discovered relations between archaic and exotic folkways; he traced similarities in the political and social institutions of peoples as remote from each other in time and space as the natives of the Society and Friendly Islands, American aborigines and the Greeks, and maintained that they are caused by the similarity of "inspirations of nature." That he was aware of peculiar differences among these customs as well as of their similarities attests the importance of Démeunier as one of the founders of sociology.

RENÉ MAUNIER

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DEMOBILIZATION. See Mobilization and Demobilization.

DEMOCRACY. No definition of democracy can adequately comprise the vast history which the concept connotes. To some it is a form of government, to others a way of social life. Men have found its essence in the character of the electorate, the relation between government and the people, the absence of wide economic differences between citizens, the refusal to recognize privileges built on birth or wealth, race or creed. Inevitably it has changed its substance in terms of time and place. What has seemed democracy to a member of some ruling class has seemed to his poorer fellow citizen a narrow and indefensible oligarchy. Democracy has a context in every sphere of life; and in each of those spheres it raises its special problems which do not admit of satisfactory or universal generalization.

The political aspect of democracy has the earliest roots in time. For the most part it remained a negative concept until the seventeenth century. Men protested against systems which upon one ground or another excluded them from a share in power. They were opposed to an oligarchy which exercised privileges confined to a narrow range of persons. They sought the extension of such privileges to more people on the ground that limitation was not justifiable. They felt and argued that exclusion from privilege was exclusion from benefit; and they claimed their equal share in its gains.

That notion of equality points the way to the essence of the democratic idea—the effort of men to affirm their own essence and to remove all barriers to that affirmation All differentials by which other men exercise authority or influence they do not themselves possess hinder their own self-realization. To give these differentials the protection of the legal order is to prevent the realization of the wishes and interests of the mass of men. The basis of democratic development is therefore the demand for equality, the demand that the system of power be erected upon the similarities and not the differences between men. Of the permanence of this demand there can be no doubt; at the very dawn of political science Aristotle insisted that its denial was the main cause of revolutions. Just as the history of the state can perhaps be most effectively written in terms of the expanding claims of the common man upon the results of its effort, so the development of the realization of equality is the clue to the problem of democracy.

This is indeed to state in a general way what is more usually seen in narrower terms. There have been times—in England, for instance, in the nineteenth century—when democratic government was largely taken to mean the extension of the suffrage. At other times, as in Oregon in the early years of the present century, the participation of the people in the process of government by means of the initiative and the referendum seemed that indispensable condition without which democracy was a shadowy figment. Others have made it depend upon the power of the majority to have its way. The basis of the feminist movement was the claim that so long as women are excluded from full and direct participation in political life democratic government cannot be said to have been realized. The number of political mechanisms, from proportional representation to the direct primary, upon which alone a democratic government has been held to be valid is very large; but analysis of them will show that at bottom the effort of their proponents has been to prevent the operation of a policy which excludes some people from the benefits of the state. They have in fact been aiming at the realization of some form of equality not previously acquired.

It is because political equality, however profound, does not permit the full affirmation of the common man's essence that the idea of democracy has spread to other spheres. The discovery that men may be politically equal without attaining a genuine realization of their personalities was seen by not a few during the Puritan revolution, and the demand for economic equality was loudly and ably voiced there by Winstanley and his followers. It was only, however, with the French Revolution that economic equality may be said to have become a permanent part of the democratic creed. From that time, particularly in the context of socialist principle, it has been increasingly insisted that in the absence of economic equality no political mechanisms will of themselves enable the common man to realize his wishes and interests. Economic power is regarded as the parent of political power. To make the diffusion of the latter effective, the former also must be widely diffused. To divide a people into rich and poor is to make impossible the attainment of a common interest by state action. Economic equality is then urged as the clue upon which the reality of democracy depends.

The demand for social equality is both older and more recent than that for either political or economic equality. Protest against the possession of privilege by birth goes back to a very early period. So also a refusal to accept the status of inferiority which slavery implies is probably as old as slavery itself. Each of these is a somewhat crude form of the demand. More subtle are claims to religious equality, to educational equality, to that equal participation in the results of social discovery which is marked by the development of communal efforts toward the improvement of health and housing, the provision of public libraries and recreation and so forth. There is, it is maintained, a kind of eminent domain which entitles the state deliberately to intervene to mitigate the consequences of social inequality. This claim is important, because the method on which it relies—taxation as a rule, but on occasion expropriation, whether revolutionary or otherwise-has the inevitable

effect of producing a simultaneous approach to economic equality, and it is significant that the use of this method should, as a rule although not invariably, be one of the consequences of the attainment of political equality. Included in this aspect also is the idea of equality before the law. The proponents of democracy affirm that in the courts of a state there can be no difference between persons: poor and rich, atheist and Christian, black and white, must in similar circumstances be treated similarly by the law. And what is interesting in this context is the early affirmation that a legal equality which remains purely formal is necessarily unsubstantial. It is found that access to the courts is a matter largely dependent upon economic position; and a demand is soon made for equality in those realms which give reality to that access. Since also the legal doctrines of a court mainly take their color from the character of the prevailing economic order, the demand for economic equality in order that these legal doctrines may bear equally upon all becomes a normal social feature.

The case for democracy is built upon the assumption that in its absence men become the tools of others, without available proof that the common good is inherently involved in this relationship. The case at bottom is an ethical one. It postulates that the right to happiness is inherent in man as a member of society and that any system which denies that right cannot be justified. The main argument in its favor is the important one that in any social order where it has not been accepted a rational analysis finds it difficult to justify the distribution of benefits which occurs. Most arguments against it indeed, like those of Plato in the Republic, have been less concerned to deny its postulate than to affirm that the end it seeks cannot be attained by the method of democracy. Yet as a rule that criticism has concealed the unstated major premise that the opponents of democracy know better than the common man what is good for him and are prepared to supply him with it. It is this major premise which historic experience seems to refute. It may be, as Rousseau said, that it is the tendency of all governments to degenerate; certainly in no system of government has power been entrusted to a few without subsequent confusion by that oligarchy of its private good with the public welfare; and revolution has frequently been provoked by the inability of the oligarchy imaginatively to meet the wants it has encountered.

Organized democracy is the product of urban life; it is therefore natural that it should have made its first effective appearance in the intense political activity of the Greek city-states. It was of course a limited democracy based on slaverand in no Greek community did free citizens constitute the majority of the inhabitants. The conditions of its emergence were for the most part economic; at Athens, for example, where the city's wealth was so largely dependent upon overseas trade, a recognition of the importance of the seafaring class in the state was unavoidable. But, generally speaking, democratic ideas did not commend themselves to the major thinkers of Greece. Either, like Plato or Isocrates, their outlook was definitely hostile to democracy or, like Aristotle, they accepted it only with severe limitations. Yet Aristotle recognized the validity of a large part of the democratic case. For him the claim of numbers is vital; he admits that the demand for equality is inescapable; and his analysis of the causes of revolution is nothing so much as a eulogy of the career open to the talents. It is clear enough that his wise and calm mind was impressed by the inherent virtue of a system which without being extreme prevents the undue concentration of power in a few hands. His notion of citizenship too implies a continuous and active interest in affairs of state. His admiration for polity is clearly an acceptance as adequate of at least the foundations of Athenian democracy.

The system broke down largely because the Greek mind never recognized the urgency of pan-Hellenism and partly because the passion for equality at Athens never permitted the creation of an executive strong enough to act vigorously in foreign affairs. Yet internally at least Greek democracy displayed astonishing merits. The life and property of the citizen were generally secure. The importance of order was realized. The sense of civic obligation was high and pride in civic achievement was great. Intolerance did exist, as the classic cases of Socrates and Aristides make clear, and a jealous particularism which, as in the tragedy of Melos, ultimately created a legacy of hate that left Athens helpless before the military genius of Macedon. Yet one of the ultimate lessons of the Athenian democracy is the power of equality to maintain a government of free men.

After the fall of Athens any effective experimentation in democracy ceased until modern times. Rome had a genius for government; but the democratic element in its system was nomi-

nal even in republican times and non-existent in imperial. Military necessity won political equality for the plebeians; but there was no real democratic character in the executive power. The legislative authority of the comitia testified to the recognition of the significance of numbers in the state; but this was so hedged about with restrictions as to be but partially effective. The lex hortensia of 287 B.C., which nominally made the enactments of the concilium plebis binding on the whole people, was important only theoretically. The senate retained the substance of power until authority passed into the hands of the emperors.

Roman democratic ideas are shadowy in a similar way. The Roman stoics show an appreciation of equality. Cicero, Seneca, Gaius and Ulpian are all at pains to establish an original equality of men and to appeal to a law of nature which gives them an equal claim to consideration. But the inference is less political than moral, the duty to be humane rather than the obligation to be democratic. The idea led to legal improvements, especially in the conditions of slaves; but its practical political consequences were not immediately important.

Yet when the stoic idea met and was fused with Christianity it gave birth to a theory of human rights which, had it been applied, would have revolutionized the world in a democratic direction. Early Christian documents insist on the equality of men; they emphasize the idea of property as a trust which must be exercised on behalf of the whole community; and their attitude to slavery contained at least the germs of its overthrow. We must not indeed press any of these elements too far. Because Christianity began as a doctrine of the disinherited, its statesmen, especially St. Paul, insistently emphasized its practical limitations. Their equality was spiritual and not legal. They urged the duty of obedience to constituted authority. They discouraged any attempt to bring out the revolutionary elements implicit in their faith. And once Christianity had been formally adopted as the religion of Rome, the position of the church as a great property owner increasingly anxious for endowment made it an instrument of social conservatism rather than of change. Its importance for democratic theory lay in the future, when it could seem to bring the support of supernatural validity to humble men's claims to a share in the direction of affairs.

Mediaeval conditions contributed ideas of far more practical importance. If the practise of

democracy was largely dead, implicit in mediaeval life were notions important for later theory. At the basis of feudalism lay the idea of contract; and this made universal the assumption that the rights of a lord depend upon the fulfilment of his duties to his tenant. The influence of this was far reaching. It is obviously easy to argue that the king as the supreme overlord owes a duty to his people as the condition of their allegiance; the coronation oath can then be interpreted as a pledge he is not entitled to break. Conflict between various authorities, especially between church and state, then naturally gives rise to the idea of a social compact. So Manegold of Lautenbach, in the struggle between Gregory VII and Henry IV, puts forward an idea of popular right. For him the king must honor divine law, obedience to which is the pactum giving validity to his rule. To act unjustly is then to break the compact, and this absolves a people from its allegiance. The theory of course was conceived in the interest of papal authority, and this is true of much of the doctrine which takes a similar view. Where John of Salisbury praises tyrannicide, where Aquinas explains the differing claims of good and evil monarchs, each is in fact discovering an avenue to papal supremacy. But each is also, however imperfectly, insisting that power must be limited in the interest of the governed, and new experience was to make the idea a fruitful one in later times

Two other mediaeval notions were important. The discovery of the idea of representation solved a problem of governance which baffled classical times. Probably ecclesiastical in origin, it was fully transferred to state affairs by the thirteenth century. Its implications are obvious. If interests are to be represented, of what interests is the representative body (or bodies) to be composed? Phrases come to us like the famous Ouod omnes tangit, ab omnibus approbetur, which show a sense that the exclusion of an interest may make the representation of a body imperfect; and thinkers like Marsiglio of Padua (with the experience of Italian cities in his mind) and William of Ockham are prepared to press the view to its logical conclusion. They failed practically, but the contribution of the idea of representation to democratic theory was a claim that those excluded from the making of decisions cannot be bound by them. The idea of representation was of seminal importance because it gave those excluded from a share in the organs of government the opportunity of grievance. When social conditions became sufficiently developed this grievance could take the form of a protest against privilege; and in that notion lies the seed of modern democracy.)

It is, finally, important that the Middle Ages had no clear conception of sovereignty. The idea of a legally unlimited will was wholly alien to its way of thinking. From the lowest to the highest, men are bound by a hierarchy of laws in which divine law is the summit. This in the long run promoted popular rights by obviously emphasizing the idea of constitutionalism. And the effort to find institutional means for expressing this view may fairly be described as universal. It is the root idea of Magna Carta; it is the essence of Aquinas' insistence on an elective monarchy; it underlies the curious modernity of Marsiglio; it is the basis of the decree Frequens of the Council of Constance which sought to put a term to papal autocracy. The absence of sovereignty meant that authority could be regarded as a trust, capable of revocation when it was subject to abuse. The Peasants' Revolt of 1381, the so-called Lancastrian experiment of the fifteenth century, even the Hussite rebellion, all show how deeply that notion had spread. All of them were premature in the sense that conditions as yet made their translation into institutional form impossible. But all of them were vital because they showed how easily they might be utilized for democratic ends in a suitable environment.

Broadly speaking, that suitable environment may be said to have emerged in the sixteenth century when religious schism coincided with economic and geographical change. The synchronism of Protestant creeds with a new capitalist economy was not fortuitous. It gave a new significance to individualism. The fight for toleration in the religious field was paralleled by a fight for freedom of economic and political action. Most reformers were not democratic in any large way, but to establish the right of their faith to exist unhampered they were compelled to attack the absolute state. The sixteenth century is full of discussion of the right to rebel for conscience's sake. Knox and Buchanan in Scotland, Ponet and Christopher Goodman in England, Beza and the author of the Vindiciae contra tyrannos in France, are only a few of the outstanding political thinkers of the period who sought ways and means of limiting monarchical authority in the interest of different political sects. Special circumstances forced the Jesuits to defend a curiously similar position; and men

like Mariana and Bellarmine were unconsciously advancing the rights of the people when they sought new weapons in defense of their church.

The sixteenth century for the most part sought to delimit the authority of the prince in the interest of churches. The main impact of the seventeenth century was in England and Holland and consisted in the defense of constitutional government against absolute prerogative. The defense was important because the tendency of the century was all the other way. In Holland it produced in Johannes Althusius a remarkable defender of a liberal federalism in which sovereignty is squarely based upon popular approval. In England civil war and revolution established the principle that Parliament is the essential lawmaking body, and the defense of Parliament was built upon its supposed representative character. The English experience is noteworthy because a revolutionary atmosphere produced among the Levellers extreme democratic views like those of John Lilburne (the true forerunner of Chartism) and extreme democratic communism like that of Gerrard Winstanley. The broad result was summed up in Locke, who gave to the English constitution the peculiar flavor of middle class liberalism it has retained ever since. Kingship became dependent upon Parliament; and we can trace to this epoch the beginnings of the transfer of effective power from the landed aristocracy to the trading bourgeoisie, which was not finally emphasized until the Reform Act of 1832.

France moved more slowly. She had her democratic thinkers in the seventeenth century, notably Claude Joly and Pierre Jurieu, who inferred from the wars of the Fronde and the revocation of the Edict of Nantes respectively that the people should be the effective basis of power. But a serious democratic theory on any considerable scale did not develop in France until the eighteenth century. Then the combination of an inefficient monarchical absolutism with religious bankruptcy and a functionless noblesse produced a widespread protest. In some, as with Voltaire and Diderot, the main claim is protection of the individual against the invasion of arbitrary power. Others, like Montesquieu, demand a constitutional system. Others again, like Mably and Morelly, depict communistic utopias as the only effective remedy for social ills. Rousscau sounded a deeper note and denied the legitimacy of all government in which the general will of all the people was not the effective lawmaking power. The philosophes did not make

the revolution of 1789; that was the product of misgovernment and bankruptey. But they made the people aware of their wants. They made a regime of privilege no longer possible, once the Estates General had been convoked. And the French Revolution may be said to have contributed to democratic theory the insistence that the career must be opened to the talents, which was, whatever its limitations, a denial that birth/or race or creed can bar the road to equality.

Political thinkers of the nineteenth century differed from their predecessors in that they confronted a condition rather than a theory. They were less concerned to defend an ideal than to discover the fitting means of its operation. Thomas Jefferson in America, Jeremy Bentham and the Mills in England, Alexis de Tocqueville in France, are the outstanding names in a notable procession. There is no common agreement among them upon essential principles. Jefferson, for example, exemplified the faith of the relatively simple agrarian community from which he came. His democratic ideas are those of a man who suspects all exercise of power and seeks above all the fullest means of its control. Bentham's view is that of a lawyer who sees sinister interests at work and finds in liberty of contract and universal suffrage the methods whereby the greatest happiness of the greatest number may be attained. John Stuart Mill saw deeper into the manifold complexitics of the problem. But it cannot be said that his demands for full freedom of expression, copartnership in industry and proportional representation did more than signalize the directions in which events were tending. In many ways the analysis of de Tocqueville is the most outstanding performance of them all. He saw more clearly than anyone else that the inherent principle of democracy is equality and that its consequence must necessarily be the use of the state to minimize the differences between men. In a sense he prophesied the course of legislation in the western world for the following century.

The history of democratic thought has thus centered about two problems—the effort to establish the right of the whole community to share in the direction of the state, and the means of attaining this diffusion of power. The wide-spread acceptance of the democratic ideal obviously implied acceptance of the possibility that social arrangements were a matter of deliberate human invention. For this three conditions were necessary, and it is in the interrelations of these three that the development of democratic thought

may best be understood. (1) The secular state had to be divorced from the ecclesiastical community. This was effected partly by that complex of causes called the Reformation and partly by the erosion, through scientific discovery, of belief in supernatural sanctions. (2) The feudal notion of social relations had to be replaced by the contractual. This was effected by the commercial revolution which transformed social classes slowly between 1400 and 1750 and with increasing rapidity since that time. (3) Popular ignorance had to be dispelled, partly by the growth of literacy and partly by the evolution of a consciousness of power in the masses which would enable them to know both what they wanted and how to organize for its attainment. Largely this was the outcome of nineteenth century development. Popular education slowly achieved the first, and economic organization, especially in the form of trade unionism, did most to secure the second.

The struggle for the attainment of democratic institutions has taken forms as various as the conditions it encountered. The eighteenth century popularized three ideas. English experience led to the belief that parliamentary government is the parent of civil liberty. The American Revolution made popular the notion that a discontented people has the right to cashier its governors. The French Revolution established the principle that autocracy is the necessary parent of special privilege. Nineteenth century democrats attempted to find institutional expression for these ideas. And the stress of a new and intensified system of production, in which rapidly increasing and concentrated populations had to be satisfied, necessarily increased the rate of progress toward democratic institutions.

Sometimes the demand was for the establishment of representative institutions, as in Germany; sometimes for the extension of the franchise. In the first part of the century the English system became the model for peoples struggling to be free. In its latter years Swiss democracy became the fashion; the representative system was criticized as leaving the member of Parliament the master of the electorate between elections. This led to an enthusiasm, most notable in western America, for direct government; and every constitution sought to embody the initiative, the referendum and the recall as the necessary safeguards of a democratic state. America indeed specialized in experiment in technique. The short ballot, the recall of judges, the direct primary, all were at one time or another urged

as seminal contributions to the problem of discovering appropriate forms. At one time the question of a second chamber aroused wide interest. At another proportional representation was put forward as the highroad to salvation.

The importance of machinery has been emphasized by another factor. A state which numbers its population by millions cannot decide upon its purposes without government by parties. "Party organization," as Bagehot said, "is the vital principle of representative government." Without the party system in some form it is impossible to get that concentration of voters for decision which is essential with electorates of the modern size. But parties, inevitable as they are, have brought in their train a host of complex problems. The method of choosing candidates, the proper size of a constituency, the prevention of corruption, the exact powers which an elected member should exert, the representation of minorities, these are only the outstanding issues for which suitable machinery has to be devised. And, broadly speaking, it may be said that the experience of party government in the last seventy or eighty years has rendered obsolete most of the simpler views of democratic government. Bentham could urge that universal suffrage would prevent the emergence of sinister interests; no one thinks so now. The Chartists could insist that the ballot and annual parliaments would enable the popular will to find its way to the statute book; it is now clearly seen that they greatly oversimplified the problem. As Halifax said some two hundred and fifty years ago, "the best kind of party is in some sort a conspiracy against the nation." In this context questions of electoral machinery become urgent if the end of democracy is to be attained. And it cannot as yet be said that their satisfactory solution is in sight.

Ever since the French Revolution there has been a close connection between democracy and nationalism. The attainment of unity involved the conquest by the nation of the panoply of the sovereign state, and the step thence to empire was a small one. Now empire for the most part meant the control of colored peoples by the white race—the Philippines by America, India by Great Britain, Java by Holland, Indo-China by France. With the close of the nineteenth century came a democratic awakening which infected not merely colonial territories of this kind but also ancient empires like China. The main proponents of democratic theory had for the most part taken the younger Mill's view

that the idea of democratic government suited only the habits of advanced and, essentially, white peoples. Its adaptation to non-white civilizations was fiercely resented. It meant the surrender of political power by the whites and often of an economic dominion based on political control. Great Britain, for instance, might yield control gracefully enough in Canada, South Africa or Australia; its surrender in India was a different matter. For the withdrawal of control meant the possible jeopardy of great interests built up on the faith of its continuance. It disintegrated economic and political habits to which great importance had become attached. It challenged, at least contingently, that domination of the world by the white man which to most nineteenth century thinkers had been almost an unconscious axiom. It would not be unfair to say that most democratic thinkers found it difficult to apply their philosophy to people of a different color. The latter in their turn found the postulates of the democratic creed unanswerable. Great Britain, for instance, found herself in the dilemma either of granting to India institutions for which she believed it to be dubiously suited or of attempting to suppress demands which could only be resisted with naked force. To use such force meant not only to divide her own public opinion; it meant also to threaten her own economic well-being in India. Mutatis mutandis, the situation was true elsewhere; and the question was posed to the twentieth century whether democracy and empire are compatible at all and if they are whether the compatibility does not mean sooner or later the abandonment of effective control by the suzerain of its authority over its dominions. Turgot's maxim that colonies are like fruit upon a tree which falls as it ripens seemed to summarize the general history of this relationship; and the democratic notion hastened the proof of its universality.

Democratic government during the nineteenth century may be said to have been successful so long as it confined its activities to the purely political field. While it occupied itself with matters of religious freedom, formal political equality, the abrogation of aristocratic privilege, its conquests were swift and triumphant. But the attainment of these ends did not solve any of the major social and economic issues. The masses still remained poor; a small number of rich men still exercised a predominant influence in the state. With the grant of the franchise to the workers therefore a movement toward col-

lectivism was inevitable. Political parties had to attract their support; the obvious method was to offer the prospect of social and economic legislation which should alleviate the workers' condition. And from the early days of the French Revolution there had appeared the portent of socialism with its insistence that only in the rigorous democratization of economic power could a solution to the social problem be found. Incoherent at first, the development of trade unions and the growth of doctrines like that of Marx made what seemed visionary utopianism into a movement. By the eighties of the nineteenth century socialism could represent itself as the natural and logical outcome of democratic theory. It could outbid the older parties on ground which universal suffrage had made the inevitable territory of conflict. In the opening years of the twentieth century the central theme of debate had become the power of the state to satisfy the economic wants of the work-

The war supervened to give this new evolution the sharpest possible definition. No democratic system met its challenge effectively. Openly or covertly every belligerent state organized itself for war in terms of a more or less extensive dictatorship. The questions were asked whether democracy had that inherent efficiency necessary to cope with its problems, whether the social question could be solved through the forms of classic democracy, whether disparities so vast as those revealed in the most advanced society could be bridged in terms of peaceful evolution. The conquest of Russia by Marxian socialism brought to power a body of men for whom political democracy was an unedifying mirage. They insisted that the democratic state merely means the dictatorship of the capitalist; that he would never peacefully yield his power; that it must accordingly be taken from him by a revolution in which the working classes would, through the dictatorship of the proletariat, seize the state and control the means of production in the interest of the masses. Democracy for them was an ideal incapable of realization until the power of property had been overthrown. It was only when men were economically equal through the successful socialization of the means of production that a thoroughgoing dictatorship could be abandoned.

In the feverish post-war atmosphere the dramatic Russian experiment exercised a wide fascination, and its communist theory became the most complete challenge to the democratic prin-

ciple since the French Revolution. Attempts to imitate it were frequent, notably in Hungary and Germany. Inevitably also it produced its antithesis, expressed in various forms, of which perhaps the most striking is the Fascist dictatorship in Italy. But underlying them all is a common philosophy based on the rejection of all democratic principles as involving an anarchy incompatible with the vigorous organization required by the state. These principles, it is claimed, destroy the unity of the state. They dissipate in discussion the energy which is needed for action. Parliaments are overwhelmed with work so that rapidity of action is impossible for them. The average man is too incompetent and uninterested in the issues which must be decided to have an effective opinion about them. The technicality of modern problems means government by the expert; and democratic methods are held to be irrelevant to his decisions.

Many factors have contributed to this outlook. The fractionalization of parties, as in France and Italy, the habits of violence engendered everywhere by the war, the new intensity of nationalist faith, the failure to adapt democratic political procedure to new conditions, the gravity of the economic crisis in the post-war period, are all causes of importance. But the underlying principle of Fascism is pretty clearly the defense of the power of the middle class against the onslaught of the masses. It is the outcome of the realization that the trend of democracy is to fasten an increasingly heavy economic burden upon the comfortable; and the dictatorship it establishes is a deliberate effort to mitigate this condition. How far it is likely to be permanent no one can say. The ability of democracy to survive the dual attack of communism and Fascism will obviously depend upon its ability to adapt its mechanisms and principles to a changed world.

Not indeed that the protagonists of democracy are unaware of the malaise. The last twenty years have seen a notable change in its perspective. In the years before the war attention was mainly devoted to questions of machinery like the referendum and the recall; and the postwar constitutions, especially those of the new European states, showed a curious enthusiasm for mechanical devices intended to give the electorate its maximum authority.

But since the war the theory of democracy has far outstripped its practise. Few thinkers now interpret its problems in Benthamite terms. The notion that political equality will give birth

to liberty in its different aspects is nowhere widely held. While there still remain, especially in England, men to whom the adoption of proportional representation remains the major political reform, continental experience of its operation has everywhere dimmed its attractions. The major currents of democratic theory set in other directions. Their emphasis now is upon equality of economic opportunity. This involves the insistence that social income must definitely be used to prevent undue disparity between man and man in all the major activities upon which the good life depends; and the state appears as the institution which deliberately uses the taxing power to achieve this purpose. The good life is unattainable where there are wide economic disparities between classes.

From this further consequences flow. If the hypothesis of self-government is valid in the political sphere it must be valid in the economic sphere also; whence is born the insistence upon constitutional government in industry. Not only must the state interfere to this end in the general details of economic life, but it cannot realize its end if the operation of the profit making motive is admitted in any industry of basic importance to the community. The new ideals of democracy therefore foreshadow a functional society in which the older conception of liberty of contract has no place. Any state in which the economic sphere is left largely uncontrolled is necessarily a class society tilted to the advantage of the rich; it lacks that necessary basis of unity which enables men to compose their differences in peace. The claim for the sovereignty of the state no longer rests upon the strong basis provided by the old liberal hypothesis of a society equal in fact because formally equal in political power. Largely the new democratic theory accepts a quasi-Marxian interpretation of the state while refusing to draw therefrom the inference that revolution is its only satisfactory corrective.

But in order to achieve a functional society in effective terms the new democratic theory calls for a thorough overhauling of existing institutions, particularly on the political side. Here we can only suggest in brief outline the direction of its thought. (1) It is hostile to the idea of the national state as the final or chief unit in social organization. The economic interdependence of the modern world makes it regard the state as essentially a province of an international society to which alone in ultimate matters essential authority can belong. (2) It regards the classic theories of parliamentary and presidential gov-

ernment as unsatisfactory. They represent a response to the social conditions of the nineteenth century rather than of our own day. The basis upon which it demands revision is threefold: (a) it looks to a large measure of territorial decentralization; proper areas of local authority must not be unduly fettered by central control; (b) it looks to a large measure of economic federalism; for it the cotton industry and mining are entities of government as real as Lancashire or New York, which need their own inherent organs of constitutional government; (c) it desires reorganization of central government in order to associate with the making of decisions all interests which are likely to be affected by them. Its view therefore of the institutional structure of the twentieth century is of a pattern far more complex than was envisaged by men like Jefferson or Bentham or Mill. It does not believe that this institutional reconstruction can be postponed in either the international or the national sphere if democracy is to be made capable of effective realization.

At the base of this view is clearly the old democratic notion that the only way to respond to the wants of the individual is to associate him with the process of authority. It accepts therefore the old claim that exclusion from a share in power is also exclusion from a share in benefit. It regards the right of men to share in the results of social life as broadly equal; and it regards differences of treatment as justifiable only in so far as they can be shown to be directly relevant to the common good. It takes its stand firmly on the need for a close economic equality on the ground that the benefits a man can obtain from the social process are, at least approximately and in general, a function of his power of effective demand, which in turn depends upon the property he owns. It is thus hostile to all economic privilege as being in its nature fatal to the end at which a democratic society must aim. For the new democratic theory liberty is necessarily a function of equality.

And it therefore seeks the institutions appropriate to an egalitarian society. That is why it refuses to confine the ideal of democracy to the purely political sphere. It believes that for the average man constitutional government is not less in politics or any other sphere. What Michel called the "eminent denity of human personality" cannot in its view be protected upon any other terms. The essente of democracy on this hypothesis is full consultation before decision; and the discovery

of the organs which will make that consultation effective is therefore of paramount importance. On such a view also the central government, in the ordinary meaning of the term, has less than the importance attributed to it in previous theories. It becomes a final method of coordination rather than an originating source of command. Society is transformed into a system of centers of authority, each of which is urgent and significant, rather than into a pyramid in which the central legislative assembly accretes all power to itself. This theory is incompatible with the classic view of parliamentary sovereignty; it tends much more to the notion of spheres of competence laid downaby a constitution which is supreme over the bodies dependent upon its authority.

The new trend of democracy is not less hostile to dictatorship in any form than the old. Whatever the original purpose of dictatorship, history indicates that it cannot avoid degeneration; and when that occurs the benefits of the dictatorship are bound to be confined to those who share in its operation. Further, modern democratic theory is built upon the notion that the only way of responding to the wants of total experience in modern communities is to give that experience the full opportunity of expression; and the only way to give it that freedom is to offer it in its various aspects the responsibility of sharing in power.

One final remark may be made. It is not the view of modern democratic theory that a political man can be constructed whose interest in the public business of the community is assured. It does believe that increased educational opportunity will increase that interest; a belief which further emphasizes the need for equality. It does argue further that the main result of inequality is so to depress the moral character of those at the basis of the social pyramid as to minimize their power to get attention for their experience. Again therefore it sees in equality the path to the end democracy seeks to serve. It has far less assurance than in the past that the end may be attained, but it is not less convinced than its predecessors of the nobility of the ideal.

HAROLD J. LASKI

See: EQUALITY; LIBERTY; INDIVIDUALISM; LIBERALISM; NATIONALISM; SOCIALISM; GOVERNMENT; SOVERIGNTY; NATURAL RIGHTS; SOCIAL CONTRACT; REPRESENTATIVE GOVERNMENT; SUFFRAGE; PARTIES, POLITICAL; POWER, POLITICAL; INTERESTS; ARISTOCIACY; DICTATORSHIP; COMMUNISM; FASCISM; PLURALISM.

Consult: For History of Democratic Institutions

AND THOUGHT: Flegler, A., Geschichte der Democratie des Altertums (Nuremberg 1880); Glover, T. R., Democracy in the Ancient World (Cambridge, Eng. 1927); Croiset, A., Les démocraties antiques (Paris 1909); Bogner, H., Die verwirklichte Demokratie (Hamburg 1930); Lecky, W. E. H., Democracy and Liberty, 2 vols. (new ed. London 1903); Ruggiero, G. de, Storia del liberalismo europeo (Bari 1925), tr. by R. G. Collingwood (London 1927); Borgeaud, C., Rise of Modern Democracy in Old and New England (London 1894); Hattersley, Alan F., Short History of Democracy (Cambridge, Eng. 1930), containing bibliography; Allen, J. W., History of Political Thought in the Sixteenth Century (London 1928); Figgis, J. N., Studies of Political Thought from Gerson to Grotius (2nd ed. London 1916); Gooch, G. T., English Democratic Ideas in the Seventeenth Century (new ed. by H. J. Laski, Cambridge, Eng. 1927); Laski, H. J., Political Thought in England from Locke to Bentham (London 1920).

FOR DISCUSSIONS OF MODERN DEMOCRACY: Bryce, James, Modern Democracies, 2 vols. (London 1921); Dicey, A. V., Lectures on the Relation between Law and Public Opinion in England during the Nineteenth Century (2nd ed. London 1914); Lowell, A. L., Public Opinion and Popular Government (new ed. New York 1026); Ostrogorsky, M. I., La démocratie et l'organisation des partis politiques, 2 vols. (Paris 1903), tr. by F. Clarke, 2 vols. (London 1902); Dewey, John, The Public and Its Problems (New York 1927); Smith, T. V., Democratic Way of Life (Chicago 1926); Laski, H. J., Grammar of Politics (London 1925), and Liberty in the Modern State (London 1930); Duguit, L., Les transformations du droit public (Paris 1913); Cole, G. D. H., Social Theory (London 1920); Laski, H. J., and others, Development of the Representative System in our Times (Geneva 1928); Benoit, Francis de, La représentation politique des intérêts professionnels (Paris 1911); Elliott, William, The Pragmatic Revolt in Politics (New York 1928); Hsiao, Kung-Chuan, Political Pluralism (London 1927); Faguet, Émile, Le culte de l'incompétence (Paris 1910), tr. by B. Barstow (London 1911); Wallas, Graham, Human Nature in Politics (3rd ed. London 1914), and The Great Society (London 1914); Lippmann, Walter, Public Opinion (New York 1922), and The Phantom Public (New York 1925); Follett, M. P., The New State (New York 1918); Croly, Herbert, Progressive Democracy (New York 1914); Veblen, Thorstein, The Vested Interests and the Common Man (New York 1920); Hasbach, W., Die moderne Demokratie (Jena 1912); Kelsen, H., Vom Wesen und Wert der Demokratie (2nd ed. Tübingen 1929); Rathenau, W., Demokratische Entwicklung (Berlin 1920); Sellars, R. W., Next Step in Democracy (New York 1916); Adler, M., Politische oder soziale Demokratie (Berlin 1926); Bonn, M. J., The Crisis of European Democracy (New Haven 1925); Lindsay, A. D., Essentials of Democracy (Philadelphia 1929); Zimmern, A. E., Prospects of Democracy and Other Essays (London 1929); Smuts, J. C., Africa and Some World Problems (Oxford 1930) ch. vi; Guy-Grand, G., L'avenir de la démocratie (Paris 1928); Burns, C. D., Democracy (New York 1929); Sait, E. M., Democracy (New York 1929); Tawney, R. H., Equality (London 1931).

DEMOCRATIC PARTIES. See Parties, Po-LITICAL, sections for separate countries. DEMOGRAPHY. The term demography is best established in France and Italy. The Germans and Scandinavians make slight use of it, and it has never attained to general usage in the English speaking countries. Internationally, however, the term has secure standing in the international congresses of hygiene and demography and the International Statistical Institute. It was first used by Achille Guillard in his Eléments de statistique humaine ou démographie comparée (Paris 1855), who regarded it as the mathematical knowledge of the general movements and of the physical, social, intellectual and moral conditions of populations, or still more broadly as the natural and social history of the human species. Levasseur defines it simply as the science of population, a science which ascertains the state and studies the movementschiefly births, deaths, marriages and migrations -of population and which endeavors to discover the laws which control these movements. Such a definition on the one hand suggests the historical evolution of demography from the political arithmetic of Graunt, Petty and Süssmilch and on the other its near relationship to modern vital statistics. In fact, Whipple regards demography as in a narrow sense synonymous with vital statistics, but also states that broadly it is "the statistical study of human life" and includes not only census and other data on the state of the population and the population movements usually recorded and analyzed in vital statistics but also genealogy, eugenics, anthropometry and statistical pathology. Such broad inclusion of content as that indicated in the latter definition should be avoided. On the other hand, demography should be defined to comprise more than vital statistics. The study of the latter, properly delimited, is concerned with the movement of population (mouvement de la population, Bevölkerungsbewegung) as revealed in the statistics of birth, marriage, divorce and death and is concerned with the state of the population (état de la population, Bevölkerungsstand) only to the extent that statistics of the state of the population afford basic data for the study of the vital movements. Despite the objection of von Mayr in his Bevölkerungsstatistik (Freiburg 1897) that the term is redundant if used as synonymous with population statistics, demography may be defined as the numerical analysis of the state and movement of human population inclusive of census enumeration and registration of vital processes and of whatever quantitative statistical analysis can be made of

the state and movement of population on the basis of fundamental census and registration data

Demography may thus be regarded as a kind of biosocial bookkeeping, a continuous inventory and analysis of the human population and its vital processes, collectively considered. There are two phases to demography, a static and a dynamic. The first ascertains and describes the state of the population. This is the function of census enumeration and analysis, which are not only exceedingly important and useful in their own right but are an indispensable basis for all studies of the movement of population, or vital statistics. In the calculation of density of population, division between urban and rural population and the like, static demography and geography come into close contact, although the fruitfulness of the cooperation between them is lessened by the fact that the census of population is necessarily made by administrative units rather than by cultural areas or natural regions. The dynamic phase of demography has as its function the statistical analysis of the movement of population. This includes both the physical movement of individuals from one place to another (migration and settlement), in the study of which demography again comes into contact with geography and also with economics and history, and the biosocial processes: births, deaths (including infant mortality, deaths at specific ages, causes of death, etc.), marriages, divorces, morbidity (where data are available) and natural increase or autogenous growth. But for the fact that dynamic demography includes migration it could be considered as coterminous with vital statistics. The absolute numbers of the population as a whole and by various classifications of age, sex, conjugal condition and the like are not without significance, not only as basic data for analytical purposes but per se. In most population literature, however, absolute magnitudes have been neglected and the major attention has been given to comparative rates. The central theme of vital statistics and of the demography of population movement is indeed that of the comparative rates at which the various vital processes take place. Birth, death and marriage rates are always ratios derived from the absolute number of the population (actually enumerated or estimated) and the absolute number of births, deaths or marriages recorded for that population in the period under consideration. Calculation of such rates, with various degrees of refinement (for instance,

fertility rates per thousand married women of child bearing age, specific death rates, life tables), is essential to any scientific comparison of the movements of two different populations or of the same population at different times. One must then distinguish descriptive demography, which includes the basic data of census and registration statistics; analytic demography, which includes all the statistical analysis of these data, as well as the calculation of rates; comparative demography, which includes the comparison of the status and movement of different populations at a given time; and historical or genetic demography, which deals with time series of demographic rates.

Aside from its scientific and sociological interest demography has indispensable, practical uses. Demography is a sine qua non of all intelligent public health work and is of much service to medicine in general (see Prinzing, F., Handbuch der medizinischen Statistik, Jena 1906). Detailed knowledge of the incidence of death, by age, sex and cause, is the foundation of life insurance. Business needs the services of demography in a variety of ways but especially in market analysis; and national economic life at large would be saved some costly maladjustments if more attention were paid to analysis of population movement. Public service economy, especially, demands accurate analysis and prediction of the growth or decline and the geographical shifts of population.

A. B. Wolfe

See: Population; Statistics; Geography; Migration.

Consult: Bertillon, J., Éléments de démographie (Paris 1895); Bowley, A. L., Elements of Statistics (5th ed. London 1926) p. 7 8, 20-21; Winkler, W., "Bevölkerungswesen" in Handwörterbuch der Staatswissenschaften, vol. ii (4th ed. Jena 1924) p. 633-55; Levasseur, E., La population française, 3 vols. (Paris 1889-92) vol. i, p. 18, 47-73, and "Histoire de la démographie" in Eighth Congress of Hygiene and Demography, Proceedings and Memoirs (Budapest 1895) p. 282-89; Mayr, G. von, Statistik und Gesellschaftslehre, 8 vols. (2nd ed. Tübingen 1910-26) vol. ii, p. 7-10; Newsholme, A., Elements of Vital Statistics (3rd ed. London 1923) ch. i; Whipple, G. C., Vital Statistics (2nd ed. New York 1923) ch. i; Willcox, W. F., "The Development of American Vital Statistics" in American Sociological Society, Publications, vol. xix (1925) 123-34; Wolff, II., Theoretische Statistik (Jena 1926) p. 425.

DEMOLINS, EDMOND (1852-1907), French sociologist and educator. Demolins was born in Marseille, the son of a physician, and was a student at the Jesuit college of Mongré. He

came to Paris in 1873 to write a history of French society in answer to the aristocratic prejudice that the common people had contributed nothing to the fame and greatness of France. In Le mouvement communal et municipal au moyen âge (Paris 1875) and Histoire de France (4 vols., Paris 1879-80) he followed the descriptive method of Augustin Thierry. After 1880 he became interested in social science and Catholic social reform in the tradition of Le Play, who had examined the condition of working men in Europe empirically and represented the demand for a social policy since 1864. Demolins turned his attention in the direction of popularizing his ideas on a new patriarchal organization of factory life and a moral strengthening of the family by founding in 1881 the magazine Réforme sociale, and from 1884 on by giving regular courses of lectures on social science in the halls of the Société de Géographie. As a consequence of his discussions with the abbé Henri de Tourville, who wished to develop Le Play's doctrine from investigation and monograph into a practical method, Demolins withdrew from the Réforme sociale and founded the Science sociale in 1886. The chronicles on social and political interrelations, which first appeared in the feuilleton of the *Univers* (1875–82), he continued in a series of many sided studies of rural population, of herdsmen's families, of miners and factory workers and of Russian and French types, unfolding in this way the program of a social geography. He also applied the method of social science to studies of the baking and slaughtering industries in Paris and supplemented them by historical works on trade.

Demolins' popular work, A quoi tient la supériorité des anglo-saxons (Paris 1897; tr. by B. Lavigne as Anglo-Saxon Superiority: To what It Is Due, 2nd ed. London 1899), ran through twenty-six editions. The inquiry as to the superiority of the Anglo-Saxon peoples involved a consideration of their education. As a result he published the program of a new education in 1898 (L'éducation nouvelle, Paris), and for its realization founded the École des Roches. He criticized the humanistic gymnasium, Napoleon's "high school barracks," the narrowly intellectual education through the ancient languages and a neglect of realistic and practical training, particularly in geography and history, as well as the complete absence of physical training; he showed the advantages of Anglo-Saxon education for moral character building, the genial relations of teachers and pupils working together with

freedom and sociability, and the advantages of rural education.

In A-t-on intérêt à s'emparer du pouvoir? (Paris 1898), his final denial of the priority of public over private life, he expressed the aloofness of the school of Le Play from parliamentary politics. He set forth a sociography, or social geography, of France in Les français d'aujour-d'hui: les types sociaux du midi et du centre (Paris 1898), and in Les grandes routes des peuples (2 vols., Paris 1901-03) he expounded the significance of migrations for the social order.

GOTTFRIED SALOMON

Consult: La science sociale, 22nd year, no. xxxix (1907) including bibliography; Muller, V., in Le mouvement sociologique international, 8th year, no. iv (1907) 125-32.

DEMOLOMBE, JEAN CHARLES FLO-RENT (1804-87), French jurist. He taught for more than fifty years in the law school at Caen, of which he was dean from 1853 until his death. In 1851 he founded the Revue critique de jurisprudence.

Demolombe was an outstanding representative of the so-called school of exegesis, which dominated French jurisprudence in the nineteenth century. He did much to elaborate the doctrines of this school, which held that the meaning of a law must be sought in the texts of the law itself or even better in the intention of the legislator. With this point in view Demolombe emphasized the spirit rather than the letter of the law in his exhaustive study of the Code civil entitled Cours de code Napoléon (31 vols., Paris 1845-82). This work, which won the biennial prize of the Académie des Sciences Morales et Politiques, was never completed; it consisted of a series of treatises dealing respectively with the various sections of the code. The Traité des biens and the Traité des servitudes (vols. ix-x and xi-xii of the Cours respectively) are the best illustrations of Demolombe's thorough scholarship. In them the analyses of the texts are combined with constructive jurisprudence. In general, however, his method was the artificial one of presenting abstract pleadings for and against his thesis before an imaginary tribunal. Although Demolombe's methods and theories were the object of extreme adulation during his lifetime, there was a marked reaction against them after his death and his work has had little permanent influence.

Julien Bonnecase

Consult: Bonne case, Julien, L'école de l'exégèse en droit

civil (2nd ed. Paris 1924) p. 95-110; Gréard, V. C. O., "Notice sur Demolombe" in Académie des Sciences Morales et Politiques, Mémoires, vol. xvii (1891) 117-22.

DEMOSTHENES (384-322 B.C.), Athenian orator and statesman. Entering public life as an opponent of the pacifist policy of Eubulus in 354, Demosthenes found the issue on which he rose to fame and influence in uncompromising hostility to the ever widening plans of Philip II of Macedon. In 346 he acquiesced in the peace by which Philip consolidated his dominating position in Greece; but in 340 Demosthenes led Athens into a new contest for which it was unfitted in vigor, leadership and financial and military resources and he failed (partly through his own fault) to elevate the Athenian quarrel into a common Hellenic interest. After Philip's victory at Chaeronea in 338 he adopted a policy of watchful waiting, but on Alexander's death in 323 he again threw himself into the struggle of the Greeks to shake off the Macedonian yoke and paid the penalty for defeat with his life.

His political ideas and methods were the traditional ones of the great Athenian demagogues. His vision did not reach beyond the disorder of a world of autonomous city-states with Athens as a paramount power among them. But so much that was provocative of creative energy and vital for human dignity was entailed in this disorder that the man who championed it at its supreme crisis was enshrined in memory as the victim of a glorious failure. As an orator he was supreme in his own generation and to men of after times he remained, in Quintilian's phrase, paene lex orandi. For the many centuries of later antiquity during which rhetoric formed the substance of the higher education his stylefinished, logical, detailed, animated, emotional, eloquent-was the model to be imitated and the touchstone of excellence; and the issues of his epoch were seen as he saw them. But in recent times, with increased understanding of Philip and his aims and subsidence of interest in oratory, Demosthenes has ceased to enjoy undivided admiration.

WILLIAM SCOTT FERGUSON

Consult: Schaefer, A., Demosthenes und seine Zeit, 3 vols. (2nd ed. Leipsic 1885–87); Beloch, K. J., Die attische Politik seit Perikles (Leipsic 1884); Pickard-Cambridge, A. W., Demosthenes and the Last Days of Greek Freedom, 384-322 B.C. (New York 1914); Adams, C. D., Demosthenes and His Influence (New York 1927); Blass, F. W., Die attische Beredsamkeit, 3 vols. (2nd ed. Leipsic 1887-98) vol. iii; Jebb, R. C., The Attic Orators, 2 vols. (2nd ed. London 1893) vol. ii,

DENIFLE, HEINRICH SEUSE (1844-1905), Catholic historian. Denifle was the son of an Austrian schoolmaster and entered the Dominican order at sixteen. He studied at Graz, Rome and Marseille and taught in colleges of his order in Austria and Hungary. In 1883 he became assistant to Hergenroether, then prefect of the Vatican archives. Denifle's historical works are concerned chiefly with the background of scholastic thought, mediaeval mysticism, the use of mediaeval universities and the Lutheran revolt. His Entstehung der Universitäten des Mittelalters bis 1400 (Berlin 1885) definitely answered in the negative the question whether the universities found their origin in the cathedral schools and proved that theology was not taught as a branch of ecclesiastical learning in the early days of the universities. The success of this first work determined the French government to confide to Denifle's care the publication of the Chartularium universitatis parisiensis (4 vols., Paris 1889-97), which provides rich material for the social history of the times. In his La désolation des églises, monastères, hôpitaux en France vers le milieu du XVe siècle (3 vols., Paris 1897-99) he pictures the destruction of churches, the ruin of monasteries, the scattering of monks and nuns and the weakening of ecclesiastical discipline, with all their cumulative effects upon the social conditions in France and Germany at the end of the Hundred Years' War. In the decline of the religious life of mediaeval Europe Denifle saw the direct causes for the religious cleavage of the sixteenth century. His Luther und Lutherthum (Mainz 1904; 2nd ed. by A. M. Weiss, 4 vols., 1904-06; vol. i tr. by R. Volz from 2nd ed., Somerset, O. 1917), although considered to be marked by a good deal of bitterness, revealed such amazing erudition that no work in recent times caused a greater storm among Protestant leaders, chief of whom were Harnack and Seeberg. It reopened the problem of Luther's youth and brought about considerable changes and corrections in the Weimar edition of Luther's works. PETER GUILDAY

Consult: Grabmann, M., P. Heinrich Denifle, o.P., eine Würdigung seiner Forschungsarheit (Mainz 1905); Grauert, H., P. Heinrich Denifle, o.P., ein Wort zum Gedächtnis und zum Frieden (Freiburg i. B. 1906); Stratemeier, B., "Denifle (1844-1905)" in Church Historians, ed. by P. Guilday (New York 1926) p. 354-72.

DENIKER, JOSEPH (1852-1918), French physical anthropologist and ethnologist. Deniker was born at Astrakhan and after traveling

over the Crimea, Transcaucasia and Persia he settled in Paris, where he worked in the laboratories of the Muséum d'Histoire Naturelle and the Sorbonne. In 1888 he became librarian of the museum and thenceforward his interest was definitely directed toward anthropological and ethnographical research. His popular work Les races et les peuples de la terre is a compendium of information on the anatomical, physiological, psychological, pathological and sociological characteristics of human groups. Despite the fact that a considerable mass of information necessary for an adequate classification of mankind is lacking Deniker attempted one. He first classified according to descriptive and morphological characters, such as types of hair and skin color, types of nose, cranium and stature. But recognizing that his arrangement according to somatic criteria was insufficient he remarshaled his evidence on the twenty-nine races discussed and placed them in seventeen groups in an attempt to bring out affinities. His classifications are widely quoted, but they are regarded by anthropologists as premature. Deniker also published memoirs on the anatomy of the anthropoid apes and man, and many ethnological monographs.

EUGÈNE PITTARD

Works: Recherches anatomiques et embryologiques sur les singes anthropoides (Paris 1886); Les races de l'Europe, 2 vols. (Paris 1899–1908); Les races et les peuples de la terre (Paris 1900, 2nd ed. 1926), English translation (London 1900); "Les six races composant la population actuelle de l'Europe" in Anthropological Institute of Great Britain and Ireland, Journal, vol. xxxiv (1904) 181–206.

Consult: Rivet, P., in Société des Américanistes de Paris, Journal, vol. xi (1919) 644-45; Vernau, R., in Anthropologie, vol. xxix (1918-19) 154-57; Keith, Arthur, and Haddon, A. C., in Man, vol. xviii (1918) 65-67.

DENIS, ERNEST (1849–1921), French historian. Denis was born in Nîmes of an old Huguenot family. His participation in the Franco-Prussian War left him with a strong patriotic sense that characterized all of his later historical works. As professor at the University of Bordeaux and later at that of Paris he devoted himself to the parallel study of Germany and the Slav states of Europe. His interest in Czech history was especially profound. With Alfred Rambaud he was the originator in France of the scientific study of Slav peoples, and he is regarded by the Czechs as the man who carried on the work of their national historian Palacky.

Both by his historical work and by his personal influence he was a great factor in the creation of the Czechoslovakian state after the World War.

Denis' works were addressed to specialists and to people of broad culture alike. While always intent on pleading a cause he nevertheless aimed to be impartial and did not recoil before the enunciation of any fact discreditable to the cause he was advocating. His enthusiasm, resulting in a lively and colorful style full of striking and at times paradoxical formulae, often lends his narrative an appearance of passion; but the reader can sense the points at which, starting with a general conception more or less different from the author's, he must add correction or modification.

LOUIS EISENMANN

Important works: Huss et la guerre des Hussites (Paris 1878); Fin de l'indépendance bohême, 2 vols. (Paris 1890); La Bohême depuis la montagne-blanche, 2 vols. (Paris 1903); La fondation de l'empire allemand, 1852–1871 (Paris 1906); La guerre (Paris 1915); La grande Serbie (Paris 1915, 9th ed. 1915); La question d'Autriche (Paris 1917, 5th ed. 1917); L'Allemagne et la paix (Paris 1918, 4th ed. 1918).

Consult: Haumant, Émile, "Ernest Denis et son oeuvre slave" in Revue de Paris, vol. xxviii, pt. ii (1921) 659-66; "L'inauguration du monument d'Ernest Denis à Nîmes" in Monde slave, n.s., vol. ii, pt. iv (1925) 116-55.

DENIS, HECTOR (1842-1913), Belgian economist, sociologist and philosopher. He was professor of ethics and political economy at the University of Brussels and for twenty years a member of the Belgian Chamber of Representatives, where he was leader of the Socialist group until his death. He was a social and economic idealist but sought an inductive, scientific basis for his views. He contributed outstanding articles on the labor movement to various liberal journals including La liberté and the Rive gauche published in Brussels and the Revue de philosophie positive published in Paris. He advocated a system of parliamentary sessions of labor by industry to replace existing political parliaments. Influenced by Proudhon and Auguste Comte he was a mutualist and a positivist and believed in the organic concept of society. He had no fixed social ideal, however, and regarded socialism as a stage in evolution rather than an end; he looked for a reconciliation of antagonisms through a transition from belief in a natural order and absolute right to the acceptance of relative right based on historical change and of a positive dynamic concept of economics and sociology. His most important work is Histoire des systèmes

économiques et socialistes (first published in Brussels 1897, later in a two-volume enlarged edition in Paris 1904-07), in which he gave an able summary of the thought of the physiocrats, Hume, Smith, Malthus, Ricardo, Sismondi, Owen and Thompson, and distinguished between static and dynamic concepts. The third volume was to have covered the socialists of the first half of the nineteenth century but was incomplete when he died. In La dépression économique et sociale et l'histoire des prix (2 vols., Brussels 1895) he did not seek a single cause of crises but made statistical analyses of many complex factors and considered the effects of an increase in the supply of fixed capital. In the Belgian parliament he was called upon as an expert in financial and budgetary problems. He wrote L'impôt (Brussels 1889), a general theory of public finance and taxation in which he showed the necessary tendency to an increase in public expenses as more and more common needs are satisfied by the state. In his L'impôt sur le revenu (Brussels 1881) he collected comparative data on the income tax as a basis for legislation. A number of his philosophical and sociological essays are collected in Discours philosophiques d'Hector Denis (ed. by G. de Greef, Paris 1919).

LOUIS BERTRAND

Consult: Ansiaux, Maurice, "Hector Denis, économiste" in Revue de l'université de Bruxelles, vol. xix (1913-14) 25-30; Simons, Leonard J., "Hector Denis, Sociologist" in Socialist Review, vol. xi (1913) 452-59.

DENISON, GEORGE TAYLOR (1839–1925), Canadian publicist and administrator. Denison was born in Toronto and was educated at Upper Canada College and the University of Toronto.

An independent in politics, he believed in a national Canada and in the necessity of the British connection. Shortly after confederation he became one of the founders of the "Canada First" movement, which aimed to foster a vigorous national spirit and policy. He sought to keep this movement on a non-partisan basis, a policy that was justified by subsequent events. He was a leading opponent of the movement for "commercial union," or reciprocity, with the United States, which began in 1887, fearing that it was a step toward political annexation. He urged as an antidote the adoption of imperial tariff preferences and became a leading figure in successive imperialist movements, such as the Imperial Federation League and the British

Empire League, through which he worked for his fiscal ideal. He helped to win Joseph Chamberlain to this cause.

Denison was police magistrate of Toronto from 1877 to 1923, exercising extensive jurisdiction in all but the most serious criminal cases. As a magistrate he avoided precedents and technicalities and resorted to short cuts in order to accomplish essential justice. In this spirit he established at very early dates an informal children's court, which contributed to the juvenile court movement, and a woman's court.

REGINALD G. TROTTER

Important works: The Struggle for Imperial Unity (London 1909); Recollections of a Police Magistrate (Toronto 1920).

Consult: Wallace, W. S., The Growth of Canadian National Feeling (Toronto 1927) ch. iv; Wodson, H. M., The Whirlpool, Scenes from Toronto Police Court (Toronto 1917).

DENNY, WILLIAM (1847-87), Scottish capitalist and wage theorist. Denny, a shipbuilder, was among the first to expound the theory, in The Worth of Wages (Dumbarton 1876, 2nd ed. 1877), that the value of labor, or wages, is determined by the cost of labor per unit of production. Because foreign competition was already threatening the supremacy of Great Britain's manufacturers and wages had not risen in proportion to the country's wealth, he thought it essential to increase the efficiency of labor. The policy of "the degradation of labor," reduction of output by soldiering or trade union restrictions must be replaced by free competition between workers, since competition between Great Britain's manufacturers was responsible for their success. On the basis of this analysis, the realization that his grandfather's informal system of management had become inadequate and a Presbyterian prejudice against laziness, he concluded that the old system of time wages must be superseded by payment by results, as in piece work, to stimulate workers to greater and more intelligent activity. Later, however, Denny realized that piece work if not carefully guarded is likely to reduce the effective earnings of workers.

Denny was also a pioneer welfare capitalist. He paid high wages for increased efficiency, rewarded employees for their inventions, inaugurated an elaborate system of shipyard rules, established an accident fund society to which fines for infractions of rules were given, and set up a joint committee of workers' and firm representatives to consider a variety of questions. He

feared that the growing number of absentee employers and the increasing impersonality of management were leading toward revolution, and thought that his methods, which kept his yard free from the interferences of trade unions, would avert this danger as well as benefit his employees and firm.

GEORGE MARSHALL

Consult: Bruce, Alexander B., The Life of William Denny, Ship-builder (2nd ed. London 1889); Schloss, D. F., Methods of Industrial Remuneration (London 1892).

DENOMINA'TIONAL SCHOOLS. See EDU-CATION, section on SECTARIAN EDUCATION.

DENTISTRY. The first dentist probably came into existence simultaneously with the first toothache. For toothache is one of the few "diseases" which the layman has never had the slightest difficulty in diagnosing nor the least intention of enduring. Among the Egyptians dentistry was an accredited specialty of medicine; dentists commanded the same deference as priest-physicians. During the Middle Ages, however, dentistry, like surgery, fell into disrepute and was practised chiefly by barbers; and under their ministrations the only cure for toothache was tooth extraction. This deterioration in the practise of the art was accompanied by delay in the science of diagnosis. The theory formulated thousands of years before Christ that caries was caused by a worm gnawing in the tooth prevailed until 1728, when Pierre Fauchard (1678-1761), a famous French surgeon, exploded it in the first complete work on dental procedure ever published. Fauchard practised antisepsis before the word was known.

Until the middle of the nineteenth century dentistry was a craft acquired entirely through apprenticeship and as such was subject to a jealous guarding of trade secrets which Fauchard vigorously attacked. The first trained dentist to come to America was one Robert Woofendale, who arrived in 1766 and departed in 1768. Thereafter no regularly trained dentists settled here until after the Declaration of Independence. Even then they were few in number and liberally interspersed with versatile Jacks to whom the trade of dentistry was only one of many.

In 1839, however, the American talent for organization began to assert itself. The American Journal of Dental Science was established—the first and for some years the only periodical

of its kind in the world. The first national society of dentists, the American Society of Dental Surgeons, was organized. In 1839, too, occurred the "historic rebuff." Distrustful of their ability to rear the infant profession, dentists decided to leave it on the doorstep of medicine, in their opinion its logical guardian. Several attempts were made to have courses in dentistry included in medical school curricula. The faculty of the most important school to which the proposal was submitted replied that dentistry was not important enough to be taught in medical schools. Thereupon dental practitioners collected the abandoned infant and proceeded to rear it themselves. In 1840 they established the first dental school in the world, the Baltimore College of Dental Surgery.

For the next three decades medicine continued to hold dentistry in low esteem and it continued to struggle, somewhat unsuccessfully, against this disapproval. Twenty-five years after the Baltimore College was opened there were only four dental schools, with a total in 1865 of sixty-one graduates. Most dentists still learned their trade as apprentices to established practitioners; less than 15 percent of them were graduates of dental schools. There were no legal restrictions surrounding the practise.

In 1868, however, the legislatures of three states enacted laws defining dentistry and specifying educational requirements for license to practise it; other states soon followed. At once there sprang up great numbers of commercial dental schools and "diploma mills," frankly designed to get their students by-but not very far by—the legal requirements. By 1900, however, all states had passed laws governing dental practise, and the inevitable reaction against mediocre teaching had set in. Since then the number of dental schools has decreased. In 1926 there were forty-four dental schools in the United States and five in Canada. Commercial institutions have been automatically eliminated in the United States by the growing amount and cost of scientific equipment required. Dental education had ceased to be a profitable business and must depend at least partially on endowment.

There are nineteen schools of dentistry in Great Britain. Dental education is founded on the same preliminary education and preparation in the sciences as medicine and must be taken in a recognized medical school. Dental subjects are taught only in dental hospitals. The cur-

riculum makes dentistry a specialty of medicine and places particular emphasis on the function of dentistry in preventive medicine.

In 1900 there were slightly over 30,000 dentists in the United States - 39 to each 100,000 of population; by 1928 the number had increased to 67,000-57 to each 100,000. The number of dentists in proportion to the population is larger in the United States than any other country except New Zealand. The number of dentists in proportion to each 100,000 of the population in certain other countries is as follows: New Zealand, 59; Austria, 48; Latvia, 29; Denmark, 19; Sweden, 17; Germany, 14; France, 13.9; Finland, 13; Poland, 10; Russia, 4.6; Italy, 1.7. Like doctors and nurses dentists in the United States are unevenly distributed. In some large cities the ratio between practitioners and each 100,000 of population is as high as 200, in some rural communities as low as 25.

As in the case of doctors, but to a far less extent, a constantly growing number of dentists are devoting themselves to the practise of a specialty, such as orthodontia (correction of dental alignment and of malocclusion) or dental surgery. In Philadelphia, for example, about 86 percent of the dentists are "general practitioners," 11 percent "partial specialists" and 3 percent "complete specialists."

The dental technician, to whom is delegated the preparation of oral appliances, such as bridges, plates, crowns and inlays, is comparatively a newcomer in the field. His appearance was foreshadowed, however, as early as 1768 by an advertisement of no less a person than Paul Revere, in the Boston Gazette and County Journal. At the present time it is estimated by the Dental Laboratory Association of Chicago that there are about 10,000 dental technicians. The dental hygienist made her début in 1914, when the first training school in this specialty graduated 27 students. Today there are over 23,000 of these practitioners, chiefly women. and the number is growing. They are licensed in twenty-five states; their work, done entirely under the supervision of dentists, is preventive rather than curative in nature.

Up to a comparatively few years ago the undertaker and dentist had one handicap in common—no one ever submitted to their ministrations until he had to. The dentist was the first medical practitioner to emphasize the value of prophylaxis. As a result of his persistent drilling, oral and verbal, Americans are now

thoroughly "mouth conscious" to an extent unknown in Europe. But although practically every one today is "sold" on the value, both to the teeth and to general health, of preventive dentistry, only 20 percent of the people actually buy it. In fact, only 38 percent receive any dental care whatever. This neglect appears to be due not to lack of intelligence but to lack of money, for dental expenditures tend to expand as incomes expand. Michael M. Davis, analyzing the expenditures of 1226 working class families, found that three fourths of the families which had only \$1200 a year spent nothing for dental care; of families with \$2500, only one fourth spent nothing.

The high cost of dental care, like that of medical service, has recently been the subject of much discussion; in both cases it is due not so much to the increased cost of any one service as to the increased expense involved in a greater consumption of a greater variety of services. To some extent too this increased cost is due to wastes in the production and distribution of dental services.

However unreasonably high dental charges may seem to patients with low incomes they must at times seem unreasonably low to dentists. The average net income of dentists in the United States in 1925, in the opinion of the editor of the *Dental Digest*, was about \$2500. A survey in 1928 by the Committee on the Costs of Medical Care showed that in Philadelphia the average annual net carnings of 205 dentists was \$5102; the median income—that of the "middle" dentist—was \$4000. Nearly a third of the practitioners received incomes between \$1500 and \$3000. In Shelby County, Indiana, a rural area, the committee found that the average annual net income was \$2744.

Although dentists are obviously unable, because of the time element involved, to do as much free work in private practise as do physicians, a great deal of dental service at little or no cost is available to the poor. Of the nearly 6000 clinics in the United States in 1926, 57 confined themselves to dental work, and many of the others, including out-patient departments of hospitals, had dental departments. Dental care approximately at cost is available to students in many universities and to workers in several industries as well as to trade unionists. Since the introduction of medical inspection of public school children, which began about 1902 in the United States (in New York City), 1906 in England and 1907 in Germany, by far the

greatest proportion of treatment given has been for the correction of dental defects.

Private practise is the dominant institution in the practise of dentistry in the United States. In most European countries, however, panels of dentists under the insurance system are replacing the private practitioner. In Germany it is estimated that four fifths of all dental service is rendered under the insurance system. As in the case of medicine, dentistry in the United States is gradually becoming organized. A large amount of preventive dentistry is being practised in clinics under the auspices of philanthropic associations, health departments, industries and professional organizations. Private associations of dentists organized for profit and practising both preventive and curative dentistry have also attained considerable success. How far this trend toward group practise will continue it is impossible to say. Minority groups in both the medical and dental professions advocate that dentistry be made a specialty of medicine and that technicians be trained to do the mechanical work under the supervision and direction of these physician dentists. By this means they propose to raise the standard of dental practise and decrease the cost of dental service. This plan has met with the strenuous opposition of the organized dental profession.

LEWIS W. JONES

See: MEDICINE; CLINICS AND DISPENSARIES; PUBLIC HEALTH; PROFESSIONS.

Consult: Gies, W. J., Dental Education in the United States and Canada, Carnegie Foundation for the Advance of Teaching, Bulletin no. 19 (New York 1926); Weinberger, B. W., Orthodontics: an Historical Review of Its Origin and Evolution, 2 vols. (St. Louis 1926), and "The Educational Evolution of the Dental Surgeon" in Dental Cosmos, vol. 1xxi (1929) 516-26, 565-75, and "Dental Literature: Its Origin and Development" in Journal of Dental Research, vol. vi (1924-26) 305-88; Moore, H. H., American Medicine and the People's Health (New York 1927); Davis, M. M., "Dental Care and the Family Budget" in American Dental Association, Journal, vol. xv (1928) 2039-46, and Clinics, Hospitals and Health Centers (New York 1927) p. 453-69; Peebles, Allon, A Survey of the Medical Facilities of Shelby County, Indiana (Washington 1930); Sinai, Nathan, and Mills, A. B., A Study of Physicians and Dentists in Detroit: 1929, Committee on the Costs of Medical Care, Publication no. x (Washington 1931); Wood, T. D., and Rowell, H. G., Health Supervision and Medical Inspection of Schools (Philadelphia 1927); White House Conference on Child Health and Protection, Official Proceedings of the Section on Medical Service, "Dentistry and Oral Hygiene" in United States Daily, Supplement, vol. vi, no. xxix, sect. ii (Apr. 6, 1931) p. 81-84; Great Britain, Board of Education, Medical Dept., "The

School Dental Service" in Annual Report of the Chief Medical Officer, 1939 (London 1930) ch. iii; Gesundheitswesen und Wohlfahrtspflege im Deutschen Reiche, ed. by Bernhard Möllers and Carl Hamel (2nd ed. Vienna 1930) p. 66-69; Schulz, Emil, "Dentistry in Czecho-Slovakia" in Oral Health, vol. xv (1925) 143-47.

DEPARCIEUX, ANTOINE (1703–68), French mathematician, physicist and mechanical engineer. He was of very humble parentage and was enabled to receive an education only by the aid of some generous persons. He earned a livelihood in Paris by manufacturing sundials, made several inventions and published books on applied mechanics and trigonometry and a logarithmic table. He was elected member of the Académie des Sciences in 1746 and belonged to many other learned societies of Europe.

His Essai sur les probabilités de la durée de la vie humaine (1746) was followed by the Réponse aux objections contre l'essai in the same year and by Additions à l'essai (1760). His conclusions as to the probable span of life were based on mortality tables derived from the records of certain French tontines and of births and deaths of children gathered from wide social strata and from the life records of inmates of certain monasteries and nunneries.

Deparcieux' tables attracted wide attention on the continent and in England and served as the basis for annuity calculations in France.

Louis Vigouroux

Consult: "Éloge de M. de Parcieux" in Académie Royale des Sciences, *Histoire* (1768) 155-59, 166; Vincenz, John, *Geschichte der Statistik* (Stuttgart 1884) p. 235-39.

DEPARTMENT STORES. See RETAIL TRADE.

DEPENDENCIES. See Colonies; Imperialism.

DEPENDENCY may be defined as the state of one who receives as alms or relief from the community any of those goods and services which other members of that community receive in return for their labor or property or by virtue of their favored position in the established order.

The attitude of the rest of the community toward dependency has varied from place to place and from time to time and has by no means been confined to that feeling of superiority tinged with contempt which during the nineteenth century was so prevalent in occidental civilization that it seemed instinctive.

It is necessary to go back only to the Middle Ages to find a contrast: so long as the belief prevailed that the end of life was to serve the Lord and that He could best be served by embracing poverty, it was logically inconsistent to hold that those too helpless to live without alms were by that fact set apart as a group to be scorned. Yet, possibly inconsistently, there was some feeling that the status of the dependent was not enviable. Alms were given that the miseries of the poor might be relieved and almsgivers were exhorted to pity and commiseration. It is almost inconceivable that such attitudes toward the poor and the giving of alms should not have developed a certain sense of superiority toward them and possibly a feeling of inferiority on their side. On the whole, however, dependency was an honorable status and the resurgence of condemnation of the rich for their injustices by popular religious revivalists suggested at times that the burden of fault did not lie with the poor.

The development of a definite stigma can be found in the fifteenth and sixteenth centuries, when the support of large numbers by doles and alms began to be felt as a real burden. The very recognition that widespread dependency created a grave social problem tended to reflect adversely upon the dependents. An even more important factor was the presence among the group of large numbers of petty offenders, "valiant rogues and sturdy beggars," who were subject to police measures. The law did single out the "impotent poor" to whom in theory no blame attached and to whom it was proper to give relief. Yet in practise it was probably inevitable that there should be carried over to all who asked aid a suspicion of belonging to the group of "valiant rogues."

It remained, however, for the new religious ideas of the seventeenth and eighteenth centuries and the concomitant economic changes to destroy almost entirely any concept of dependency not resulting solely from the fault of the dependent. For as economic prosperity became the mark of the Lord's approval and poverty a sign that the victim had incurred His anger, it followed that those too poor to live without alms must be sinners in need of punishment. The economic changes which made possible the rise of many of the relatively poor to positions of affluence served to emphasize the idea of personal responsibility; the extraordinary worship of the virtues of industry, frugality and self-help likewise cast a stigma upon

the state of dependency. This attitude, registered most clearly in the English Poor Law of 1832, attempted to make conditions under which relief was given as onerous as possible for the recipient.

This view of dependency persisted long after its underlying religious sanctions had lost their vitality. New sanctions, however, were found in the theory of evolution and its current interpretation as proof of the survival of the fittest. This idea modified to some extent the emphasis on punishment in remedial action, but it did not destroy or modify the belief that dependents were a group inferior to the rest of society.

In the identification of dependency with sin or unfitness there was some exception made always for the "worthy poor," and even the strictest evolutionist recognized the possible existence of victims of circumstances. But the "worthy" seemed hard to find, and for the most part the exceptions were forgotten in the belief that in general the dependent group was less well endowed morally or physically than the independent wage earners.

The modification of this attitude, in so far as it has been modified, may be traced to a number of different sources. One was better acquaintance with those who asked aid, brought about by the rise of a professional or semiprofessional group who were attempting to cure dependency by treating the dependents. This ¹ed to a greater recognition of the role played by extraneous circumstances; a realization of the continual shift in composition of the dependent groups modified the conception of dependents as a fixed and distinct part of the population. Moreover, studies of the independent wage earning group showed that many of them habitually lived in such a state of poverty that a slight setback sufficed to send them into dependency. Then, as a more critical analysis of the working of the economic system resulted in a knowledge of its wastes and maladjustments and as the growing realization of the interdependence of the individual and society led to a less complete acceptance of a rigid doctrine of individualism, the old attitudes toward economic dependency became less consistent with accepted common sense.

There was, however, no general renunciation and no conscious adoption of a new attitude. Rather the exceptions which had never been quite overlooked began to receive more emphasis. One after another certain types of dependents—children, widows, the sick and handi-

capped, victims of industrial accidents, the aged and unemployed workers—were singled out as special groups for whom the old attitude toward dependents was no longer considered appropriatc. In practise this change was registered in two ways: the provision of certain services free or at nominal costs on a universal or nearly universal basis which destroyed the taint of dependency; and the provision of special care for special groups, given only on the basis of need but with the understanding and in such a manner that persons in this group could accept help without incurring odium. At the present time the groups which have been thus marked off are so numerous and are drawn from such varied classes in the community that there would seem to be few instances in which the old attitude toward dependency could logically be held.

Yet the old attitude persists; it is registered in the very reluctance to apply the term dependent to anyone whose self-respect is to be preserved. It is often registered likewise in the treatment of these special groups, partly, no doubt, because in most places the service has not acquired a professional basis and is often administered by individuals or organizations completely out of touch with more modern concepts. It is discernible, moreover, in the practise of many whose conscious philosophy would exclude such an attitude. Probably its persistence, at least in this rudimentary form, can be expected so long as society is organized primarily for the attainment of wealth.

HELEN R. WRIGHT

See: POVERTY; CHARITY; BEGGING; POOR LAWS; SOCIAL WORK; SOCIAL INSURANCE.

Consult: Webb, Sidney and Beatrice, "English Poor Law History" in their English Local Government, 9 vols. (London 1906-29) vols. vii-ix; Intelligent Philanthropy, ed. by E. Faris, F. Laune, and A. J. Todd (Chicago 1930); Hammond, J. L. and Barbara, The Town Labourer, 1760-1832 (London 1917); Marcus, G. F., Some Aspects of Relief in Family Casework (New York 1929); Warner, A. G., American Charities (3rd ed. New York 1919); Loch, C. S., Charity Organisation (2nd ed. London 1892).

DEPORTATION AND EXPULSION OF ALIENS. The phrase is loosely used to mean the enforced transportation of aliens to the country of their origin. Nevertheless, the returning of aliens before they have effected an entry is properly exclusion, and deportation concerns merely the expulsion of aliens already within the country. Both are instruments for

enforcing immigration policies, but important differences arise from the fact that one forbids only the acquisition of a new residence, whereas the other uproots the alien from his newly established environment.

From the standpoint of international law the exact status of a nation's power to exclude or expel aliens is somewhat shrouded in doubt. Despite the recognition of the fact that a nation's safety and destiny are its proper concern, there is always the conception of duties consequent upon its being part of an international community inviting commercial intercourse and being in the stream of constant transmigratory movements. Poised between such conflicting consideration lies the "right" of deportation, the boundaries of which are being empirically pricked out by national policies. As a matter of municipal law the exclusion and expulsion of aliens have historically been regarded as subject to executive control. In continental countries the power to deport has developed under the conception that it lay within the prerogative of the executive. Continental legislation upon the subject is thus meager and essentially declaratory of an incidental executive power. English practise originally assumed the possession of a similar prerogative by the crown, but since the time of the Stuarts the power has been deemed to spring from legislative grant. The same theory has dominated in the United States. The difference is important, for under the Anglo-American theory the right of the alien to continue his residence becomes a matter of law rather than of executive grace. True, law as molded by administration may actually make the difference a matter of theory rather than of practical import.

Deportation as a national policy did not originate until a comparatively recent date. Prior to modern times resort was had to the device as a temporary expedient to rid a community of individuals or groups of undesirable aliens. The early cases are of this character, the grounds for removal being political. The first English deportation statutes were also temporary measures, which from 1793 to 1826 empowered high state officials to remove under severe penalties alien propagandists of the French Revolution. Of the same character was the Alien Law of 1798 authorizing the president of the United States to remove aliens judged "dangerous to the peace and safety of the nation" or "suspected of being concerned in treasonable and secret machination." Again in 1848 England, aroused by the revolutionary movement of the continent, enacted a similar statute, never used and soon obsolete. Such legislation represents the erection of temporary bulwarks against the encroachment of revolutionary thought. Later years were to see the practise of deportation and exclusion on political grounds develop into a national policy.

Resort to deportation as a national or international policy begins in the newer countries confronted with the pressing problems arising from extensive alien immigration. The first intensification of the issue arose out of the practise of the older countries of disposing of their unfit and burdensome criminal and pauper population by transporting them to the New World. The American colonies fought this practise mainly through protest, but the records disclose actual resort to deportation by the Plymouth colony and the maintenance of a deportation policy by Virginia and other colonies. Under the federal constitution the states were stripped of their power to control immigration. They agitated volubly for relief from pauper and criminal immigrants, but for almost one hundred years Congress took no action. Apart from the Alien Law of 1798 deportation was first introduced in 1882 in response to the demand for more effective exclusion of Chinese labor. A method was introduced for the deportation of Chinese unlawfully resident within the country after determination of their rights by a judicial proceeding. The significant act, however, is the Immigration Law of 1891. Its exclusionary features were made enforceable by providing for deportation within one year after entry and by authorizing deportation within the year of aliens becoming public charges from causes antecedent to entry. An administrative procedure for deportation was created, and judicial review narrowly limited.

The significance of the act of 1891 arises from the fact that later deportation legislation has merely elaborated its mechanism, increasing the number of causes and extending the time during which deportation may take place. The act also has served as the model for the British Alien Act of 1905 and similar legislation by the British dominions. It has thus set the broad outlines of the processes for deporting aliens from the Anglo-American world.

Deportation as an instrument has two aspects. From one standpoint it is simply an auxiliary arm of the weapon of exclusion, for without deportation successful avoidance of barriers to

entrance becomes its own reward. The essential difference between deportation and exclusion, uprooting the alien as against merely debarring him, led originally to a more tender consideration of the alien resident within the country than of the alien knocking at its gates. Nations have hesitated to resort to this punitive device even after exclusion was part of a national policy. Short time limitations upon the right to deport accompany the grant of the power. But as the demand for exclusion increases and friendly regard for the alien lessens—a distinct tendency in American development—the differentiation between exclusion and deportation becomes less acute. The powers closely parallel each other; time limitations upon the right to deport lengthen and in some cases disappear; equally limited control over administrative procedure governs the one as the other. This epitomizes the trend of American legislation from 1891 onward. The list of ineligible and hence deportable aliens has grown until it includes persons likely to become public charges. convicts, feebleminded, insane and diseased persons, contract laborers, illiterates, epileptics, prostitutes, procurers, anarchists and radicals, persons entering without inspection or in excess of the quota. Various periods of limitation govern the time during which deportation may be had, ranging from three and five years to no time limit for criminals and anarchists.

The second aspect of deportation is its use with reference to aliens originally eligible to enter the country. Aliens becoming public charges, criminals and anarchistic radicals are the chief classes so affected. The effort to shift the cost of charitable relief to the alien's country of origin accounts for making him deportable if he becomes a public charge within five years after entry for causes existing at the time of entry. Aliens deportable for criminal conduct after entry include prostitutes and procurers, persons convicted of a crime involving "moral turpitude" and second offenders. Despite the legalistic notion that deportation is not punishment for a crime its use in these cases reflects not only the desire to oust undesirable aliens but also to impose an additional penalty upon the convicted alien. A widespread belief exists that the alien preponderates in the criminal population, and deportation presents itself as an additional deterrent. Under existing laws little individualization is permitted in the deportation of alien criminals. Whatever clemency is achieved can be had only through the pardoning powers of the executive, and although individualization is the essence of the imposition of the penalty of deportation, the use by state governors of the pardon as a means of introducing a discretionary element into the administration of the law has been severely criticized by the Department of Labor. A sense of the harshness of deportation necessarily following conviction pervades court decisions that strain to find an absence of "moral turpitude" in various crimes.

Deportation for the possession or advocacy of anarchistic beliefs begins as a matter of law in 1903, but a genuine administrative practise of seeking deportation on this ground originates only after the enlargement of the conception of anarchism and radicalism by the acts of 1917, 1918 and 1920. Like the effect of the French Revolution on England, the Russian Revolution and post-war radicalism in other countries initiated deportation as a weapon for combating the introduction of radical ideas. The provisions of the law are wide enough to include within the deportable class aliens possessing any real radical belief. Indeed, possession of the belief is unnecessary, mere ignorant membership in a radical party being sufficient. The years 1919 and 1920 saw a veritable crusade against alien radicals. Widespread raids were carried on; agents provocateurs were introduced into alien associations; thousands of aliens were arrested, detained and tried, often in flagrant violation of the most fundamental constitutional safeguards. Spectacular persecutions of this character have since been abandoned, but the ferreting out process continues. Important is the fact that the *in terrorem* application of the law denies to the alien not only that freedom and expression of belief accorded the citizen but also the freedom of action and expression regarding industrial and other conflicts that is still rightfully his.

Deportation has increased to enormous proportions in the United States. From 995 deportations for the year ending June 30, 1907, the total reached 12,908 for the year ending June 30, 1929. The complaint of the Department of Labor still centers about lack of funds to prosecute the work with more vigor and the interference of courts with administrative freedom. The full secret of the impact of deportation laws largely lies concealed in the processes of administrative, the original hearing being before an immigration inspector, with an appeal to the secretary of labor. The appeal is actually

determined by an advisory board of review and two assistant secretaries of labor, who give such consideration to the case as the handling of from 100 to 200 cases a day permits. Control over the administrative by the judiciary is narrowly circumscribed, review being limited to the determination of "jurisdictional facts," questions of law and the formal requirements of a hearing. Questions of fact, the decisive issues in the cases, are not reviewed, it being sufficient that some evidence supports the administrative conclusion. Due to the unrealistic notion that deportation is not a penalty, legislation can dispense with the constitutional safeguards applicable to the most ordinary criminal proceeding. Much the same trust is vested in the administrative in deportation proceedings in the British dominions and in England, where there is even less judicial control than in the United States. On the continent the administrative is unchecked. With whatever concern purely administrative determination of important rights be viewed, such concern will arise over the problem of deportation. As yet one awaits a thorough examination of the administration of deportation laws, for court decisions and bare legislative enactments are but peripheral to this central factor of law in action.

The problem of the country to which deportces should be returned has caused some concern. In the United States limited option is given the secretary of labor, but in special instances the alien is allowed to depart voluntarily at his own expense. Some complications have arisen from the unwillingness of nations to receive their returned subjects. Others have recently arisen from the fact that the deportee may be a political offender within his own country. Deportation may thus take the aspect of the return of political offenders, a practise antagonistic to Anglo-American traditions. Unimaginative administration of deportation laws in this respect has provoked considerable criticism, judicial and otherwise, of their tendency to provide a vehicle for the extradition of political offenders because of incidental violations of the immigration laws.

J. M. LANDIS

See: Immigration; Migration; Mass Expulsion; Oriental Immigration; Naturalization; Alien; Political Offenders; Labor Disputes; Antiradicalism; Civil Liberties.

Consult: Official Sources: Statutes: Act of June 25, 1798, 1 Stat. 570; Act of May 6, 1882, 22 Stat. 58; Act of Sept. 13, 1888, 25 Stat. 476, § 13; Act of

Mar. 3, 1891, 26 Stat. 1084, § 11; Act of May 5, 1892, 27 Stat. 25; Act of April 29, 1902, 32 Stat. 176; Act of Mar. 3, 1903, 32 Stat. 1213, §§ 20, 21; Act of Feb. 20, 1907, 34 Stat. 898, §§ 20, 21; Act of Mar. 26, 1910, 36 Stat. 263, § 3; Act of Feb. 5, 1917, 39 Stat. 874, §§ 3, 9, 30; Act of Oct. 16, 1918, 40 Stat. 1012; Act of May 10, 1920, 41 Stat. 593; Act of June 5, 1920, 41 Stat. 1008; Act of May 19, 1921, 42 Stat. 5; Act of May 26, 1924, 43 Stat. 153, § 14; Act of Mar. 4, 1929, 45 Stat. 1551. Leading Cases: Fong Yue Ting v. U. S., 149 U. S. 698 (1893); Wong Wing v. U. S., 163 U. S. 228 (1896); Low Wah Suey v. Backus, 225 U. S. 460 (1912); Zakonaite v. Wolf, 226 U. S. 272-75 (1912); Ng Fung Ho v. White, 259 U. S. 276 (1922); Colyer v. Skeffington, 265 Fed. 17 (1920); Skeffington v. Katzeff, 277 Fed. 129 (1922); U. S. ex rel. Klonis v. Davis, 13 Fed. (2d) 630 (1926); In re Adam, 1 Moore P. C. 460 (1837); Rex v. Leman Street Police Station Inspector, L. R., (1920) 3 K. B. 72; Rex v. Schoppelrei, 31 Can. C. C. 255 (1919); Re Loo Len, 41 Can. C. C. 388 (1923); Lancet v. O'Connell, 61 Quebec S. C. 9 (1921); Ah Sing v. Minister of Interior (1919) Transvaal Prov. Div. 338; Union Government v. Fakir, (1923) Juta's So. African Rep., App. Div. 466. Hearings and Reports: United States, Department of Labor, Reports of the Secretary of Labor (1913-29); United States, Congress, House, Reports, 70th Cong. 1st Sess., no. 484 (1928); United States, Congress, House, Committee on Immigration and Naturalization, Hearings, 69th Cong. 1st Sess. (Jan. 12; Mar. 25, 26; Apr. 13, 1926), and 70th Cong. 1st Sess. (Feb. 21-Apr. 5, 1928).

JURISTIC AND POLITICAL DISCUSSION: Clark, J. P., Deportation of Aliens from the United States to Europe, Columbia Univ. Studies in History, Economics and Public Law, no. 351 (New York 1931); Bouvé, C. L., A Treatise on . . . Exclusion and Expulsion of Aliens (Washington 1912); Cook, A. E., and Hagerty, J. J., Immigration Laws of the United States (Chicago 1929) ch. v; Garis, R. L., Immigration Restriction (New York 1927); Abbott, E., Immigration Select Documents (Chicago 1924); Claghorn, K. H., The Immigrant's Day in Court (New York 1923) ch. x: Post, L. F., "Administrative Decisions in Connection with Immigration" in American Political Science Review, vol. x (1916) 251-61; National Popular Government League, To the American People: Report upon the Illegal Practices of the U.S. Department of Justice (Washington 1920); "Report on Charges of Illegal Practices of the Department of Justice" in Congressional Record, vol. lxiv (1923) 3005-27; Panunzio, C. M., Deportation Cases of 1919-1920 (New York 1921); Post, L. F., Deportations Delirium of Nineteen-Twenty (Chicago 1923); Sibley, N. W., and Elias, A., The Aliens Act (London 1906); Haycraft, T. W., "Alien Legislation and the Prerogative of the Crown" in Law Quarterly Review, vol. xiii (1897) 165-86; Craies, W. F., "Right of Aliens to Enter British Territory" in Law Quarterly Review, vol. vi (1890) 27-41; Darut, J. A., De l'expulsion des étrangers (Aix 1902); Martini, A., L'expulsion des étrangers (Paris 1909).

DEPRECIATION signifies a decline in value and may refer to a decrease in market prices of commodities, securities and services; to a decline

in the purchasing power of the monetary unit in which prices of other objects are expressed; or to a reduction of capital assets as they are used in the operation of a business. This discussion is concerned only with the last meaning of the term. From this limited standpoint depreciation may signify either loss in value of individual units of capital assets used in the operation of a business or the reduction, or "write down," in capital cost of such assets. The distinction arises as a question of policy, since business accounting may be intended to represent the asset values held for capital purposes, or may be really concerned with costs and their proper allocation between capital and operating account as affected by operation.

Accountants quite generally speak of the depreciation of values but for the most part are concerned strictly with costs. During periods of business stability the difference in conception has little practical significance, but during transition periods it becomes a material factor in the calculation of returns and capital standing. Whether the strict value or the cost policy is adopted, the physical units of property used for capital purposes have a limited period of use in operation and at the expiration of their service life must be retired and replaced by new units. As the service life of the capital expires, depreciation accrues and corresponding provision must be made through the operating account to replace the expired capital units. The complete concept of depreciation thus covers not only the writing down of capital assets owing to expiration of service life but also the inclusion of the accrual in the costs of operation and the preservation of the capital used in the business.

The same basic course is involved under the value and cost conception, except that the quantities may be materially different. The operations of the business are divided into conveniently comparable periods—weeks, months or years—and the ultimate purpose is to determine the amount chargeable to operation or output in relation to capital. On the cost basis, when a plant unit is installed, its full cost is viewed as a capital expenditure if it has a service life longer than a single accounting period, and as its service life expires its original cost is gradually transferred or allocated to the operating account as a part of the cost of service or output, in proportion to its decreasing usefulness in operation. This process is applicable not only to physical properties but also to intangible capital such as franchises, easements, patents and other

rights which have a limited life in a business. It does not extend to land and all so-called intangible expenditures which are incurred for permanent capital purposes.

The value and cost concepts are not always kept distinct. But even where the cost view is taken as the basis of accounting, there is still the question whether current depreciation is properly computed, under all circumstances, on the original cash cost basis or whether, when there have been price changes, recognition should not be given to higher or lower amounts than the actual cash cost of the capital units. Accountants quite generally hold to original costs and ignore the fact that when prices have changed they are making inadequate or excessive provisions for the actual replacement of the physical assets for which depreciation is accrued. Thus there is the practical question whether the depreciation allowance even on the cost basis may not be reasonably modified so as to provide for equivalent costs in relation to the changes in prices. Such modification would present the cost of operation and preserve the capital on the basis of changing equivalent costs. But few accountants favor such a departure from the cost system.

Depreciation is due to expiring life of capital assets. The most obvious cause of expired service life is physical wear and deterioration. Wear is due directly to operation, while deterioration is due mostly to weather, soil conditions or internal changes in the physical unit. There is also depletion, which represents the gradual exhaustion of natural resources, such as forests, coal, all kinds of ores, natural gas and oil.

Besides such physical factors there are also functional causes, including obsolescence, inadequacy and changes in consumers' demand. Obsolescence is caused by technological improvements. Under competitive conditions plant and equipment units are ruthlessly scrapped whenever cheaper output can be obtained through more efficient apparatus, and in many industries obsolescence is the most important cause of depreciation. Inadequacy develops as the existing appliances and structures gradually become incapable of meeting the growing requirements demanded of them. Likewise a change in demand as to kind or quality of service often causes retirement of capital assets which otherwise might be continued in use indefinitely. In all three classes the retirement is due to the fact that the old capital units perform their functions less economically or appropriately than the new units.

There is also obsolescence of wider range which involves an entire industry, as in the case of street railway transportation systems which according to present indications appear antiquated and may be superseded by bus operation. This is known as system obsolescence and requires complete capital amortization and transfer to other forms of investment without replacement by similar kinds of property.

The depreciation process has been generally accepted by accountants and financial analysts as essential to sound financial management. In recent years, however, its validity has been challenged by certain writers who contend that it properly applies only to isolated property units, each considered as an independent object of value. When large numbers and great varieties of such units are combined in a single business, their individual character disappears and they must be considered in their collective aspect. When, for example, a railroad or an electric corporation or any business with a large and varied property is thus considered as a whole, it is contended that the idea of depreciation no longer applies; since, although individual units are continuously retired and replaced, the property in its entirety remains unimpaired as to productive capacity and earning power. Therefore, it is claimed, there is no depreciation, provided that retirement and renewals are made, that the cost is included in the operating account and that the property is kept in first class operating condition.

This view is predicated upon the concept of aggregate business value and not upon cost or value of individual asset units. If, however, the object of accounting is to determine cost of operation and to keep a record of investment, then the depreciation theory applies, for the renewal method would result in erroneous or inadequate presentation of the facts. When a plant has reached stable conditions, so that annual retirements and renewals have been substantially equalized, then the renewal method would produce the same results as the depreciation process with regard to charges to operating account but not with respect to the showing of capital investment. But if a business is expanding or if there are material changes in conditions, then the renewal method gives different results both as to operating costs and capital account. Accountants and economists generally look upon the depreciation method as the more desirable.

There are three general methods of determining the amount of periodical depreciation: the

straight line, the ascending line and the descending line. All start with the actual cost of the capital units and then estimate service life and salvage. For convenience the computations are usually made on an annual basis, subject to subdivisions by month or any other desired period. If the straight line method is used, the original cost of a capital unit, less salvage, is divided by the number of years of expected life, and then an equal annual charge is made to the operating account. As an inseparable part of the process an equal annual provision is made for the preservation of capital investment.

The ascending line method represents increasing annual charges to the operating account and gradually increasing provisions for the preservation of capital. It usually appears as the socalled sinking fund system: the same sum is set aside annually which together with compound interest will create a fund equal to the original capital sum, less salvage, at the expiration of the service life of the capital unit. While the basic annual allowance follows a straight line, the sinking fund accruals produce an ascending line, so that the net annual provisions increase from year to year with the growth of the sinking fund. The ascending line methods, however, can be adopted without regard to sinking fund operations by scheduling a rising series of depreciation accruals and carrying them systematically through the operating and capital accounts.

The descending line is less commonly used than the straight line or ascending line methods. When it is used it is usually taken as a fixed annual percentage based upon the net balance of capital investment in the asset units. It is generally used when only net capital balances are carried in the property accounts without separate depreciation reserve, while ordinarily the property accounts continue the full original cost of the capital units until actual retirement and the past accrued depreciation is cumulatively shown in a special reserve account.

There is no conclusive basis of determination as to the relative advantages or financial soundness of the three methods. So far as general convenience is concerned, the straight line method is the simplest and most commonly used. The ascending line corresponds more closely with the changes in the separate value of individual units when determined with respect to discounted earning capacity. The descending line method, however, probably corresponds more closely with the actual sales value of individual capital units. The heaviest depreciation, so far as

marketability of used equipment is concerned, probably comes in the earlier years of most capital assets.

Any specific method is best applied to groups of like assets instead of individual units, since estimated life involves average expectation rather than a fixed period for each unit. If the straight line method is used, an average annual percentage may be established for the business as a whole, based upon consideration of the various groups of units, their relative capital cost and expected life, and may then be applied to the aggregate capital cost of the depreciable plant. Such a rate furnishes the most convenient course but requires reexamination from time to time with respect to all the elements, especially the expected life calculated for each group of units.

The depreciation provisions are sometimes based upon special surveys and are irregular as to annual amounts. They may be adjusted to financial ability—increased with high earnings and reduced with low earnings. They may also be correlated with service performance or output—a definite allowance, for example, may be made per car mile, per kilowatt hour generated, etc. Such methods do not deal with definite capital cost and expected life. While they may produce substantially the same results they are less subject to exact determination and are more likely to lead to unsound practise.

The formal accounting arrangements depend upon the specific objectives of the business. Usually the accounting system provides for the recording of the original cost of each unit under its appropriate property account; new units are debited at cost, retired units are credited at their original cost, and the balance of the account shows the original cost of all units kept in service. As time passes the periodical depreciation is charged to operating account and is simultaneously credited to a special depreciation reserve. While the operating account is cleared at the close of each period, the depreciation reserve continues the cumulative depreciation accruals and at the end of the expected life usually contains a sum equal to the original capital cost of the units as shown in the property accounts, less salvage. Upon retirement of the units the original cost is credited to, i.e. deducted from, the property account and at the same time is debited to, or deducted from, the depreciation reserve. Under this scheme, which covers all capital units, the total balance of all property accounts at any time shows the original

cost of all property units left in operation, while the balance of the depreciation reserve represents the cumulative amount of such original costs charged to past operation. This scheme thus provides a complete cost record of property in use at the same time that it shows the extent of the accrued depreciation.

There is often confusion between the terms depreciation reserve and depreciation fund. The reserve is merely an offsetting account to preserve the record of depreciation accruals, as distinct from the capital cost of existing properties. As charges to operating account are made, equivalent funds are automatically locked up within the business through the reduced showing of net operating return. The funds thus retained are ordinarily used for any business purpose without separate designation. While they are intended for renewals they may be properly regarded as general capital replacements without regard to specific unit retirement, to be used freely for the purchase or construction of any property needed for operation. They replace in an equivalent cost sense the depreciation as accrued and charged to operation, so that the specific renewals have no accounting distinction from additions to capital assets. When, however, a property is not expanding or when it contains some large individual units or when there are legal restrictions, separate investment of the depreciation funds may be desirable or necessary to effect specific renewals. In such instances, as the depreciation charges are made to operating account and credits are entered in the depreciation reserve, there is a simultaneous transfer of cash or equivalent assets to a special depreciation fund, which is separately invested and accounted for. If completely maintained the amount of the fund, as an asset, is equal to the depreciation reserve. The latter constitutes the deduction for depreciation from the original costs in the property accounts, while the depreciation fund contains the assets accumulated to replace the accrued depreciation. The fund as well as the reserve may be variously subdivided as desired for business purposes.

Where large properties are involved, especially when they are scattered over wide areas and are of great variety, systematic provisions for depreciation require practically a continuous inventory of capital units. Usually the system provides for groupings so as to include in the same schedule all property of the same kind or function located in the same territory or plant, showing readily the number of units, the original

cost, the date of installation, the expected life and the amount of depreciation applicable to each operating period.

The depreciation process is primarily a matter of private concern to each business. But it has also far reaching public significance, whose extent depends upon the character of the business and its ramifications in the modern economic structure.

The first fact of public significance is the general dependence of our economic organization upon private capital and management. The public interest therefore requires sound financial policies on the part of the various private groups. While they are private in form, in their collective significance they are public. In a socialistic economic order the depreciation process would be the direct concern of the public management of industry. From a somewhat different standpoint there are also the interests of various classes of investors, who constitute large social groups. The relationship of a large modern corporation to its stockholders as well as to its bondholders and other creditors is really a fiduciary one, so that relative rights and obligations are involved, including not only large numbers of persons but also savings banks, insurance companies and other semipublic investment institutions. Management today is largely independent of the generality of stockholders, except special groups. Hence it is important that sound financial policies be adopted and carried out, that costs be accurately shown and capital not impaired.

Depreciation acquires additional significance in the industries which furnish recognized public services and are therefore subject to special public control with respect to service, rates and financial structure. For such industries there is additional reason for systematic cost provisions with respect to service and investment, and under present conditions they raise special questions as to valuation for rate making and other public utility purposes. Whenever public considerations are involved in the conduct of private business, proper depreciation provisions are essential to determine costs and to prevent capital dissipation.

The emergence of the income tax as an important source of revenue in advanced countries and the consequent need for a clear concept of income lend particular importance to the problem of depreciation. The agencies of financial administration and the courts have laid down many rules and regulations in an attempt to

ascertain the proper amount and rate of depreciation for various types of capital assets.

See: ACCOUNTING; VALUE; COST; VALUATION; PUB-LIC UTILITIES; CORPORATION FINANCE; APPRECIATION. Consult: Saliers, E. A., Depreciation; Principles and Applications (New York 1922); Kester, R. B., Depreciation (New York 1924); Leake, P. D., Depreciation and Wasting Assets and Their Treatment in Computing Annual Profit and Loss (4th ed. London 1923); Dicksee, L. R., Depreciation, Reserves and Reserve Funds (2nd ed. London 1907).

DEPRETIS, AGOSTINO (1813-87), Italian statesman. Depretis took part in the movements of 1848-49 and 1859-60 for Italian unification and, following Garibaldi's occupation, was vice dictator of Sicily. In the parliament of the new Italian kingdom he led the party of the Left which in 1876 wrested control from the rigidly conservative Right. Such was the impetus and force of the Left in this action that it appeared to be conducting a revolution in legal form. Ardent liberal hopes were aroused, but the Left proved little less conservative than its predecessor. During the eight administrations over which Depretis presided from 1878 to 1887 with brief interruptions, nothing new occurred except the adoption of a compulsory education law in 1877, the grant of the suffrage in 1882 to lower middle class elements and the passage of a few such welfare measures as the repeal of the unpopular grist tax. Depretis continued the work of juridical and administrative unification begun by the Right. His routine administration was accompanied by a process of gradual and subtle degradation of political practises, given the specious label "transformism." Depretis' transformism was an effort to abolish distinctions of party and to obtain the support of the Right. Both parties were induced to abandon traditional views for the sake of wielding power. As a consequence party divisions disappeared, parliamentary institutions were corrupted and Depretis and his group wielded practically dictatorial powers. Such opposition as arose on the extreme Left from labor elements newly touched by socialist doctrines was ruthlessly suppressed; in 1886 Depretis broke up the Independent Workers' party. As Croce has shown, Depretis merely accelerated a process already far advanced as a result of Right-Left struggles for power and the dissolution of the basis for the ideals of the first decades of unification and national solidarity.

GUIDO DE RUGGIERO

Consult: Croce, B., Storia d'Italia dal 1871 al 1015

(3rd ed. Bari 1928), tr. by C. M. Ady (Oxford 1929); Volpe, G., L'Italia in cammino (Milan 1928); Sturzo, L., Italy and Fascismo, tr. from Italian by B. B. Carter, (London 1926); Thayer, W. R., Life and Times of Cavour, 2 vols. (Boston 1911).

DE QUINCEY, THOMAS (1785-1859), English writer. The author who took an almost Baudelairian delight in flaunting his passion for opium in the face of the British public and whose superb "impassioned prose" broke all bounds of literary convention had in him little of the political or social rebel. Through his innumerable contributions to the periodical literature of his day there breathes a profound reverence for established English tradition; he was a Tory of ancient lineage, a devout Anglican rejoicing in his membership in a "pure, holy and magnificent church." That in spite of these predisposing allegiances he could advance in his two chief political papers, A Tory's Account of Torvism, Whiggism and Radicalism (1835-36) and On the Political Parties of Modern England (written in 1837), a thoroughly scientific doctrine based on a genetic view of British partiesaccording to which Toryism and Whiggism were necessary opposing forces, each performing a specific function determined by its historical origin and together "sustaining the British constitution in its integrity by their equilibrium"--illustrates his capacity for philosophical detachment and largeness of view. De Quincey possessed an intellectual audacity which in one interval of freedom from opium extended to a projected De emendatione humani intellectus and in another to an advertised Prolegomena to All Future Systems of Political Economy, but which in reality dissipated itself in subtle expositions of miscellaneous literary, historical, philosophical and often curious subjects or in commentaries upon the works of other speculators. By translation and criticism De Quincey did more than anyone else except Coleridge in the period before Carlyle to introduce German philosophy and romanticismparticularly the writings of Kant-into England. De Quincey's power of lucid exposition and of felicitous illustration also enriched economic literature; and although they present no original contribution and treat only a very few points, his writings in this field won the admiration of J. S. Mill, who quotes him freely in his *Political* Economy (bk. iii, chs. i-iii). The disgust which De Quincey recorded in 1811 when he declared that he had looked into "loads of books and pamphlets on many branches of Economy"and

had found most of them "the very dregs and rinsings of the human intellect" bore no resemblance to the revolt of a Coleridge or a Ruskin against the dismal science. Until 1811 economics had merely failed to justify itself to De Quincey's mind, and when in 1818, after a period of mental prostration, he chanced upon Ricardo's Principles, he became as enthusiastic as he had previously been critical. In 1823 he published in the London Magazine an article demonstrating the fallacy in the Malthusian theory of population. This was followed the next year by a discussion of Ricardo's doctrines in Dialogues of Three Templars. His principal economic work was The Logic of Political Economy (Edinburgh 1844, new ed. Boston 1859), rearranged from a series of papers published in Blackwood's Magazine in 1842 under the title "Ricardo Made Easy." Most of this was devoted to a discussion of the relative influence of utility and scarcity, the former being described as affirmative or power value, the latter as negative or resistance value. De Quincey here approached but failed to hit upon the conception of marginal utility which had been explained by Lloyd a decade earlier. In a final paper on "California and the Gold-Digging Mania" (1852) he applied the law of rent to gold mines and pointed out that the proportionate increase in cost would set a limit to the depreciation of gold.

EDWIN R. A. SELIGMAN

Works: Collected Writings, ed. by David Mason, 14 vols. (new ed. Edinburgh 1889-90), vol. ix containing the essays on economics and politics.

Consult: Japp, A. H., Thomas de Quincey: His Life and Writings (new ed. London 1890); Dunn, W. A., Thomas De Quincey's Relation to German Literature and Philosophy (Strasbourg 1900); Meyer, Gertrud, Das Verhältnis Thomas de Quinceys zur National-ökonomie (Hanover 1926), containing bibliography; Seligman, E. R. A., Essays in Economus (New York 1925) p. 81–95.

DERAISMES, MARIA (1828-94), French feminist. Maria Deraismes, well educated and of a wealthy family, was an outstanding figure in the French woman's rights movement of the second half of the nineteenth century. At a period when few women dared to speak in public she contributed powerfully to the development of feminist ideas by lectures, given especially from 1868 to 1870, devoted to the study of the condition of woman, who, she said, was trained to prejudice by being robbed of her reason. Before this she had written plays. Always

fearlessly active she headed an ambulance unit in the Franco-Prussian War. In 1872 she engaged in a polemic with Alexandre Dumas fils, who declared that woman must necessarily hold a place subordinate to man. Her pamphlet Eve contre Monsieur Dumas fils (Paris 1872) made a sensation. In collaboration with Léon Richer she directed the French League for Woman's Rights, organized in 1876, which later became the Woman's Welfare Society. They also organized the first International Woman's Rights Congress, which was held at Paris in 1878 and was attended by delegates from America, England, Italy and Switzerland. An ardent freethinker, Maria Deraismes presided over the first anticlerical congress in 1881, and the next year she was admitted to Freemasonry, then strongly anticlerical. In 1893 she founded the first mixed Masonic lodge, of which she was "Venerable" until her death the following year. Her complete works were published in 1895 (1 vol., Paris).

SUZANNE GRINBERG

Consult: Crawford, Emily, "Maria Deraismes" in Illustrated London News, vol. civ (1894) 162; Grinberg, Suzanne, Historique du mouvement suffragiste (Paris 1926).

DERBY, EARL OF, EDWARD HENRY STAN-LEY (1826-93), British statesman and social reformer. Derby's tendencies in the direction of social radicalism were somewhat tempered by the aristocratic traditions of his family, one of the oldest in England. He entered the House of Commons in 1848 and soon aligned himself with the more progressive elements in the Conservative party represented by his friend and colleague Disraeli. Manifesting from the outset an independent spirit he voted for important liberal measures, such as the removal of Jewish and nonconformist disabilities, the abolition of purchase in the army and amendments to the law relating to married women's property. Under his father, the fourteenth earl, who was three times prime minister (1852, 1858 and 1866-68), Derby came to occupy an increasingly influential position in the conduct of colonial and foreign affairs, pursuing a consistent policy of avoiding any action that might involve England in a European war. In the Beaconsfield ministry of 1874 he served as secretary for foreign affairs until 1878, when he resigned because of his opposition to the prime minister's aggressive foreign policy. He joined the Liberals but during the first two years of Gladstone's second ministry refused office in order to be able to take a

more active part in various social and non-party movements, such as sanitary reform, regulation of mines, acquisition of people's parks, improvement of technical education and the spread of cooperative societies. His address before the thirteenth annual congress of the cooperative societies in 1881 reveals him as unique among the statesmen of the day in his sympathetic understanding of the methods and principles of that great movement. "The subject of cooperation, is in my opinion," he said, "more important as regards the future of England than nine-tenths of those discussed in Parliament and around which controversy gathers." This statement, abundantly vindicated by the subsequent growth of the movement, expresses the true sympathies of a man who at one time gave promise of becoming prime minister but who because of his inability to ally himself permanently with either of the great parties was forced to sacrifice a great career.

F. J. SHAW

Consult: Derby, E. H. S., Speeches and Addresses, ed. by T. H. Sanderson and E. S. Roscoe, 2 vols. (London 1894), especially biographical sketch by W. E. H. Lecky, p. xi-xliv; Monypenny, W. F., and Buckle, G. E., Life of Disraeli, 2 vols. (new ed. London 1929); Morley, J., Life of William Ewart Gladstone, 3 vols. (London 1903) vols. ii-iii.

DERNBURG, HEINRICH (1829–1907), German jurist. He studied law at the University of Giessen and became Privatdocent at Heidelberg in 1851. He subsequently lectured at Zurich and Halle. In 1872 he was appointed professor of Roman and Prussian law at the University of Berlin, where he remained until his death. His early lectures and research were devoted to Roman law. In this field his outstanding work was Das Pfandrecht (2 vols., Leipsic 1860-64), a treatise on pledge, developed from the principles of modern Roman law. In his work entitled *Pandekten* (3 vols., Berlin 1884-87; 8th ed. abridged by P. Sokolowski, 1911-12) he discussed the Pandects historically but took little notice of the newer investigations concerning the interpolations in the Digests of Justinian.

In the meantime he had decided that Prussian law students needed in addition to a knowledge of the Roman law an introduction into the civil law of their own country. Accordingly he lectured on Prussian law and in 1871 began the publication of the Lehrbuch des preussischen Privatrechts (3 vols., Halle 1871-80; vol. iii 4th ed., vols. i-ii 5th ed. 1894-97), a classic work

on Prussian private law. In it he compared the common and civil law and brilliantly demonstrated the interaction of law with economic and social life, particularly in connection with the common law. He rounded out his work on German private law with Das bürgerliche Recht des deutschen Reichs und Preussens (5 vols., Halle 1898-1905; 4th ed. 1906-15), written after the completion of the German civil code. He was also the author of Das Vormundschaftsrecht der preussischen Monarchie (Berlin 1875, 3rd ed. 1886) and, in association with other scholars, Hypothekenrecht (8 vols., Leipsic 1877-91), two important treatises dealing respectively with the German law of guardianship and with mortgages in Prussian law.

THEODOR KIPP

Consult: Kipp, T., Heinrich Dernburg, cin Vortrag (Leipsic 1908); Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880–1910) vol. iii, pt. ii, p. 931–36.

DEROIN, JEANNE (1805-94), French feminist and socialist. After the Revolution of 1848 she devoted herself to the cause of feminine equality. She contributed to the short lived Voix des femmes (March-June 1848), edited by Eugénie Niboyet, and with Desirée Gay founded its successor, Opinion des femmes. In 1849, the year of the first republican election, she stood as candidate for the National Assembly to protest against the omission of women from "universal" suffrage. This bold action gave rise to a vigorous polemic with Proudhon. As a good housewife, claimed Jeanne Deroin, the woman has a right to citizenship; the state, that badly administered household, needs her good management.

Jeanne Deroin also was active in the socialist movement. In *Opinion des femmes* she proposed a union of fraternal associations—a step fatal to the paper. This union was to aim at supplanting capitalist society peacefully by issuing paper notes as a medium of exchange and by organizing mutual credit between its federated associations. More than one hundred associations had joined the union when Madame Deroin and her associates were arrested in 1850 on the charge of forming a secret society with a political aim; she was condemned to six months' imprisonment.

After the coup d'état of 1852 she emigrated to England to avoid arrest for having helped proscribed republicans to escape. There she continued for two years to publish Almanachs des femmes, a yearbook she founded in France in

1852 to further her feminist propaganda. In her exile, however, her general activities declined. She died in London in 1894.

MARGUERITE THIBERT

Consult: Thibert, M., Le féminisme dans le socialisme français de 1830 à 1850 (Paris 1926); Abensour, Léon, Le féminisme sous le regne de Louis-Philippe et en 1848 (Paris 1913).

DEROULEDE, PAUL (1846-1914), French poet and political agitator. Déroulède served in the French army during the Franco-Prussian war but a subsequent equestrian accident prevented him from continuing his military career. He became instead the poet of the revanche and the apostle of modern French nationalism. His personal fortune, his poetic gifts and his physical strength were all spent for the single purpose of providing a moral basis for military revenge against Germany. Through his patriotic ballads he did more than any other individual to keep alive the desire and the hope for the recovery of Alsace-Lorraine. His Chants du soldat (Paris 1872), crowned by the Academy, declaimed at the Comédie Française, memorized by school children and sung in the streets, went through more than one hundred editions. In 1882 Déroulède with Félix Faure, Henri Martin and other nationalist intellectuals founded the Ligue des Patriotes in order to arouse the spirit of revanche and defend morality, religion, the family and the nation. In 1914 the Ligue claimed to have a membership of 200,000 and it is still an active agent in the propagation of a chauvinistic and militant nationalism.

Déroulède as self-constituted forger of French alliances traveled throughout Europe and was one of the most active propagandists of the Franco-Russian alliance. He was a supporter of Boulanger, an *antidreyfusiste* and an avowed enemy of the parliamentary system. His legislative career in the Chamber of Deputies was thus confined to oral disturbances. In 1900 he was sentenced to ten years of exile for complicity with the royalists. Pardon was offered to him but he refused to return to France until the passage of the amnesty law of 1905.

VERA MIKOL

Consult: Tharaud, Jean and Jétôme, La vie et la mort de Déroulède (Paris 1914); Ducray, Camille, Paul Deroulède (Paris 1914); Florent-Matter, Eugène, Paul Déroulède (Paris 1909); Barrès, Maurice, Scènes et doctrines du nationalisme, 2 vols. (Paris 1925); Chenu, C., La ligue des patriotes (Paris 1916).

DERVISHES. See Religious Orders.

DE SANCTIS, FRANCESCO (1818-83), Italian man of letters, educator and statesman. A native of Morra Irpino, de Sanctis went to Naples and founded a private school in which he began his teaching of literature. For participating in the liberal movement of 1848 he suffered a three years' imprisonment after the Bourbon reaction and upon his release was sent into exile. He taught at Turin and then at Zurich from 1856 until the establishment of the kingdom of Italy, when he became minister of public instruction in Cavour's first cabinet. Henceforth he divided his time among teaching, writing, journalism and politics. De Sanctis' supreme achievement was the revival of literary criticism in Italy through his teaching and writings, especially his classical Storia della letteratura italiana (2 vols., Naples 1870; new ed. by Benedetto Croce, Bari 1912) and his Saggi critici (Naples 1866; new ed. by Paolo Arcari, 3 vols., Milan 1921). The influence of his aesthetic theory and of his broad conception of the significance of criticism was particularly marked at the University of Naples, where he was professor of comparative literature from 1871 to 1877.

De Sanctis also occupies a position of some importance in the history of Italian political thought. He was a liberal who struggled against the clericals and who, when he found the historic Right becoming solidified in a narrow conservatism, abandoned it for the progressive Left. But in contrast to the merely negative and formal doctrine of the advocates of laissez faire his liberalism envisaged a freedom "which is self-limited, has a program and aims to attain definite ends and social objectives"; it thus bears some analogy to the doctrine later developed by T. H. Green. While he desired to see the benefits of liberty extended to the masses he realized, as he wrote in 1877, that "democracies, impatient and violent . . . in the long run become corrupt and impotent, retarding and impeding the progress which they seek with so much haste . . . ," and that "what is known as Caesarism does not necessarily occur only in monarchies but also in constitutional states when power falls into the hands of a turbulent and inexperienced people." To his mind the only avenue of escape lay in educating the masses according to a broad cultural program which would direct the intellect to highly concrete and specialized ends and would make it an instrument for illuminating and guiding action. These views de Sanctis had an opportunity to expound at length during his last two terms as minister of public instruction,

in 1878 and from 1879 to 1880, as well as in his plan of civil education for Italian youth based upon his conception of liberty and self-discipline. Although he was essentially a scholar he was one of the foremost Italian advocates of physical training for the young; such training he regarded not as an end in itself but as a means of spiritual and moral discipline. His attitude toward mass education cannot be understood except in the light of the "anti-intellectualist" fiber of his mind; this was compactly expressed in his famous address of 1872, La scienza e la vita (Naples 1872; tr. by Edith Wright, Philadelphia 1884), in which he set forth the view that science to be creative, that is, to be translated into action, must necessarily build upon a groundwork of vital moral forces.

Guido de Ruggiero

Consult: Croce, B., Estetica (5th rev. ed. Bari 1922), tr. by Douglas Ainslie (2nd ed. London 1922) pt. 11, ch. xv; Russo, L., Francesco de Sanctis e la cultura napoletana (1860–1885) (Venice 1928); Villari, Pasquale, Studies, Historical and Critical, tr. from Italian by Linda Villari (London 1907) p. 157–99.

DESCARTES, RENE (1596-1650), French philosopher and scientist. Descartes was the son of a parliamentary counselor and was educated for the career of a gentleman by the Jesuits at La Flèche. After serving in the Dutch, German and for a short time in the French armies his studious inclinations triumphed and in 1628 he retired to Holland to devote the rest of his life to scientific research and philosophic reflection. His first book, Essais philosophiques (Leyden 1637), contained his famous "Discourse on Method," an essay on dioptrics, one on meteors and a sketch of his epoch making analytic or algebraic geometry. Then followed his Meditationes de prima philosophia (Paris 1641), his Principia philosophia (Amsterdam 1644), which expounded his physical doctrines, and last Les passions de l'âme (Paris 1649), which developed his biologic and psychologic theories.

Descartes impressed his own generation and the one immediately following by the bold novelty of his physical speculations. His vortex theory became fashionable in the salons, but to the progress of scientific physics he contributed relatively little except through his mathematical method. His mechanistic biology, viewing animal motion from its purely physical cause, influenced the progress of medicine and prepared the way for the materialism of the eighteenth century. In his ethics and psychology

he stressed the physiologic basis of humar passion, holding, however, that desires can be controlled by controlling their physical expression. Felicity and good will are thus to be attained by rational activity free from the disturbances of passion. In this he showed the influence of the stoics.

While Descartes made almost no direct contribution to the strictly social sciences he must still be reckoned, through the boldness of his rationalistic method, as one of the great figures in their history. His rejection of final causes meant that the study of social phenomena was to focus on their necessary connections and the mechanism by which they are actually brought into being; and this can be achieved only by close and precise observation and rigorous logical or mathematical calculation. The influence of Descartes' mathematical method was thus opposed to traditionalism and to the purely historical approach. His was the spirit of free enterprise which regards new houses or new towns rationally planned as superior to those which have grown up through the accretions of time. In this too he prepared the way for the rationalism of the eighteenth century revolutionary philosophers.

Descartes' influence was first felt most extensively in Holland, where it was expounded by Reneri, Regius, Geulinex and Spinoza. Cartesianism spread rapidly also in France. It was taken up by idealistic and religious philosophers like Malebranche as well as by physicists like Rohault. The Jansenists were mildly favorable to it, and the jurists Domat and Daguesseau reflected its rationalistic influence.

Formerly it was a commonplace to regard Descartes as the founder of modern philosophy and as the source of the idealism of Berkeley and Kant (through Malebranche, Molyneaux and Collier). Recent study places greater emphasis on the continuity of the neo-Platonic tradition and on Descartes' own obligations to the scholastic philosophy. A copy of St. Thomas' Summa was one of the few books that he carried with him. Nevertheless, Descartes stands out in the history of human thought as one of the founders of scientific philosophy and of the rationalistic faith that in dealing with human affairs we should seek the greatest attainable clarity of understanding. His conception of the reign of law weakened the attitude of looking for supernatural or miraculous interventions in history. He thus wrought for the secular liberalism which sees no reason why religious opinions or differences should bar anyone from participation in public life and work.

His writings were placed on the Index in 1663.

Morris R. Cohen

Works: Oeuvres de Descartes, ed. by C. Adam and P. Tannery, 12 vols. (Paris 1897–1910). His ethical views are expressed in the correspondence with Princess Elizabeth (in Oeuvres, vol. iv). There are available English translations of the "Discourse on Method" and the "Meditations" by J. Veitch (The Method, Meditations and Selections from the Principles, 11th ed. Edinburgh 1897), and of parts of the Essais philosophiques by E. Haldane and G. Ross (2 vols., Cambridge, Eng. 1911–12). Selections from his physiological, psychological and ethical writings have been translated by II. A. P. Torrey (The Philosophy of Descartes in Extracts from His Writings, New York 1892).

Consult: Haldane, Elizabeth S., Descartes, His Life and Times (London 1905); Hamelin, Octave, Le système de Descartes (Paris 1911); Heinze, M., Die Sittenlehre des Descartes (Leipsic 1872); Gilson, Étienne, La liberté chez Descartes et la théologie (Paris 1913); Koyre, Alexander, Descartes und die Scholastik (Bonn 1923); Maritain, Jacques, Trois réformateurs (Paris 1925), English translation (London 1928) p. 53-89; Espinas, Alfred, Descartes et la morale (Paris 1925); Bouillier, Francisque, Histoire de la philosophie cartésienne, 2 vols. (3rd ed. Paris 1868); Leroy, Maxime, Descartes, le philosophe au masque, 2 vols. (Paris 1929); Dilthey, Wilhelm, Gesammelte Schriften, 8 vols. (Leipsic 1914-31) vol. ii, p. 452-92; Jodl, Friedrich, Geschichte der Ethik, 2 vols. (3rd ed. Berlin 1920-23) vol. i, ch. xi.

DESERTION, FAMILY. See Family Desertion and Non-Support.

DESERTION, MILITARY. See MILITARY DESERTION.

DESMOULINS, CAMILLE (1760-94), French revolutionary agitator and journalist. Desmoulins was born in Picardy of a good, but not wealthy, family of lawyers and civil servants and was educated as a scholar at the Collège Louis-le-Grand at Paris. Here as elsewhere in France the rigid classical curriculum was easily adapted to the spirit of the age, and young Camille learned republican virtue from Livy and Plutarch. The Roman trappings of which he was so fond hardly disguise the true modernity of his role in the revolution. For, in spite of the accounts he himself has given of how his table top oratory stirred the Palais Royal to attack the Bastille and in spite of his election to the Convention as a follower of Danton, his real importance lies in his work as a journalist. Desmoulins is one of the founders of a kind of

journalism very important outside of Anglo-Saxon countries—the personal, witty, often unprincipled journalism of comment, not of news. In two pamphlets, La France libre (Paris 1789) and the Discours de la lanterne aux parisiens (Paris 1789, new ed. 1869), he caught the popular taste for violence set off by wit and literary ability. This style he maintained, a bit less feverishly, in his weekly newspaper, Les révolutions de France et de Brabant (7 vols., November, 1789-July, 1791). Danton made use of him to attack Brissot, and the resulting pamphlet, Jean Pierre Brissot démasqué (n.p., n.d. [1792]), as well as the later Histoire des brissotins (Paris 1793, English translation London 1794) inspired by Robespierre, were conspicuously bitter, violent, unfair and clever in an age when only the latter quality is rare. Desmoulin's last venture into journalism was Le vieux cordelier (December, 1793-April, 1794), undertaken to promote Danton's campaign to end the Terror. This brought him the guillotine and a secure place in French literature.

Crane Brinton

Works: Oeuvres, by Jules Claretic, 2 vols. (Paris 1874). Consult: Claretic, J., Camille Desmoulins, Lucile Desmoulins, étude sur les dantonists (Paris 1875), tr. by Mrs. Cashel Hoey (London 1876); Arnaud, R., La vie turbulente de Camille Desmoulins (Paris 1928); Études révolutionnaires: Camille Desmoulins et Roch Marcandier: la presse révolutionnaire, cd. by E. Fleury, 2 vols. (2nd ed. Paris 1851); Cunow, Heinrich, Die Parteien der grossen französischen Revolution und ihre Presse (2nd ed. Berlin 1912) ch. viii; Aulard, F. V. A., L'éloquence parlementaire pendant la révolution française: les orateurs de la législative et de la convention, 2 vols. (Paris 1885-86) vol. ii, p. 311-23.

DESPINE, PROSPER (1812-92), French psychiatrist and criminologist. He devoted most of his life to studies in medical philosophy and criminal psychology. Like many of his French and English contemporaries he concluded from his clinical researches that serious crimes were due to "moral insensibility" or "moral idiocy" caused by inherited organic brain defects. He held that society has a right to defend itself against such criminals, who are characterized by lack of pity, prudence and foresight and although frequently of considerable intelligence are morally irresponsible for their acts. Criminals socially accountable for their behavior must be subjected to reformative treatment based on a study of their characteristics. Treatment should be continued through the use of an indeterminate sentence until the criminal shows moral im provement. Despine had no great hope that the treatment would result in anything more than legal conformity, which might be attained if a trained staff, working in an institution small enough to permit intimate contact with the prisoners, exploited in every way the sentiments of pride and self-esteem present in all men, however degraded.

THORSTEN SELLIN

Works: Psychologie naturelle; étude sur les facultés intellectuelles et morales dans leur état normal et dans leurs manifestations anormales chez les aliénés et chez les criminels, 3 vols. (Paris 1868); "Étude sur l'état psychique des criminels" in Annales médico-psychologiques, 5th ser., vol. viii (1872) 321-41; Du rôle de la science dans la question pénitentiaire (Montpellier 1878).

Consult: Brunet, D., in Annales médico-psychologiques, 5th ser., vol. i (1869) 523-36.

DESTUTT DE TRACY, ANTOINE LOUIS CLAUDE (1754-1836), French philosopher. In his youth Destutt de Tracy was a cultured dilettante, a distinguished cavalry leader and skilled in the art of dancing. Under the stimulus of the French Revolution he devoted himself to an intensive pursuit of knowledge along many lines and to the formulation of a methodology which he came to regard as not only superior to the best efforts of the past but virtually infallible. In his somewhat disillusioned old age, robbed of his stimulating association with Cabanis and Daunou, he abandoned half completed the task he had originally set himself of establishing upon the fixed foundation of this new methodology the political, moral and physical sciences.

Starting with the sensationalist assumptions inherited from Locke through Condillac, Destutt de Tracy evolved a philosophical system which he believed to afford for the first time a true analysis of the processes of the human mind in the formation of ideas. The recognition of truth and the detection of error could be reduced to a science as accurate as the physical sciences because similarly based on direct observation. This science of ideas he christened ideology and in the light of its basic truths set out to examine the "first principles" of all other branches of knowledge. He drew up a course of public instruction designed to conform more closely to the true progression of learning; and although his attempts at practical reform were frustrated by Napoleon's measures against the idéologues, he revealed in the first section of his Elémens d'idéologie the extent to which prevailing educational methods were antiquated. In the uncompleted second section of this work he proceeded

to apply the principles of ideology to a reexamination of the political and moral sciences. From sensation comes perception, from perception desire and from desire needs. Liberty is the freedom to gratify those needs, labor the means of gratifying them. The system of political economy which he constructed upon this foundation evoked a brief word of approval from Ricardo and aroused the interest of Thomas Jefferson, who sponsored an American translation (A Treatise on Political Economy, Georgetown, D. C. 1817). Destutt de Tracy's political philosophy, which is formulated most clearly in his Commentaire sur l'esprit des lois de Montesquieu, was to a certain extent influential in shifting the emphasis of eighteenth century liberalism, especially in its conception of natural rights. Opposed to the rationalistic and metaphysical approach with its assumption of absolute natural rights, he was forced in his defense of liberty to confine himself to a concern for the individual as an isolated phenomenon with needs differing from those of his neighbor. An ideal government was a government, however tyrannical according to abstract concepts of liberty, which satisfied the needs of a people at a particular time. The national will, which was the only power in the state, must remain a unit, and Montesquieu for all his wisdom in understanding the relativity of institutions and laws had seriously erred in proposing that it be divided. Invoking Rousseau, Destutt de Tracy discounted the degree of liberty enjoyed under the English constitution and compared it unfavorably with conditions in the United States. Such a thesis could not fail to appeal to Jefferson, who persuaded his old friend to allow him to translate the work into English. Georges Weill

Works: Élémens d'udéologie, 4 vols. (Paris 1801-15; 2nd ed. Paris 1817-18); Commentaire sur l'esprit des lois de Montesquieu (Liége 1817, reprinted Paris 1810), tr. from ms. by Thomas Jefferson as A Commentary and Review of Montesquieu's Spirit of Laws (Philadelphia 1811).

Consult: Picavet, F. J., Les idéologues (Paris 1891) chs. v-vi; Michel, H., L'idée de l'état (Paris 1895) p. 282-86; Stepanawa, V., Destutt de Tracy: eine historisch-psychologische Studie (Zurich 1908); Chinard, G., Jefferson et les idéologues, Johns Hopkins Studies in Romance Literatures and Languages, extra vol. i (Baltimore 1925).

DETECTIVE AGENCIES, FRIVATE. Private detective agencies offer for sale services in crime detection, crime prevention and industrial spying. Of the thousands of such agencies in the United States there are many which

do a very profitable business. Their advertised services are similar in some respects to those of the official police: shadowing individuals; obtaining evidence to support legal action; conducting investigations to identify and apprehend kidnapers, thieves and blackmailers; and to uncover frauds. Private detectives are hired by the rich to guard their estates or other property and by banks, hotels, business houses and theaters to prevent thefts on their premises. Finally, they are used by industrial establishments to spy on the labor force and to undermine unions and other labor organizations.

Although competing with public officers these agencies in order to gain prestige frequently claim close relations with the government and use names, badges, uniforms and other paraphernalia easily confused with that of official bureaus. Private agencies have through such misrepresentations extorted money from bootleggers by holding the threat of a raid over the victims' heads, terrorized and mulcted foreigners and impressed on the public a belief, out of all relation to the facts, in their ability to protect persons or property.

Private detective agencies are often used by political groups to discredit rivals. Conservative business interests backing one political party in 1924 paid a private detective \$50,000 to secure evidence that would connect their progressive rival for the presidency, Senator Robert La Follette, with extreme radicals. In 1930 a candidate for the United States Senate hired detectives to trail a progressive senator who was officially investigating the former's campaign expenses.

Most agencies advertise service in domestic troubles and it is common practise in divorce cases for an agency to be hired by one of the parties or by both in collusion to secure the evidence necessary to procure divorce. Private detectives have lured persons to commit illegal acts in order to obtain such evidence. The testimony of private detectives is usually accepted in the courts, although some corroborative evidence is ordinarily required.

The investigation of juries is a regular service of detective agencies. The line between investigation and tampering has been crossed in many cases. In the trial of a wealthy oil magnate in 1929 a leading agency was found to have approached jurymen and offered bribes for favorable votes. Its agents were found guilty of contempt of court for plotting to obstruct justice. The head of this agency, a former high

federal official, had earlier been found guilty of such illegal acts as telephone wire tapping and of entering offices secretly to copy and remove private business papers.

Detective agencies are often employed illegally to obtain the business secrets of rival concerns, and many suits have resulted from this practise. Agencies have also in some cases secured conrects for work through blackmail, threats and intimidation or when faced with dismissal have held their jobs by threats of exposing certain secrets to the public or to competing firms.

It is in the field of industrial relations that the private detective agencies have become most conspicuous, and here they have had their greatest effect on social conditions. Since the days of the Knights of Labor they have practised espionage on labor, and some agencies have specialized in this type of detective work. When engaged in this type of spying some agencies drop the word detective from their titles, calling themselves industrial service bureaus, corporations auxiliaries, audit, inspection and efficiency companies and personnel relations counselors. Their functions remain practically unchanged. They offer to help employers solve their labor problems, a service which usually consists of sending undercover men, "emissaries," "inside operatives," disguised as workers, into the clients' plants to ascertain and report on how the labor force is reacting to its work and to union organization. Or investigators may be assigned to the union to report on its activities. The employer's objective is almost invariably to prevent the formation of a union or, where one exists, to destroy it. In some cases an agency is hired by an employers' association to prepare measures of opposition to unionism, such as a blacklist or an individual "yellow dog" contract.

Agencies also usually offer complete services for preventing or breaking strikes. Their undercover men carry on propaganda against a strike; the agency supplies strike breakers (in one case as many as ten thousand), guards and sluggers; and detectives operating in the ranks of the strikers report daily on the progress of a strike. When workers' leaders are arrested on trumped up charges, operatives testify against them and help manufacture evidence necessary to secure a conviction. Private detective agencies act as agents provocateurs as well as spies. Investigations have shown that operatives are often ordered to incite strikers to violence or to

commit acts of violence to pave the way for injunctions, police attacks of workers and the creation of a public opinion unfavorable to the strike or the union. The history of American labor struggles gives many instances of detective agency violence. Noteworthy cases are on record in which detectives have resorted to assault, dynamiting, bomb and acid throwing, raids on strike relief stores, murder and other acts of repression and provocation. An agency has been known even to start strike agitation or to incite some form of violent outbreak of workers to secure a contract with a prospective client.

One method of destroying union morale is to bribe union leaders and to entice them to the pay roll of the agency. Many labor leaders in the United States tell of having been offered bribes by agencies acting for employers and corporations. Some leaders have in this way become the secret employees of agencies to which they report regularly.

Certain private detective agencies have offered special services in securing information on the operations, and in preparing blacklists of members, of radical political groups such as the Communist party and related organizations. Professional patriotic societies have employed such agencies for antiradical spying.

Most agencies have been organized and are staffed by ex-policemen and secret service men, and heads of the larger agencies have held the highest detective jobs with the federal government. Such men have at times used their official positions to advance their own interests. A former head of the Bureau of Investigation of the Department of Justice, for example, used government stationery on an antilabor investigation undertaken by his agency for a private client. Some agencies with political and underworld connections have refused to testify as to their activities before grand juries investigating thefts. Their intimacy with police officials and other persons of authority often places them beyond the reach of prosecution for crimes they have committed.

Various legislation has been passed or proposed to curb private detective agencies, especially in their antilabor activities. In twenty states private detective agencies are licensed by law. Each must pay a fee and put up a small bond. Operatives of such agencies are not usually required to have a license. In 1925 the state of Wisconsin passed a law requiring the registration and bonding of all "inside shop operatives." Although this law has somewhat

curbed industrial espionage in Wisconsin it has by no means put an end to the practise. While compelled in some instances to shift their licensed business offices to cities in adjacent states the agencies have continued their antiunion espionage in Wisconsin. Attempts by unions and progressive political groups to pass similar legislation in other states have been defeated. The complete abolition of private agencies, the raising of standards of vouched reliability and financial bonding for operatives, stricter licensing laws, federal licensing of all agencies engaged in interstate business, especially the transportation of labor undercover men, armed guards and strike breakers, have been proposed. In 1915 the Industrial Relations Commission urged congressional statutes regulating or prohibiting agencies and similar organizations. It urged the complete assumption of police duties by the states and municipalities and the prohibition of private detective agency police. None of these measures has been passed. Bills calling for the investigation of the acts of the agencies have been fought by the agencies and the industrial interests which use them.

Some private detective agencies exist in Europe, where they are active chiefly in divorce and business spying. Most European governments use official police detectives for espionage against working class and radical movements, and hence the private industrial spy and private detective espionage in trade unions are virtually unknown in Europe.

ROBERT W. DUNN

See: Espionage; Police; Blacklist, Labor; Labor DISPUTES; CRIME; CRIMINAL LAW; CIVIL LIBERTIES. Consult: Howard, Sidney, and Dunn, Robert, The Labor Spy (New York 1924); Dunn, Robert W., The Americanization of Labor (New York 1927) ch. v; Hunter, Robert, Violence and the Labor Movement (New York 1914); Friedman, Morris, The Pinkerton Labor Spy (New York 1907); United States, Commission on Industrial Relations, Final Report (1915); Interchurch World Movement, Commission of Inquiry, Public Opinion and the Steel Strike (New York 1921); Palmer, Frank L., Spies in Steel (Denver 1928); Spielman, J. E., The Stool Pigeon and the Open Shop Movement (Minneapolis 1923); Siringo, Charles A., Two Evil Isms (Chicago 1915); Wagar, L. H., Confessions of a Spotter (St. Louis 1918); Beet, Thomas, "Methods of American Private Detective Agencies" in Appleton's Magazine, vol. viii (1906) 439-45; Professional Patriots, ed. by Norman Hapgood (New York 1927).

DETERMINISM in one form or another is the theoretical presupposition of all intelligent social activity. No social regulation could be undertaken without the assumption that human behavior is largely influenced by certain factors revealed through a consideration of man's past. Reflection upon the extent to which we can rely on our neighbor's behavior indicates that a complete denial of determinism can be only an academic indulgence. It would make of all social existence and control an ever renewed miracle. When professed such denial means either a refusal to accept some particular definition of determinism or disbelief in its universality or an unwillingness to carry over some special type of determinism from one domain of experience to another.

Primitive man's mythology and religious practises express in large measure his desire to understand and control the exceptional occurrences in his environment. The attempt to formulate a theory of universal causation, however, comes rather late in human history. But as early as antique Greece there existed side by side the three generic theories which have dominated the history of European thought. One was the idea of fate, central to Greek drama and religion, a conception of the world order in terms of absolute decrees that fulfil themselves independently of natural mechanism or moral intent. It was a primitive form of cosmic predestination, dramatically conceived. In eschatological dress it reappears in the theological determinism of St. Augustine, Dante, Vico and Bossuet. The second, found in the philosophies of Plato and Aristotle, conceives the world order as a moral order. Things are defined in terms of their ends and purposes, which are organized hierarchically and are active in the process of world history. In the later forms of this teleological determinism, as represented by Hegel, Herder, Ranke, history is conceived as the autobiography of ideas or spirit. Finally, in the Ionic philosophies, and more definitely in Democritus of Abdera, we have the beginnings of scientific determinism. All occurrences are regarded as expressions of certain invariant principles indifferent to the needs of men and the will of God. The idea of an intelligible "order of nature," self-contained and transcendent-the source of all man is and the condition of all he can be—emerges as the guiding principle of scientific inquiry. In the sixteenth and seventeenth centuries, when the detailed characters of the "book of nature" were read by Galileo, Kepler and Newton, such scientific determinism became glorified as the method of all inquiry. In the eighteenth and nineteenth

centuries this conception of natural order and the methods used for its investigation became the model for such attempts to analyze the social order as those of Saint-Simon, Comte, Spencer and Schäffle.

A system is said to be determined when there are relations between any state of the system and certain elements, $e_1, e_2 \dots e_n$, such that, given the elements at time t, the state of the system at any other time t_i can be inferred. It should be carefully noted that there is nothing in a determined system which makes it necessary that the relationships discovered to hold between any state of the system and $e_1, e_2, \dots e_n$ recur or endure forever. The common notion that in the proposition "if a occurs then b will follow" b must follow confuses logical determination with existential connection. The long continued association of a and b gives us a right only to a probable judgment about their further association. This probability is not merely a measure of our ignorance. To say that were we to know enough about the state of a system at any momem we should know everything about its future states is to utter a deceptive tautology, for it overlooks the fact that to know enough of a system we should already have to know everything about it. And obviously to know everything about a system the world would have to be over and done with, in which case the maxim would be useless since there would be no future to which it could be applied. So long, then, as the future event predicted has not happened there is a genuine contingency involved in its occurrence. We discount this contingency by erecting the invariance of law into a postulate of scientific inquiry, and a postulate, as Peirce said, is no more than "something we hope to be true."

Another contingent factor in every deterministic system is the point at which the system intersects with another system. The death of x, say, may be determined; but the exact place, time and occasion of his death is a matter of "relative accident." To say that anything is "relatively accidental" does not mean that it is uncaused but merely that it is not deducible from the data of the original system. For example, the breakdown of the rice economy in Japan was determined by the preceding social development; the visit of Commodore Perry by certain political considerations. The conjunction of both was relatively accidental. One event could not have been deduced from the other nor both from a third.

Finally, to say that a system is determined does not of itself tell us how it is determined. The specific terms or categories which are taken as determinants (particles of matter in motion, organic stimuli or ideal motives) cannot be inferred from the general fact that a system is determined. A system may be determined in several ways but not in the same respect. Failure to realize this is behind the many attempts to reduce all phenomena to variants of one special type of determinism.

In the physical sciences there has been considerable unanimity as to how the principle of determinism should be stated and the nature of the fundamental categories involved. In the social sciences, however, not only has there been no unanimity about the character of social causation but the very relevance of causal analysis of cultural phenomena has been denied, e.g. by Windelband and Rickert.

Those who believe that social phenomena can be scientifically investigated fall into two main divisions. One group maintains that whatever is socially determined is merely a complex function of the simply determined processes studied in the natural sciences. Whether this school calls itself mechanical, energetic, biological or psychological, its methodology is the same. Sometimes it is accompanied by a skepticism concerning the material possibility of social science because of the complexity of the subject matter. Other theorists, among them Marx, Durkheim, Simmel and Weber, maintain that social determinism is not reducible to the simpler forms of scientific determinism but has an autonomous character of its own with specific explanatory characters derived from the social activity of man. It uses the causal relations established by the physical sciences as elements in its own explanation but insists that in such cases the character of the explanation differs from the character of the elements.

Theological determinism is an exceptional type of deterministic theory. According to this doctrine whatever happens has been determined by God's will (sometimes read as fortune, fate or providence). It is indistinguishable from fatalism whenever it fails to specify how God's will works. This does not prevent those who profess it from putting lightning rods on church steeples. It survives in the writings of those who still see the finger of God in history. Nothing can possibly refute it, for it can always reinterpret the findings of experimental science. Since it can speak only after the event its wisdom

is of an easy post hoc, ergo propter hoc variety. Consequently, even as a postulate it is useless.

Physical determinism is an attempt to explain social phenomena primarily in terms of the categories of natural science. Sometimes the movements of material particles in space and time are taken as fundamental, as by A. P. Weiss; sometimes the dissipation of energy, as by Brooks and Henry Adams and by Ostwald; sometimes the processes of biochemistry, as by Lotka. The resultant "social physics" is then regarded as a complicated chapter in mechanics, thermodynamics, biochemistry, etc. The chief objections to this type of determinism are: (1) In explaining all phenomena in terms of one set of categories the specific and differentiating characters of social phenomena disappear. (2) Theoretically it is impossible to derive those features of qualitative novelty which practise compels us to recognize on different behavior levels. (3) As a consequence either such phenomena as feeling, will and purpose are denied, resulting in crude mechanistic materialism, as in Büchner; or in order to explain their existence they are read back as potentially present in all natural processes from the very start, resulting in metaphysical spiritualism, as in Fechner.

Geographic determinism, under which we may include all theories which emphasize climate, soil or food as determining factors of social development, traces the character of any culture and the changes within it to some relevant element of the physical environment. These interpretations follow the fortunes of the physical sciences. Valuable monograph work has been done in correlating certain social phenomena, such as suicide and marriage, with climate and fertility of soil. But the general claims made by theorists of this school from Buckle to Huntington are extremely speculative. Their chief difficulties are: (1) A confusion between necessary conditions of cultural activity and sufficient conditions. It is true to say that unless woods contained game there could be no hunting. But that does not mean that a people hunts because a wood is rich in game, for many tribes under such conditions live on vegetables. (2) They resort to problematic long distance influences exercised by the geographical environment upon factors which are apparently stable, such as race. (3) They minimize the significance of cultural diversity where the geographical environment is similar and of cultural similarity where geographical conditions are diverse.

Racial and biological determinism assign to a racial or to some other hereditary trait the status of an independent variable in the history and organization of society. The theory suffers from the same logical difficulties as do other monistic determinisms and, as expounded by its most influential representatives, Gobineau, Chamberlain and Pearson, from others as well. The fundamental concepts of race and native intelligence are seldom precisely defined. Value terms expressing subjective preferences creep into the use of epithets like superior and inferior. It cannot be too strongly emphasized that the influence of racial and other hereditary characters is never observable directly, since these traits are found existing in some specific cultural environment. Judgment as to the relative weight of innate capacity is consequently an inference based on the different rates and qualities of cultural achievement displayed by different groups in the course of history. But in order that the inference be valid we must show that in respect to environment, training and other relevant circumstances conditions were similar. This has obviously not always been the case. Hence all judgments about inherent racial capacities must be received with great caution.

Psychological determinism takes two generic forms. It is sometimes an attempt to explain social behavior primarily in terms of certain unconditioned responses (Thorndike's innate tendencies, W. McDougall's instincts, Freud's libido). All the objections urged against the other varieties of determinism apply to these schools. The opposite psychological standpoint is defended by the behaviorists, led by Watson. All social behavior is construed in terms of conditioned responses built up under the sole influence of the environment. This view assumes almost complete psychological plasticity on the part of the individual. It has even less experimental justification than the view it opposes. Both varieties of psychological determinism fail to do justice to the logical nature of meaning and to the historical character of culture. In addition, the first fails to explain the different expressions of instincts assumed to be constant; the second, the widely divergent responses on the part of different individuals who have been developed in similar environments.

Social determinism embraces all theories which seek to explain the structure and development of culture in terms of man's social environment. It is clear that the social environment as a whole cannot be regarded as the proximate cause

of any specific event. Nor is the tautology that the whole social environment at time t is the cause of the whole social environment at time t_1 any more enlightening. Consequently, it is always some element or series of elements in the social environment which is regarded as the key factor to cultural change. This may be the mode of economic production, as in Marx, or the system of jural relations, as in Stammler, or the forms of religion, as in Weber, or some combination of these with others.

Every form of social determinism implies that cultures are morphologically determined. Before attempting to explain the nature of cultural change it must therefore first reconstruct the structural pattern of a given culture complex. By using the logic of the part-whole relation it must reveal the intimate ways in which different cultural activities—ideas, institutions, habits dovetail with one another. For example, in discussing Greek culture it attempts to lay bare the thread of organic unity which connects Greek religion with Greek art, philosophy, occupational activity and political history. Or in approaching feudal culture it reveals how such apparently unrelated things as a mediaeval cathedral, the realistic theory of universals, the principles of canon law and the system of land tenure are organically involved in one another and are not at all accidental conjunctions of independent cultural elements.

But culture is not only a structurally interrelated whole. It is a developing whole. Consequently, the results of morphological analysis only set the proper tasks of social theory. These are: What elements or combination of elements constitute the dynamic factors (independent variables) in social change? What is their comparative strength? What the resultant rate of change? Due to the enormous complexity of the elements involved, the difficulty of experimental control and the absence of a theory of measurement no body of detailed objective results has emerged comparable in any way to the achievements of other sciences. But perhaps the chief obstacle to the development of a scientific theory of social change has been the use of a crude, monistic theory of causation. Some single factor has been isolated and all other cultural changes simply explained in terms of its changes. This has often led to a disregard of the facts of reciprocity and interaction between social factors, to an attempt to call the reality of cultural effects into question (social epiphenomenalism; for example, the effective

role of ideals in history is sometimes denied because they are causally conditioned by some material factor) and to a quest for remote ultimate causes of events instead of their proximate causes.

The substitution of a functional conception of causation for a simple monistic theory of cause and effect is a safeguard from errors of this kind. Under the influence of positivist thinkers like Mach, Avenarius and Verworn, the tendency today is no longer to lay down flat unverifiable statements, for instance, that religion is the "primary" or "basic" or "most important" cause of cultural change. The relationship is expressed in terms of function, dependent and independent variables. If religion is selected as the independent variable, then we try to discover the definite ways in which other aspects of culture, for instance, the legal, vary with changes in religious conceptions [symbolically, I = f(r)] But there is no logical compulsion to take religion as the independent variable. We could have taken art or politics or economics as independent variables and traced the functional dependence of law upon them [getting a whole series of relationships, $l = f_{\nu}(a)$; $l = f_{\nu}(p)$; $l = f_{\nu}(e)$]. Or we could have reversed the original function, taken law as the independent variable and shown how religion varies with its changes $[r = f_{\lambda}(l)]$. Strictly speaking, neither the one nor the other member of the functional equation can be called cause or effect. Theoretically there is no limit to the number of functional correlations which may be so established nor to the complexity of such correlations. For we might take the functional relationship between any two variables, say religion and law, and try to show that the change in the function which relates the two is itself a function of some third variable. say economics [symbolically, l=f(r) or F(r, l)= 0; but it may be that $F = \phi(e)$]. What, then, determines the specific functional relations for which we are to seek?

This last question indicates that the quest for direct causes is not incompatible with the establishment of functional dependences in the social sciences. The reason we seek to establish one set of correlations rather than another can be found only in the assumption of some hypothetical causal connection between the elements so related. In many instances we disregard the presence of high positive correlations between two phenomena because we do not believe we have evidence of significant connection. Why is it that we take the positive functional correla-

tions established between the business cycle and tuberculosis as more probably indicating relevant connection than the even higher positive correlations between the business cycle and cancer? The question of causal agency is not at all academic; since for purposes of social control we must know which element in the functional relation must be changed. The element which must be changed we regard as the cause. The relevance of one element to another in a culture complex can never, then, be ascertained merely by a functional correlation, for the obvious reason that an antecedent hypothesis as to relevant causal connection must guide the search for correlations.

The functional theory of causation together with all the apparatus of statistical inquiry is invaluable in accumulating data to be interpreted. It can also establish the irrelevance of any two elements in the social environment assumed to be causally connected. Of itself, however, it cannot offer an explanation of the correlations found. Only some causal theory can do that. Such a theory will be, as we have seen, pluralistic rather than monistic. Its chief problem is to develop a theory of measurement to determine the relative weight of the various causal factors considered.

SIDNEY HOOK

Sec Philosophy; Science; Method, Scientific, MECHANISM AND VITALISM; MATERIALISM; ENVIRON-MENT; HEREDITY; RACE; EVOLUTION; EVOLUTION, Social; Social Process; Change, Social; Fatalism. Consult Brunschvicg, L., L'expérience humaine et la causalité physique (Paris 1922); Rickert, II., Die Grenzen der naturwissenschaftlichen Begriffsbildung (5th ed. Tübingen 1929); Flint, R., Historical Philosophy in France and French Belgium and Switzerland (Edinburgh 1894); Barth, P., Die Philosophie der Geschichte als Soziologie (4th ed. Leipsic 1922); Stammler, R., Wirtschaft und Recht nach der materialistischen Geschichtsauffassung (5th ed. Berlin 1924); Troeltsch, E., "Der Historismus und seine Probleme" in Gesammelte Schriften, 4 vols. (Tübingen 1919-25) vol. iii; Weber, Max, Gesammelte Aufsätze zur Wissenschaftslehre (Tübingen 1922); Durkheim, E., Les règles de la méthode sociologique (Paris 1895); Brinkmann, C., Gesellschaftslehre, Enzyklopädie der Rechts- und Staatswissenschaft, vol. xlviii (Berlin 1925).

DEVALUATION is a term applied to a series of legislative enactments by which a new legal value is assigned to a depreciated monetary unit and a new settlement is decreed for all contracts in monetary terms. Generally devaluation involves a reduction of the bullion content of the monetary unit in order to assure approxi-

mate equality between the open market value of the metal and the actual purchasing power of the monetary unit and aims at a resumption of the redemption of money in specie; that is, a restoration of the metallic standard of the currency.

In the course of devaluation the old monetary unit may be retained and its bullion content fixed for the first time, or de novo. This type of devaluation, sometimes called de jure stabilization, was effected in Argentina in 1899, in Czechoslovakia in 1925 and 1929, in Italy in 1927, in Poland in 1927 and in France in 1927. But devaluation may sometimes involve also the introduction of a new monetary unit with a fixed bullion content. The old money is then exchanged for the new, which is in its turn directly or indirectly redeemable in specie. Examples of this type of devaluation are found in Austria-Hungary in 1892, Russia in 1896 and at least nominally in 1924, Germany in 1924, Austria in 1924, Poland in 1924, Hungary in 1925 and Belgium in 1926. This type of devaluation should be distinguished from repudiation of the old money, when the old money is declared completely worthless or is exchanged for government obligations, as well as from cases in which the new monetary unit is merely a multiple of the old, as in Russia in 1922. A different type of devaluation is that which assigns no fixed bullion content to the new monetary unit or does not provide for its free redeemability in specie. The devaluation in France in 1795, Austria in 1811, Argentina in 1882 and Russia in 1839 approaches to some extent the latter type.

Devaluation is a method of currency stabilization. It must be preceded therefore by measures designed to remove the factors responsible for the breakdown of the currency system. Among them the most important are budgetary deficits covered by paper money issues, unwise economic and social policies leading to extravagance in expenditure, and natural catastrophes. The obvious remedy in all of these cases is retrenchment in expenditure and an increase in public revenues. The next step is the restoration of confidence in the stability of the currency. To accomplish this revenue from specific sources may be earmarked as a guaranty of the successful execution of the reform. In many cases, when the country is poor or the process of economic dislocation has progressed too far, revenues are earmarked as security for a foreign loan obtained to facilitate stabilization. The

proceeds of such a loan are used to balance the budget, to combat currency speculation and to adjust temporarily the balance of foreign payments. Such cases were particularly frequent after the World War, France being the only country which succeeded in devaluing its currency without foreign help. In this period the assistance of the League of Nations and the cooperation of central banks of foreign countries played prominent parts.

The new mint standard, i.e. the new value of the monetary unit, must be fixed with due regard to eventual stabilization of the currency more or less on the basis of the actual purchasing power of money. The point of reference may be either the external purchasing power as measured by foreign exchange quotations or the internal purchasing power. There are historical examples of deviations from this course which were dictated by political considerations or technical currency difficulties. Where the prestige attaching to a high value forces devaluation on a level above the actual purchasing power, unnecessary business complications may ensue and the reform be jeopardized. On the other hand, devaluation at a level lower than actual purchasing power speeds up the liquidation of the public debt, allows for a further utilization of the printing press to tide over the transition to a balanced budget and by stimulating exports minimizes the difficulties connected with the balance of foreign payments advantages that might outweigh the additional sacrifice which is thereby imposed upon the rentier.

Extension of the legal revaluation of money to all existing credit relations is an integral part of the devaluation reform. A devaluation of the currency in circulation, not accompanied by a corresponding regulation of credit relationships, amounts to a deflation of the worst type. Moreover, extension of devaluation to existing debts comes naturally where the necessity of revaluing the public debt is one of the principal reasons for undertaking monetary devaluation.

The devaluation of debts may amount merely to a substitution of the devalued monetary unit for the old one, disregarding the change in the value of the monetary unit; this is the provision of article 1895 of the civil code and of the decision in the Mixed Money Case [2 State Tr. 113 (1605)]. The other possibility is a complete or partial valorization of the current debts. In some cases, as in Germany in 1925, the valori-

zation is made retroactive, so that either additional payments are required or cancelation of contracts is permitted under certain circumstances. When valorization is left to the courts each case is judged on its own merits, and such considerations as the purpose for which the loan was made and the material circumstances of the parties are taken into account. When done by statute the value of money at the time the debt was contracted is the sole consideration, and valorization is effected on the basis of specially constructed tables. The tables are based on either price indices or gold quotations and may be uniform for the entire country or differentiated by regions. The debtors are often granted a moratorium and a low interest rate on the valorized debt. While a valorization of debts may not remedy all the violations of equity and justice entailed by currency depreciation it is nevertheless of considerable value, particularly for its psychological effects.

Valorization of the public debt is less frequent, since it may endanger the balancing of the budget. This sometimes leads to a decision not to valorize private obligations, justified by the legal fiction that a dollar is always a dollar irrespectively of its actual value. When the public debt is valorized a reduction of the interest rate and even a complete suspension of interest payments are often enforced. A similar purpose is served by a forced funding of the floating debt, the repayment of which would aggravate currency disorders. The original purchasers of government obligations, particularly those of the poorer classes, are often treated less harshly. Foreign loans are likely to involve special problems.

Devaluation reduces the legal value of paper money, which is in a sense evidence of a forced loan to the state; for this reason devaluation has in the past been feared as a damning admission of national bankruptcy. This sentiment is still current in certain circles and has caused some governments to hesitate in undertaking stabilization of currencies on the level of their post-war values. In legalistic a consideration of currency disorders aroused criticism even in the nineteenth century. It is patent that paper money differs from ordinary poversment obligations because it circulates as currency and is endowed with the legal tender privilege. A recognition by the government of its paper money obligations in full, that is, raising the purchasing power of paper money to par, would necessitate a reduction in the

quantity of it in circulation, or a resort to deflation.

Whether accomplished through a forced exchange of a part of the paper money, interest bearing government obligations, or through other measures carried out by the treasury and the central bank, deflation engenders a new price revolution affecting all credit relations. The more serious the depreciation which has taken place, the more protracted is the period of deflation accompanied by painful social and economic readjustments. The restoration of the value of money and private debts thus effected is not certain to remedy the social injustice caused by the preceding inflation. It is impossible to ascertain who has been affected by the depreciation and what has been the extent of losses. Many debts are paid before restoration occurs and many others are transferred to third parties, who are probably persons who have speculated on the possibility of profiting by just such a measure. Again, a deflation policy increases the burden of the public debt and of taxation, retards economic reconstruction and may necessitate a renewed resort to paper money issue. A long period of instability which is likely to follow an untimely deflation affects confidence abroad even more injuriously than a devaluation reform.

Expediency rather than abstract reasoning must decide whether devaluation or deflation is the proper policy under given circumstances. While the extent of actual depreciation is an important consideration it is not necessarily decisive; in two countries whose currencies are equally depreciated other economic factors may throw the balance in favor of devaluation in one case and of deflation in the other. At any rate the international monetary conference at Genoa in 1922 advised against the return to pre-war parities in all countries where currencies were substantially depreciated, and this advice was followed almost without exception. Even those governments which dreaded it were forced by the pressure of events to resort to devaluation.

THOMAS BALOGH

See: Money; Paper Money; Monetary Stabilization; Inflation and Deflation; Debt; Public Debt. ('onsult: Keynes, J. M., Monetary Reform (New York 1924); Schaefer, C. A., "Die legale Devalvation" in Schmollers Jahrhuch, vol. xliii (1919) 1459-75; Elster, K., "Zum Begriffe der 'Devalvation'" in Jahrbücher für Nationalökonomie und Statistik, vol. cxvi (1921) 160-713; Seligman, E. R. A., Currency Inflation and Public Debts (New York 1921); Subercaseaux,

G., El pap l moneda (Santiago de Chile 1912) pt. iii; Hargreaves, E. L., Restoring Currency Standards (London 1926); Cassel, G., Money and Foreign Exchange after 1914 (London 1922) p. 187-282; Guyot, Ives, and Raffalovich, Arthur, Inflation et déflation (Paris 1921); Hawtrey, R. G., Currency and Credit (3rd ed. London 1928) ch. xv; Gregory, T. E., The First Year of the Gold Standard (London 1926).

DEVAS, CHARLES STANTON (1848-1906), English economist. During the period following his appointment to the professorship of political economy at Catholic University College in 1876 Devas, a convert to Catholicism, became the ablest and most influential economist of his faith in Great Britain. It was from his addresses and writings, especially his Manual of Political Economy (London 1892, 3rd ed. 1907), that the British social Catholic movement, which since its origin had been preoccupied with merely negative criticism leveled either against particular evils such as intemperance, the sweating system and pauperism or against socialism, first received the outlines of a social code, which was at once scientific, comprehensive and progressive. The effect of his doctrines became apparent when in 1909 the movement assumed organized form as the Catholic Social Guild. While Devas rejected socialism as impracticable he recognized that its indictment of the existing order was to a considerable extent justified and that many of its constructive proposals were both ethically and economically sound. But socialism was, like individualism, a "vicious extreme." Regarded realistically the choice which society must make lay between rampant capitalism and capitalism socially controlled in the interest of individual welfare and with a view to the perpetuation of family life, an end to which, as his Studies in Family Life (London 1886) evinced, he attached fundamental importance. Unhesitatingly repudiating the former alternative he advocated adequate labor unions, labor sharing in industrial management, progressive income and inheritance taxes, public control of prices, and social insurance. He even went so far as to deny the necessity of interest on capital, holding that the capitalist receives "ample reward without any need of any interest on capital." Devas' entire program of social control was grounded in the doctrine that the state served an ethical purpose. In his treatment of economic theory also he constantly reiterated the necessity of regarding economics as essentially "ethical, the application of the moral law in particular departments of human life" ("Lessons from Ruskin" in *Economic Journal*, vol. viii, 1898, p. 28-36). Devas' demonstration that the "economic man" was not only morally repellent but inadequate as a scientific concept exerted wide influence among economists and represents his greatest achievement in the theoretical sphere.

JOHN A. RYAN

Other works: Groundwork of Economics (London 1883); The Key to the World's Progress (London 1906, new ed. 1908).

Consult: McEntee, Georgiana P., The Catholic Social Movement in Great Britain (New York 1927) p. 102-06; Economic Journal, vol. xvi (1906) 637-38; "Charles Stanton Devas" in Messenger, vol. xlvii (1907) 492-99.

DEVOLUTION. See DECENTRALIZATION; HOME RULE.

DEW, THOMAS RODERICK (1802-46), American educator and publicist. In 1826, six years after his graduation, Dew was appointed professor of political law in the College of William and Mary, which since the beginning of the century had taken the lead among American colleges as a center for instruction in the social sciences. In his courses, which covered history, metaphysics, government and political economy, he carried his students beyond the limits of the rather inadequate textbooks then in use in American colleges. His Digest of the Laws, Customs, Manners, and Institutions of the Ancient and Modern Nations (New York 1853), first printed for the use of his students, showed the author's appreciation of the importance of human institutions in the teaching of history and was considered especially valuable for its unusually full treatment of more recent movements such as the Renaissance, Reformation and the French Revolution.

Dew's influence extended, however, far beyond the classroom. His exhaustive defense of slavery as a social and economic system (Review of the Debate in the Virginia Legislature of 1831 and 1832, Richmond 1832; reprinted in The Pro-Slavery Argument, Philadelphia 1853, p. 287-490) had a larger influence in bolstering the institution in the South than any other book of the early period of the slavery controversy. His fund of historical knowledge enabled him to clothe the familiar proslavery arguments of the time with the authority and sanction of the past. Rome, whose civilization represented his ideal, was able, thanks to its slaves, to foster a leisured class devoted to culture and to grant to women

the high position of which they were worthy; while Sparta was instance enough that slavery was not incompatible with republicanism. Although disturbed by the failure of the South to maintain its economic progress in comparison with the other sections of the country he refused to attribute this failure to any evil effects of slavery, finding the explanation rather in the high tariff, which was sacrificing the agricultural interests of the South to the demands of the northern industrialists - a policy which if pursued would lead to disunion. His Lectures on the Restrictive System (Richmond 1829), which relied in the main on the physiocrats and on Smith and Say, espoused the classical free trade argument and are said to have been influential in bringing about the tariff reductions of 1832. His Essay on the Interest of Money and the Policy of Law against Usury (Shellbanks, Va. 1834) reyeals his concern for the agriculturist as "the great paymaster to all the other classes of productive and unproductive laborers" and his opposition to any artificial restriction of credit.

Broadus Mitchell

Gonsult: Midyette, B. D. R., Jr., "Thomas Roderick Dew" in John P. Branch Historical Papers of Randolph-Macon College, vol. iii (Richmond 1909–12) p. 5–13.

DEZAMY, THÉODORE (1803-50), French communist. Dezamy wrote a number of communist and anticlerical works, edited *Egalitaire* (2 issues, Paris 1840), Communautaire (1 issue, Paris 1840) and the Almanach de la Communauté (Paris 1843). He was a leading representative of the Babeuf tradition in the decades preceding 1848. Detamy worked with Cabet for a while and later projected a communist utopia which owed much to Fourier and Cabet. His system would replace the family by a community of some ten thousand souls, united by ties of brotherly affection with a common dwelling place; man would express his nature freely and completely and in doing so always act in the social interest. He proposed relative not absolute equality of distribution. Dezamy sharply attacked Cabet's conciliatory tactics and opportunism, rejecting his appeal for bourgeois aid for the working class as unrealistic and calling upon the proletariat to unite and free itself. He emphasized the necessity of including peasants in all communist calculations. Cabet proclaimed himself first a Frenchman, then a communist; Dezamy proclaimed himself a communist above all. Cabet characterized Dezamy as an extreme

demagogue and a violent communist; Dezamy questioned both Cabet's good sense and his good faith. There is much support in Dezamy's writing for Sombart's contention that he anticipated Marxian revolutionary socialism. But while Dezamy's emphasis on materialism, atheism, science and class struggle is proto-Marxian, his program was stated only in the most general terms, his proposed goal was utopian in character and he evolved no precise tactical formulations. In 1848 Dezamy ran for the National Assembly as a "radical socialist."

EDWARD S. MASON

Works: M. Lamennais refuté (Paris 1841); Calomnies et politique de M. Cabet (Paris 1842); Code de la communauté (Paris 1842); Le jesuitisme vaincu et anéanti par le socialisme (Paris 1845); Organisation de la liberté et du bien-être universel (Paris 1846).

Consult: Grun, K., Die soziale Bewegung in Frankreich und Belguen (Darmstadt 1845) p. 384-400; Sencier, G., Le babowwwe après Babeuf (Paris 1912); Sombart, W., Der proletarische Sozialismus ("Maratsmus"), 2 vols. (Jena 1924); Ryazanov, D., explanatory notes to his edition of the Communist Manifesto, tr. from the Russian by E. and C. Paul (London 1930); Delevsky, J., Les antinomies socialistes et l'évolution du socialisme français (Paris 1930) p. 160-73.

DIABOLISM, the belief in a personified agency of evil commonly called the devil, may be traced back to the animistic attitude which saw behind natural events active, creative spirits, both good and evil. Gradually the demons behind good acts came to be conceived as subordinated to a good god and the demons behind evil acts as subordinated to an evil spirit. The conception of a maleficent power is probably of greater antiquity and stronger potency than the idea of a benevolent deity; for fear has been considered the first incentive of religious worship and propitiation of harmful powers regarded as the first phase of all religious ceremonies.

The worship of the devil as creator of the world and author of evil has continued to play a prominent part in the history of religions. The belief in an independent power of evil working in this world is indeed an integral, essential element in all organized religions. The introduction into a religious system of an antagonistic deity serves the purpose of isolating the domain of evil. This tendency of relieving the beneficent deity of the responsibility for evil by ascribing its origin to another and maleficent power is well illustrated in the Old Testament. In *I Chronicles* XXI: I Satan is introduced to do the work of temptation to evil

which in *II Samuel* XXIV: I was ascribed to Jehovah himself.

The monotheism of the ancient Hebrews did not permit the development of a power acting independently of the deity. Satan, the "assailant," the "accuser" (Greck diabolos), is in the Old Testament not an adversary but an adjutant of the Almighty. Whether he acts as the enemy of the nation (Zechariah III: 1-2) or as the slanderer of righteous men (Job I: 9) he is counted among the "sons of Elohim." He is a member of the celestial court and stands high in the councils of Jehovah but sits on the opposition bench. He is a kind of prosecuting attorney attached to the judgment seat of the Eternal.

The opposition of good and evil was carried to its most logical consequences in the Zoroastrianism of Persia, where Ahriman, the spirit of darkness and evil, holds a completely independent position, constantly menacing the powers of light. During the Babylonian captivity the Jews came in contact with these ideas and to some extent modeled Satan upon the pattern of Ahriman. This conception of Satan as the enemy of Jehovah continued to expand in postexilic Judaism and was reproduced in the earliest parts of the New Testament. But it was reserved for the church fathers to develop the belief in the devil into a dogma. Although the devil never played an important part in Judaism he is the fount and foundation of the Christian religion. Indeed, the whole Christian system of salvation is based on the belief in the devil, since no need would exist for salvation through Christ if Satan were not present to tempt man to sin.

It is worth while to trace in detail the history of Satan, not only because he is one of the best known of the representatives of evil but because the story of his successive transformations throws much light on the nature and significance of diabolism. There is found in postexilic Judaism, simultaneously with the development of the conception of a powerful spiritual adversary, the elaboration of the myth of the fallen angels, of whom Samael or Satan was the leader. The origin of this myth is in Genesis VI: 1-2, but the Book of Enoch seized upon the material and expanded it at great length. In this apocryphal work the sin of the angels, which brought about their fall, is ascribed to their carnal relations with the daughters of men. The New Testament account of a war in the skies, which resulted in the defeat of Satan and his fall like lightning from heaven

(Luke x: 18; cf. Revelation IX: 1), is based, however, upon another apocryphal book, the Wisdom of Solomon, which attributes Satan's sin to envy. The Talmud and the Koran explain this as envy of man, who was created by the Lord as the king of this earth. Many church fathers, among them Irenaeus, shared this view. The orthodox teaching of the Christian church, however, is that Satan's rebellion and expulsion from heaven were the results of his envy of the Lord, whom he wished to replace in the government of this earth; and that the creation of man, far from causing the rebellion of the angels, resulted from it. Adam was created by the Lord for the express purpose of filling the vacancies caused in the celestial choir stalls by the fall of the angels. As soon as the devil learned that the seats which he and his angels had vacated in heaven were to be occupied by a new generation, of whom Adam and Eve were to be the parents, he determined to balk the sacred will of the deity with regard to the destiny of man. Disguised as a serpent Satan tempted our first ancestors to sin and was thus instrumental in driving them out of Eden and depriving them of the possibility of substituting for him in heaven. The serpent of Genesis (ch. III) was developed into Satan only through the interpretation of the later Jews (Wisdom of Solomon II: 24), an interpretation which passed over into the Christian faith (Revelation XII: 9; xx: 2). Through this master stroke Satan succeeded in obtaining from God the assignment of the human race as his property. All men by reason of the fall, according to the teachings of the church fathers, became the rightful property of Satan and had to be bought from him by the vicarious death of Christ, who was the ransom price of humanity. But although Christ's First Advent delivered mankind from the powers of Satan, the latter's overthrow will be completed, according to the doctrine of the church, only by the Second Advent. Although laid in chains by Christ the devil directs his work on earth from his dungeon and effects his will among men through millions of messengers. The church has swelled Satan's ranks by subjecting to him all the heathen deities. The diabolization of the gods of alien faiths or rival sects is a typical theological practise. A new religion never actually rejects the gods of the preceding religions which it has replaced and which it combats; it adopts them but assigns to them a maleficent character. The ancient Hebrews already considered the gods of the

nations with which they were at war as devils; and the numberless dethroned, outlawed and fallen gods of the subjugated races and discredited religions changed, for the Christians, into demons. In the course of this process Satan himself assimilated many of the characteristics of the discarded deities of the old religions—certain details of dress, traits of character or tricks of manner. The identification of the devil with the uncouth northern giants was especially momentous for the transformation of his character from the height of terrible power to the plane of pictured grotesqueness.

Within the church there have always been sects which carried on devil worship. Among the groups which continued within Christianity the traditions of Persian Magianism, Gnosticism and Manichaeism, were the Priscillianists, the Paulicians, the Bogomiles, the Catharists and the Luciferians. The mediaeval witch cult, on the other hand, which was regarded by the church as devil worship, was merely a survival of the old indigenous heathen religions that covered Europe before the advent of Christianity. Inasmuch as the Christians identified the indigenous gods with their devils, the ritual of the domestic deities, to which the masses clung tenaciously for centuries, was decreed by the church as devil worship, and their priests and priestesses were branded as wizards and witches. Jews, Turks and heretics in addition to the heathen were believed in all Christian lands to be allies of the infernal powers. The mediaeval church was emphatic in its assertion that all who did not seek salvation in its bosom served Satan. When the church at the advent of the Reformation was divided against itself, each part accused the other of serving Satan. The Protestant sects, warring among themselves, accused each other of connections with the powers of darkness.

The fathers and doctors of the church expressly and explicitly developed and elaborated the personality of evil for the greater glory of God. The devil was represented as the completest contrast to the deity, the fiend in hell set up as a foil to the Father in heaven. The similarities in creed and cult between Christianism and paganism were interpreted as infernal counterfeits of eternal verities. The devil, who always wished to rival the deity, developed his domain in all details after the pattern of the celestial organization. Satan as simia Salvatoris also has a mother, who as queen of hell is the exact copy of the queen of heaven. Antichrist

as the foil of Christ (II Thessalonians II: 3-10) will in the end of days be born of a Babylonian virgin and the devil, just as Christ was born of a Palestinian virgin and the Holy Ghost.

The devil was regarded as not only the hierarch of hell but also the prince of this world (John XII: 31; XIV: 30; XVI: 11) and even the god of this world (II Corinthians IV: 4). If he was not considered by Catholicism as the creator of the cosmos he was at least regarded as the master of the material world in contrast to the spiritual world, which was the domain of the deity. The church was concerned with heaven, consigning to the devil the possessions and deeds of the earth. All mundane pursuits, professions and pleasures of man were under his protection. Satan was regarded as the incarnation of human reason in contrast to the Savior, who represented faith. To the dominion of the devil the church handed over all sciences and arts. The fiend was also credited with all aspirations for improvement in every field of human activity. He represented the discontent with existing conditions in matters social, political and ecclesiastical. He was identified with the spirit of progress so disturbing to the ruling powers in church and government. Every democratic institution, every social reform, was attributed by the reactionaries to the machinations of the spirits of hell.

The belief in the devil was at its height in the last centuries of the mediaeval period. The Reformation, if anything, increased the devil's power by withdrawing from the saints the right of intercession on behalf of sinners. Martin Luther saw in Satan a real living power, who was incessantly working in human affairs. John Wycliffe in his great treatisc De dominio divino (c. 1375) went so far as to imply that here on earth God must obey the devil. The belief in the devil as the controlling power in this world was very strong in Protestantism throughout the sixteenth and seventeenth centuries. But eighteenth century rationalism undermined belief in the devil as in all supernatural agencies, and by the nineteenth century in large sections of the western world the devil had been relegated from the citadel of asserted belief into the vaguer regions of poetic fancy. Primitive peoples in various parts of the world, however, still carry on devil worship: among them the Yezidis of Mesopotamia, the black Jews of Cochin and the Voodoos of the West Indies and Haiti. There are devil worshiping cults also in the north of China, in the south of India, in

Africa, in the Solomon Islands and in the New Hebrides. Belief in sorcery is also still extant in rural districts throughout most of the western world. A cult of Satan was also carried on as a dilettantist fad among cultured classes in various European capitals toward the end of the nineteenth century. The contemporary cult of Satan, however, is primarily a diabolism of debauchery, and the principal part of the modern Black Mass consists of sexual perversions of all kinds. On the other hand, the accusations of devil worship made against the Masons, with which France was flooded toward the end of the past century and which were called forth by the papal encyclical Humanum genus, were wholly without foundation. But if diabolism has lost its compelling religious character, the concept of the personification of evil has continued to play an important part in the history of ideas.

The legend of Lucifer, as solving the problem of the origin of evil and the birth of man, has always been a subject full of fascination for the poet just as diabolus has been a principal motif for the world's greatest literary masterpieces. But since the devil is what men make him he changes with changing temporal, national and individual attitudes. In modern literature his chief function has become that of a satirist of human institutions, directing the shafts of his sarcasms against all the faults and foibles of men. Among the recent demonstrations of the devil's ability as a satirist of manners and morals are Mark Twain's posthumous romance, The Mysterious Stranger (1916), and Leonid Andreev's similarly posthumous work, Dnevnik Satany (Helsingfors 1921; tr. by H. Bernstein as Satan's Diary, New York 1920).

The adversary's outward appearance too has changed in recent times. The modern devil is as fascinating as his predecessor was dismal and dreadful. The devil has fully discarded his animal parts and has turned human—all too human for most of us. Marie Corelli in *The Sorrows of Satan* (1895) describes the devil as of extraordinary physical beauty, fascination of manner and splendid intellectuality. To that dignity of person, which in part is already found in the Miltonic Satan, the modern devil has added a corresponding nobility of character.

The devil, as Renan has aptly remarked, has benefited chiefly by the relativist point of view in ethical judgments, which no longer permits any rigid interpretation of good and evil, any strict division of men into saints and sinners.

The spirit of evil is better than he once was, because evil is no longer so bad as it was. As a result the devil has come to be regarded as one of the instruments in the government of the world and the education of mankind. He has been used as a symbol for our progressive, inquisitive nature, which will not permit us to remain satisfied with what we have already achieved but urges us on to higher and nobler aims. Of course the older dogma has not entirely disappeared; writers loyal to Catholic teaching and tradition have continued to see in Satan the symbol of all evil in the world. We need but refer to the neo-Catholic writer, Georges Bernanos, author of the novel Sous le soleil de Satan (1926), which achieved a great success upon its publication.

Many thinkers of the nineteenth century, having found such great improvement in the character of the devil, predicted his pardon and purification. This idea of the end of the devil's doom is from the philosophical point of view the corollary of the belief in the essential unity and final identity of good and evil held by many modern metaphysicians. From the aesthetic point of view it forms a part of romantic humanitarianism, which a misanthropic humorist has named redemptorism, that is, the wish to redeem all criminals by means of love. The pity which the romantics felt for all sinners was also extended to Satan. The sympathy shown by the romantics for all social and political victims could not be denied the devil, all the more on account of the kinship they felt for him. The rebel poet reached out his hand to the rebel demon. The man in opposition to society had a fellow feeling for the angel who raised the standard of revolt in heaven.

Just when good churchmen and churchwomen of all sects were discarding the devil from their dogma, many writers who will certainly never receive canonization were developing a belief in the devil. Thus Victor Hugo like many other romantics deduced from the existence of evil, "that terrible sphinx propounding a terrible riddle," the existence of an evil being. "It is this perfection of Evil," he says in Les travailleurs de la mer (1866), "which has sometimes sufficed to incline powerful intellects to a belief in the duality of the Deity, toward that terrible bifrons of the Manichaeans. It is certain that Evil at one end proves the Evil One at the other." The conception of evil, however, has changed as a result of changing ethical, social and political ideas. In the Cath-

as modified forms of the culturally accepted Hochdeutsch of literature, the pulpit, the stage and general cultural activity. The dialects of the German speaking folk go back unbrokenly to the Old High German of early mediaeval times, a German which was even then richly differentiated into dialects. The present standardized German of the schools arose comparatively late in the history of German speech as a result of the fixing of one of the Upper Saxon dialects as the recognized medium of official communication within the German speaking dominions. Luther's Bible helped considerably in the diffusion of this form of German as the recognized standard. It has taken a long time, however, for Hochdeutsch to take on a recognized phonetic form and to be looked upon as a well standardized form of oral communication, and to this day a large proportion of Germans, including the educated ranks, are bilingual in the sense that they use the standardized German for formal purposes but employ the local dialect for more familiar uses.

The history of German is paralleled more or less by the history of all the other national languages of Europe and of other parts of the world. As a result of cultural reasons of one kind or another a local dialect becomes accepted as the favored or desirable form of speech within a linguistic community that is cut up into a large number of dialects. This approved local dialect becomes the symbol of cultural values and spreads at the expense of other local forms of speech. The standardized form of speech becomes more and more set in its vocabulary, its form and eventually its pronunciation. The speakers of local dialects begin to be ashamed of their peculiar forms of speech because these have not the prestige value of the standardized language; and finally the illusion is created of a primary language, belonging to the large area which is the territory of a nation or nationality, and of the many local forms of speech as uncultured or degenerated variants of the primary norm. As is well known. these variations from the norm are sometimes much more archaic, historically speaking, than the norm from which they are supposed to depart.

Local dialects are in a sense minority languages, but the latter term should be reserved for a completely distinct form of speech that is used by a minority nationality living within the political framework of a nation. An example of such a minority language would be the Basque of southwestern France and northern Spain or the Breton of Brittany. These languages are not dialects of French and Spanish but historically distinct languages that have come to occupy culturally secondary positions.

There is naturally no hard and fast line between a dialect and a local variation of a minor nature, such as New England English or middle western English. In the case of the older dialects the connection with the standardized speech is quite secondary, while in the case of such local variations as New England and middle western American speech standard English, however loosely defined, is present in the minds of all as the natural background for these variations, which are thus psychologically, if not altogether historically, variations from the primary or standard norm. It would be possible for the speaker of a local Swiss dialect or of Yorkshire English to build up a nationalistic gospel around his local dialect in opposition to the accepted speech of the cultured group, but the attempt to do this for middle western English in America would have something intrinsically absurd about it because of the feeling that this form of English is at best but a belated departure from an earlier norm. As usual in social phenomena, however, it is the symbolism of attitude that counts in these matters rather than the objective facts of history.

Ever since the formation of the great national languages of Europe toward the end of the mediaeval period there have been many social and political influences at work to imperil the status of the local dialects. As the power of the sovereign grew, the language of the court gained in prestige and tended to diffuse through all the ramifications of the official world. Meanwhile, although the Roman Catholic and Greek churches with their sacred liturgical languages were little interested in the question of folk versus standardized speech, the Protestant sects with their concern for a more direct relation between God and His worshipers emphasized the dignity of folk speech and lent their aid to the diffusion of a selected form of folk speech over a larger area. The influence of such documents as Luther's Bible and King James' authorized version in the standardization of German and English has often been referred to. In more recent days the increase of popular education and the growing demand for ready intelligibility in the business world have given a tremendous impetus to the spread of standardized forms of speech.

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In spite of all these standardizing influences, however, local dialects, particularly in Europe, have persisted with a vitality that is little short of amazing. Obviously the question of the conservatism of dialect is not altogether a negative matter of the inertia of speech and of the failure of overriding cultural influences to permeate into all corners of a given territory. It is to a very significant degree a positive matter of the resistance of the local dialects to something which is vaguely felt as hostile. This is easily understood if we look upon languages and dialects not as intrinsically good or bad forms of speech but as symbols of social attitudes. Before the growth of modern industrialism culture tended to be intensely local in character in spite of the uniformizing influences of government, religion, education and business. The culture that gradually seeped in from the great urban centers was felt as something alien and superficial in spite of the prestige that unavoidably attached to it. The home speech was associated with kinship ties and with the earliest emotional experiences of the individual. Hence the learning of a standardized language could hardly seem natural except in the few centers in which the higher culture seemed properly at home, and even in these there generally developed a hiatus between the standardized language of the cultured classes and the folk speech of the local residents. Hence cockney is as far removed psychologically from standard British English as is a peasant dialect of Yorkshire or Devon. On the continent of Europe, particularly in Germany and Italy, the culture represented, for example, by standardized German or standardized Italian was until very recent days an exceedingly thin psychological structure, and its official speech could hardly take on the task of adequately symbolizing the highly differentiated folk cultures of German speaking and Italian speaking regions.

The Age of Enlightenment in the eighteenth century was, on the whole, hostile to the persistence of dialects, but the romantic movement which followed it gave to folk speech a glamour which has probably had something to do with the idealization of localized languages as symbols of national solidarity and territorial integrity. Few writers of the seventeenth and eighteenth centuries would have taken seriously the use of dialect in literature. It was only later that Lowland Scotch could be romantically restored in the lyrics of Robert Burns, that Fritz Reuter could strive to establish a Low

German (Plattdeutsch) literary language and that Mistral could attempt to revive the long lost glory of Provençal. One may suspect that this renewed emphasis on linguistic differences is but a passing phase in the history of modern man. Be that as it may, it has had much to do with the emergence of new nationalisms in recent times. It is doubtful if such countries as Lithuania, Estonia and Czechoslovakia could have so easily proved their right to exist if it had not come to be felt that just as every nationality needs its language, so every unattached language needs its nationality and territorial independence to fulfil its inherent mission. Perhaps the best example of what might be called linguistic romanticism is the attempt of the Irish nationalists to renew the vitality of Gaelic, a form of speech which has never been standardized for literary, let alone folk, purposes and which is profoundly alien to the majority of the more articulate of Irish nationalists.

No doubt the respect for local forms of speech has received assistance from scientific linguistics and its tendency to view all languages and dialects as of equal historical importance. It is very doubtful, however, if linguistic localism can win out in the long run. The modern mind is increasingly realistic and pragmatic in the world of action and conceptualistic or normative in the world of thought. Both of these attitudes are intrinsically hostile to linguistic localism of any sort and necessarily therefore to dialectic conservatism. Compulsory education, compulsory military service, modern means of communication and urbanization are some of the more obvious factors in the spread of these attitudes, which, so far as language is concerned, may be defined by the thesis that words should either lead to unambiguous action among the members of as large a group as is held together culturally or in the domain of thought should aim to attach themselves to concepts which are less and less purely local in their application. In the long run therefore it seems fairly safe to hazard the guess that such movements as the Gaelic revival in Ireland and the attempt to save as many minority languages and dialects from cultural extinction as possible will come to be looked upon as little more than eddies in the more powerful stream of standardization of speech that set in at the close of the mediaeval period. The modern problem is more complex than the classical or the mediaeval problem, because the modern mind

insists on having the process of standardization take the form of a democratic rather than an aristocratic process.

A word may be added in regard to the social psychology of dialectic forms of speech. In the main, markedly dialectic peculiarities have been looked upon as symbols of inferiority of status, but if local sentiment is strongly marked and if the significance of the local group for the larger life of the nation as a whole allows, a local dialect may become the symbol of a kind of inverted pride. We thus have the singular spectacle of Lowland Scotch as an approved and beautiful linguistic instrument and of cockney as an undesirable and ugly one. These judgments are extrinsic to the facts of language themselves but they are none the less decisive in the world of cultural symbolisms.

If an individual is brought up in a community that has its characteristic dialect and if he becomes identified later in life with another community which has a second mode of speech, some very interesting personality problems arise which involve the status symbolism or affectional symbolism of these differing forms of speech. Individuals who vacillate somewhat in their conception of their own role in society may often be detected unconsciously betraying this feeling of insecurity in a vacillating pronunciation or intonation or choice of words. When under the influence of an emotional crisis such individuals are thrown back upon their earliest emotional experiences-"regress," in short—they are likely to relapse into early dialectic habits of speech. It is suggested that the question of the relation of the individual to the various dialects and languages to which he has been subjected from time to time is of far more than anecdotal interest, that it constitutes as a matter of fact a very important approach to the problem of personality subjected to the strains of cultural change.

EDWARD SAPIR

See: LANGUAGE; LOCALISM; CENTRALIZATION; CUSTOM-Gonsult: Jespersen, J. O. H., Language: Its Nature, Development and Origin (London 1922); Bally, Charles, Le language et la vie (Paris 1926); Vendryès, Joseph, Le language: introduction linguistique à l'histoire (Paris 1921), tr. by Paul Radin, History of Civilisation series (London 1925); Meillet, Antoine, Les langues dans l'europe nouvelle (2nd ed. Paris 1928).

DIAMAND, HERMAN (1860–1931), Polish socialist. Diamand was born of Jewish parents in Lwów and studied law and economics at the universities of Lwów, Vienna and Czernowitz.

After a brief period of activity in the Zionist movement Diamand transferred his sympathies and allegiance from the cause of Jewish nationalism to that of international socialism. He was the cofounder of the Polish socialist organization of Galicia in the 1880's and for over fifty years was the leading spirit of the Polish Socialist party. During the last few years of his life he was chairman of its executive council. His entrance into the Austrian parliament in the election of 1907-the first Austrian election based on universal franchise—opened to Diamand a brilliant and uninterrupted period of parliamentary activity, first in the Reichsrat of Vienna and following the disruption of the Austro-Hungarian Empire in the Sejm in Warsaw. In both legislatures he occupied a prominent position as a leader of the Polish Socialist party and as a member of the commission on budget and finance. He was particularly valued for his expert knowledge in matters of finance and industry and was delegated by the Polish government to negotiate the commercial treaty with Germany.

Diamand's activities extended beyond the boundaries of Poland. He represented Polish socialism in the International Socialist Bureau prior to the World War; with Daszynski he pleaded the cause of the reestablishment and unification of Poland at the socialist peace conference in Stockholm in 1917; he represented the Polish Socialist party on the Executive of the Labor and Socialist International from its inception in 1923. He was a brilliant orator, contributed frequently to the leading socialist papers at home and abroad and was the author of several pamphlets on the economic position of Galicia.

N. Reich

DIASPORA is a Greek term for a nation or part of a nation separated from its own state or territory and dispersed among other nations but preserving its national culture. In a sense Magna Graecia constituted a Greek diaspora in the ancient Roman Empire, and a typical case of diaspora is presented by the Armenians, many of whom have voluntarily lived outside their small national territory for centuries. Generally, however, the term is used with reference to those parts of the Jewish people residing outside Palestine. It was used at first to describe the sections of Jewry scattered in the ancient Greco-Roman world and later to designate Jewish dispersion throughout the world in the 2500

years since the Babylonian captivity. Diaspora has its equivalents in the Hebrew words galuth (exile) and golah (the exiled), which, since the Babylonian captivity, have been used to describe the dispersion of Jewry.

While the origin of the Diaspora was largely due to repeated mass deportation or exile (e.g. at the hands of Babylonian and Roman conquerors), the emigration of economically depressed groups, the settlement abroad of traders and similar trends helped create Diaspora communities. Similarly, the progressive shifting of the Diaspora is not solely explicable in terms of orders of expulsion, massacres and like incidents. The Diaspora moved and broadened not only because of pressure from behind but also because of such pulls as were exerted by regions which seemed to offer better economic opportunity or increased liberty and security. The nature of Jewish emigration and wanderings is not peculiar in itself. It is the persistence of the Jewish people as a recognizable group through centuries of such wanderings in countries where they constituted a compact minority, which never enjoyed the powerful and dependable protection or support either of a homeland or of any foreign ally, that makes the Jewish Diaspora a rare and significant phenomenon.

The history of the Jewish Diaspora may be divided into two periods, the eastern and the western. The eastern Diaspora developed while a center continued to exist in Palestine, which was either an independent state or an autonomous province within the great near and middle eastern empires. Under the Persian monarchy of the Achaemenidae (558-330 B.C.) a small restored Judea found itself between two Diaspora centers, Babylon and Egypt, where (as shown by the books of *Exra* and *Nehemiah*, by documents discovered in Babylonian Nippur by the American expedition of 1893, and by the Elephantine papyri discovered in 1906) exiled lews founded large colonies which maintained a constant connection with the metropolis, Jerusalem. The spread of the Jewish Diaspora was particularly favored by Greek eastward expansion beginning under Alexander and Roman expansion after the Punic wars. In the third and second centuries B.C. Judea found itself between two Hellenistic states: the Ptolemaic kingdom in Egypt and that of the Seleucidae in Mesopotamia, Syria and Asia Minor. Jerusalem was closely tied to the important Jewish colonies in Alexandria and the Syrian Antioch,

capitals of the two dynasties which, in turn, ruled Judea. The stream of the Diaspora spread with increasing force toward the Nile and even more toward the Euphrates. The liberation of Judea from the Seleucidae and the formation of an independent Hasmonaean state (142-63 B.C.) did not stop the growth of the Diaspora, and the substitution in the East of Roman for Greek authority (middle of the first century B.C.) still further increased its area. Hardly a town in Mediterranean Asia and Africa was without a considerable Jewish population, according to Strabo (see Josephus, Antiquities, XIV: 7, 2), Josephus and Philo of Alexandria (In Flaccum, 7). Jewish colonies were scattered not only through all the eastern territories of the Roman Empire but also outside its frontiers in Parthian Mesopotamia and Persia. Jewish communities everywhere enjoyed autonomy in internal affairs. When local populations (e.g. the Greeks in Syria and Asia Minor) attempted to interfere with their rights of self-government, the Jews appealed to the imperial authorities in Rome; both Julius Caesar and Augustus restored Jewish autonomy in these provinces (Antiquities, XIV: 10; XVI: 6). The Jews of Alexandria had a chief (ethnarches), their own tax inspector (alabarches) and, according to Strabo, formed a separate state unit (politeia). Each Jewish community had an archon and a council of elders (gerousia). The Diaspora Jews exceeded in number those of Judea; according to Philo about one million lived in Alexandria and its vicinity alone. At this time the Mishnah already distinguished between "laws connected with the country" (Judea) and those applying chutz la-aretz, or outside the country.

As long as Jerusalem maintained its position as the capital of Judea, the Diaspora acknowledged its spiritual hegemony. Pilgrims from Asia and Africa flocked to it for the great annual festivals, and the Diaspora communities were taxed for the support of the Jerusalem Temple. Even after the fall of Jerusalem in 70 A.D. and the cessation of worship at the Temple the Diaspora for a time accepted the orders of the Sanhedrin at Jabneh in Judea and of the patriarchs in Galilee. But after the suppression of the Bar-Kochba uprising in 135 A.D. and the stiffening of Roman oppression in Palestine, the hegemony of Palestinian Jewry was challenged by the Jews of Babylon, particularly of the lands under Parthian and Persian domination, where the exilarchs, or resh-galutha (leaders of the Diaspora), assumed the position formerly

held by the patriarchs of Palestine. After Christianity became the state religion of the Roman Empire and after the patriarchate in Palestine (315-425 A.D.) had declined, national hegemony passed completely to the Babylonian center with its influential Talmudic academies, which about 500 A.D. fixed the oral tradition in an immense literary monument, the Babylonian Talmud. In the Arabian caliphate, which included the whole of the eastern Diaspora together with Palestine (from the seventh to the eleventh centuries), all Jewry recognized the hegemony of the Babylonian community. The geonim, heads of the Talmudic academies in Sura and Pumbeditha, interpreted religious and legal questions for individuals and communities everywhere. A flourishing international trade in the countries of the caliphate in which Jews were active contributed to the unification of the Diaspora around Babylon, center of the Bagdad caliphate. The breakdown of the caliphate in the eleventh century ended the hegemony of the Babylonian center, and the crusaders struck the last blow at the Jewish center in Palestine.

The western or European Diaspora came into being shortly before the Christian era at the time of Roman expansion into central Europe. A Jewish colony existed in Rome itself as early as the capture of Jerusalem by Pompey and inspired apprehensions in the conservative Cicero (Pro Flacco, § 28). Roman Jewry began to intervene in Judean affairs in the time of Herod I and his successors. In the days of the apostle Paul, Jewish communities (synagogues) existed in Corinth, Thessalonica and other Greek cities. Jews settled in the Greek colonies on the north shore of the Black Sea, where Jewish synagogues are referred to in inscriptions as early as 80 A.D. Memorial tablets in Roman catacombs and many Italian cemeteries indicate the steady growth of Jewish communities in the first centuries of the Christian era. Beginning with the fourth century Jewish immigration into central Europe proceeded from both Italy and Byzantium. The great migrations scattered the Jews through Germany, Gaul and Spain. The religious fanaticism of the Spanish Visigoths threw the persecuted Jews into the arms of the Arabian conquerors in 711, and Arabic Spain became for several centuries one of the largest centers of western Jewry. Simultaneously Jewish communities grew in the empire of Charlemagne and the states which evolved from it, Germany and France. International trade linked western Jewish colonies

to the old eastern centers, but national hegemony was shifting westward. After the fall of the exilarchs and geonim in Babylon in the eleventh century it rested with the Jews of the caliphate of Cordova and the states of Granada, Seville and Saragossa, which developed from it. There Jews became important statesmen and leaders of an Arabo-Jewish literary renaissance. At the same time there arose in France and Germany Jewish centers, upon which the first three crusades inflicted heavy material losses without affecting their spiritual leadership. Persecutions served to segregate the Jews in special quarters of cities (Judenstadt, juiverie and, later, ghetto). They developed separate autonomous communities with their own indigenous cultures embodying Jewish national traditions. The mediaeval fanaticism of the church, coupled with the economic struggle, resulted in the expulsion of the Jews from England in 1290 and from France in 1394, but left intact the large settlements in Italy, Christian Spain and Germany, those of the latter two countries sharing Jewish national hegemony. At the end of the Middle Ages the expulsion of the Jews from Spain and Portugal from 1492 to 1498 dealt a death blow to the Iberian center, and persecutions weakened German Jewry. The western Diaspora turned eastward: the Spanish exiles (Sephardim) migrated en masse to European Turkey, many oppressed German Jews (Ashkenazim) to Poland.

Beginning with the sixteenth century national hegemony was exercised by the Jews of Germany and Poland. The prosperity of the Jews of Poland, where broad autonomy was granted by the state, led to a remarkable increase in numbers: about one half of European Jewry became concentrated here. The Ukrainian massacre of the mid-seventeenth century and political reaction affected unfavorably the position of Polish Jewry, but the natural increase of the patriarchal Jewish family was so great as to exceed many times the loss in population resulting from massacres and emigrations. At the end of the eighteenth century, following the partition of Poland, one million Jews were found in the Russian Empire; a century later there were six millions. In the nineteenth century the largest part of the Diaspora was concentrated in eastern Europe.

By the end of the century the situation had materially altered. Pogroms and legal disabilities in czarist Russia, beginning in 1881, forced out tens of thousands of Jewish immigrants

annually, of whom the majority went to the United States. Similar migrations from other parts of eastern Europe went on until the American Jewish colony had grown from 250,000 in 1881 to about 4,000,000 half a century later. Expansion also occurred into Canada, South Africa, Australia, Argentina and Brazil. By the twentieth century the Diaspora had spread to all quarters of the globe. At the end of the nineteenth century a small current of migration to Palestine became noticeable; since 1914 the Iewish population of Palestine has increased by only 90,000, making a total of 170,000. This partial return, while of little importance to Jewry's general situation in the Diaspora, may have symbolic meaning in the revival of the ideological dualism of Zion and galuth.

The Diaspora has left a deep imprint on all aspects of Jewish life. Aside from the fact that the law of Christian countries until recently prohibited Jews from owning land or leasing it except for short terms, a people scattered among various nations and with constant expectation of new compulsion to migrate could not engage to a great extent in agriculture, which fixed men to the soil. Jews needed a portative economics of handicraft and commerce, assets convertible at short notice should they be forced to move suddenly to a new place of settlement. During the centuries of persecution and expulsions many were engaged in money lending, especially the making of small short term loans.

In the social and political spheres Diaspora life created, as substitutes for state forms, autonomous communities controlling not only religious life but social relations in the broad sense of the term: education, social welfare, external relations (with the state authorities) and so on. In most of the eastern Diaspora the state delegated to such communities wide powers of regulation, taxation, judicial administration (including punishment of crime) and the like. Even in modern Europe the Jewish kehilla (communal organization—the Kultusgemeinde of German states, the consistoire of more limited authority in France) has continued as an arm of the state. Where, as in the United States, national or cultural minorities are largely ignored by the state officially, Jewish communities still carry on some public functions.

In many countries the Jews created vernaculars, mixtures of the local language with Hebraic words, and retained the Hebrew script. Such are the so-called jargons: Judeo-Spanish (La-

dino or Spaniolit) and Judeo-German (Yiddish), the latter still the spoken and literary language of millions of Jews in eastern Europe and of not a few in America. Jewish political emancipation, which began with the French Revolution, changed the character of the relations between parts of the Diaspora and the states which gave them shelter. As long as Jews were considered by Christian states as foreigners or made to suffer from legal disabilities as a caste, they kept apart and felt themselves to be citizens only within the limits of their own communities. With the emancipation, however, they began to be active in the cultural, political and social life of the country as a whole and to assimilate with the general population, even to the extent of intermarriage. There arose divergent views among Jews: some favored assimilation, looking upon themselves as merely a religious group, and others (nationalists) emphasized their ties with the world Diaspora as an interterritorial nation and demanded national minority rights in countries where Jews form compact groups.

The Jewish Diaspora has always exercised considerable influence upon the cultures with which it has come into contact. The influence of Judaism on the growth of Christianity in the ancient world and the part played subsequently by scattered Jewry in European religious evolution are well known. The syncretism of lewish and Hellenistic thought and the Jewish-Arabic mediaeval renaissance were creations of the Diaspora which played important roles in European cultural history. In addition the Diaspora had an important influence upon world economic development. The continuous relations maintained between its various parts made it a powerful factor in international trade. In the ancient world this role was played by Jews and Greeks, in the Middle Ages by Jews, Venetians and Genoans, in modern times by Jews and the colonial empires. Jews have played a major role in organizing modern credit and establishing the use of promissory notes, stock exchanges and banks. On the other hand, many Jewish elements have become connected with the modern socialist movement. The contributions of the Diaspora to the development of international capitalism and socialism are among the effects of which antisemites complain. The Diaspora, always a cultural ferment and a force for progress, has provoked the enmity of conservative and reactionary elements, which seek support in religious and national fanaticism. Hence the warnings of the mediaeval church against the danger of Judaism to the Christian world and the protests of modern antisemitism against the "international Jew."

Among the Jews themselves there is no unanimous estimate of the Diaspora. From the religious point of view it has always been considered as a punishment of God. The hope of a return to Zion with the coming of the Messiah has always lived in the heart of the orthodox Jew and was one of the thirteen articles of faith of the Jewish religion as drawn up by Maimonides. In the course of twenty centuries of expectation repeated Messianic movements for a return to Zion, colored by political and mystical influences, have arisen, all ending in disappointment and resignation. In moments of resignation Jews consoled themselves with the thought that the Diaspora was not God's curse but a benefit; and Rashi, a mediaeval commentator, in interpreting this statement in the Talmud, explained that it is a benefit because a scattered people cannot be all destroyed at the same time (Pesachim, 87b). Another scholar declared that God did not "scatter" the Jews but has sown them among the nations like seeds from which will grow the true world religion of monotheism. This twofold attitude toward the Diaspora is paralleled in modern Reform or Jewish religious liberalism. The reformers deny the Messianic dogma and regard the spreading of the ethical monotheism of the Jewish prophets through the Diaspora as Jewry's mission, for the sake of which they are willing to accept national assimilation. The Zionists, who have revived the Messianic dogma in modernized political form, declare that Jewry in the Diaspora is doomed to national extermination through assimilation and that those who cannot or do not want to assimilate must create the Judenstaat, or national home in Palestine. This "rejection of Galuth" is criticized by a third group, the Diaspora nationalists, who contend that the Diaspora has survived for twenty-five centuries not only because of religious unity but also because it always preserved national autonomy in cultural institutions, organized communities and unions of communities and will continue to do so by adapting itself to new political and cultural conditions. At the end of the World War a new formula for the settlement of national problems in general was proposed: in countries of heterogeneous population the right of national minorities to cultural autonomy was officially recognized by international treaties and guaranteed by the

League of Nations. Jewish national groups in several countries have partly obtained such recognition. Even Zionists begin to accept Diaspora nationalism when they accept the fact that a large Diaspora must continue to exist side by side with the small national center which may develop in Palestine.

SIMON DUBNOW

See: Migration; Mass Expulsion; Ethnic Communities; Minorities, National; Jewish Autonomy; Judaism; Messianism; Zionism; Ghetto; Intermarriagi; Assimilation, Social; Jewish Emancipation; Antistymitism.

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DÍAZ, JOSÉ DE LA CRUZ PORFIRIO (1830–1915), Mexican soldier and statesman. Like many ambitious Mexican youths without wealth he was educated for the church, but at the first opportunity he turned to the study of law and politics. Since the army, however, was the surest avenue to political power in Mexico he soon concentrated his attention upon military

affairs. Between 1847 and 1877 he participated in three wars, playing a prominent role in that against Emperor Maximilian. His ambition grew with his military successes, and the military uprisings of 1871 and 1876, which he led, ostensibly against foreign capital and the principle of non-reclection of presidents, were intended to further his political aspirations. In 1877 he became president.

As the Mexican constitution forbade the president to succeed himself, he deemed it wise to transmit the presidency to Manuel González in 1880. Díaz succeeded him in 1884 and maintained himself in power continuously until 1911. His regime began at a time when a successful war for national integrity and a partially successful struggle for social reform had left Mexico prostrate and virtually bankrupt. In order to further material development he unfortunately turned the nation aside from the path of democratic evolution. Aided by a few able administrators he ruled the Mexican people with an iron hand, eliminated banditry and inaugurated a stable regime which invited foreign capital, particularly from the United States. Railways and telegraph lines were built and the rich natural resources of the country rapidly exploited. The foreign trade of Mexico increased from \$64,000,000 in 1885 to \$238,000,000 in 1907. But the foreigners failed to become Mexican citizens and took most of their money away, leaving only a small residue in taxes, higher wages and profits to a small group of Mexicans in return for concessions and political influence. Although Díaz gave comparatively little attention to the education of the masses, material progress brought some enlightenment, but the presence of prosperity aroused envy among the mixed classes who had little share in its benefits. Moreover, the Indians whom the dictator allowed to be dispossessed of their communal lands became restless. In 1911 the Madero revolution compelled Díaz to resign and go into exile.

J. FRED RIPPY

Consult: López Portillo y Rojas, J., Elevación y catda de Porfirio Dtaz (Mexico City 1921); Priestly, Herbert I., The Mexican Nation (New York 1923) ch. xxiii; Garciá Granados, Ricardo, Historia de México, 4 vols. (Mexico City 1929) vol. iii; Tannenbaum, Frank, The Mexican Agrarian Revolution (New York 1929) p. 11-15, 138-55, 375-79.

DICEY, ALBERT VENN (1835–1922), English jurist and political scientist. Dicey was graduated with first class classical honors from

Balliol College, Oxford, in 1858 and in 1860 won the Arnold Historical Prize for an essay on *The Privy Council* (Oxford 1860, 2nd ed. London 1887). He was admitted to the Inner Temple in 1863 and became counsel in the Inland Revenue in 1876. From 1882 to 1909 he was Vinerian professor of the common law at Oxford, where his services were notable in stimulating in every way the study of law. He was one of the Oxford group of professors who in 1884 established the *Law Quarterly Review*, to which he frequently contributed.

Dicey was influential chiefly through his writings. His treatise A Digest of the Law of England with Reference to the Conflict of Laws (London 1896; 4th ed. by A. B. Keith, 1927) remains an authoritative work on this subject. He will probably be particularly remembered, however, for his Introduction to the Study of the Law of the Constitution (London 1885, 8th ed. 1915) and his Lectures on the Relation between Law and Public Opinion . . . (London 1905, 2nd ed. 1914), both of which grew out of courses of lectures to students. In the former he gave classic form to the orthodox theory of English constitutional law. Employing the analytic method of Austinian jurisprudence at its best he clearly developed the principles of parliamentary sovereignty and the rule of law as contrasted with the constitutions and administrative law of European countries. He was the first legal scholar to clarify the relationship between constitutional law and the conventions of the constitutions upon which the cabinet system depends. In the later editions of this important work he considerably modified his earlier severe strictures on the continental system of administrative law but nevertheless seriously deprecated the growth of administrative law and administrative tribunals in England. Probably Dicey's most important work was his Law and Public Opinion. In it he traced in masterful fashion the influence of early nineteenth century individualistic sentiment upon the legislation of that period and upon the subsequent collectivist trend in opinion and in the positive law which has been increasingly evident since that time. His historical survey is greatly illuminated by chapters upon the relation between law and public opinion. Dicey was also the author of A Treatise on the Rules for the Selection of the Parties to an Action (London 1870, 2nd American ed. Jersey City 1886) and of The Law of Domicil as a Branch of the Law of England (London 1879).

His later years were largely occupied with polemical discussions of current political questions, which appeared in the English reviews, chiefly the Nineteenth Century. He was strongly opposed to home rule and was generally out of sympathy with the newer tendencies in English politics.

W. J. Shepard

Consult: Memorials of Albert Venn Dicey, ed. by R. S. Rait (London 1925); Holdsworth, W. S., The Historians of Anglo-American Lave, Columbia University, Lectures James S. Carpentier Foundation (New York 1928) p. 91-94; Pillet, A., "Sur un point peu aperçu de la doctrine de Dicey" in Revue de droit international et de législation comparée, 3rd ser., vol. iv (1923) 345-55.

DICKENS, CHARLES (1812-70), English novelist and publicist. Scenes and people and conditions of squalor were embedded in Dickens' memory when during his childhood his family suffered a period of misfortune, and these experiences gave intensity to the hatred of oppression and the interest in human beings which are apparent in all his writings. The framework of contemporary English society determined the direction of Dickens' sympathics. The industrial revolution with its rapid economic change and its accompanying social disorganization was creating a new and bewildering England. Living and working conditions, education, legal protection, state provisions for welfare, even the consolations of religion, were still confronting the problems of industrialism with a feudal technique. The resultant misery was for Dickens not a problem to be analyzed but a grievous injustice to be palliated as quickly as possible. In a series of vivid and powerful novels which commanded a large, intent and sympathetic audience he awakened and directed the humanitarian consciousness of his day to the most glaring evils, with an effectiveness that would have been impossible to a professional reformer. As editor of several magazines, notably Household Words, he was also able to project his convictions through the medium of journalism.

Dickens' depiction of the injustice and degradation of imprisonment for debt was largely instrumental in its eventual abolition. Rapid urbanization and the impoverishment of the countryside were both characteristic of the period, and Dickens' revelation of the wretched housing conditions—the squalor of the slums and the inadequacy of homes in rural districts—bore tangible results in the Association for Improving the Dwellings of the Poor and in the first housing

acts. He ridiculed bureaucracy in government and he called attention to the human consequences of cumbersome, absurd and slow moving legal processes, particularly as they involved the poorer classes. He was one of the first to denounce the customary neglect and oppression of children, their organized training in crime, the cruelty and stupidity of the treatment of juvenile delinquency, the wretched provisions made for education. By wakening the public to a realization of the rights of children he opened the way for far reaching reforms which had hitherto been unsupported or undreamed of-the Reformatory School Act of 1854, the work of Lord Shaftesbury in behalf of street urchins, the Ragged School Union, the discrediting of corporal punishment in schools, the abolition of forced and artificial methods of education, the establishment of free schools for the poor. Dickens was an active supporter of the work of Froebel and the kindergarten movement, and he made a strong plea for the value of sympathy and imagination in the teaching of children.

Dickens' novels reflect the values and limitations of his period with an exactitude that is possible only in a writer who is wholly of his own time. He was not a mere conformer—in many respects he was considered even a radical-but his philosophy and his radicalism were confined strictly to the Victorian mold of propriety and restraint. Neither his traditions nor his sympathies were of the masses; even his most scathing indictments were dictated by the social passion of a bourgeois. His novels present a perfect picture of the life and temper of Victorian England, a better picture for the very reason that his conformity with his age was implicit and unconscious. It is largely this orthodoxy to Victorian humanitarianism that makes possible the charge that as a social reformer Dickens saw only the necessity of remedying superficial abuses, that he did not go to the root of the evils he abhorred, that he understood little of economic processes and that he shared the "dry-as-dust" conception of the social sciences. Yet, on the other hand, Dickens removed himself from the immediate issues of time and place by insisting primarily on that sympathy and intelligence in social relationships which are essential to any program of improvement.

ELIZABETH TODD

Consult: Forster, John, The Life of Charles Dickens (New York 1928); Ward, A. W., Dickens (London 1882); Crotch, W. W., Charles Dickens, Social Reformer (London 1913); Hughes, J. L., Dickens as an

Educator (New York 1901); Clark, Cumberland, Dickens and Democracy (London 1930); Holdsworth, W. S., Charles Dickens as a Legal Historian (New Haven 1928); Zweig, Stefan, Drei Meister (Leipsic 1925), tr. by Eden and Cedar Paul (New York 1930) p. 51-95.

DICKINSON, JOHN (1732-1809), American political writer and statesman. Dickinson was born in Maryland of a wealthy Quaker family. He was educated privately and then studied law in Philadelphia and in the Middle Temple in London. After practising for several years in Philadelphia he was elected to the Delaware Assembly in 1760 and two years later to the Pennsylvania Assembly. He was a delegate to the Stamp Act Congress in 1765, a member of the Continental Congress from 1774 to 1776 and of the Congress for four years during the revolution. He was president of the Delaware Supreme Council in 1781-82 and of the Pennsylvania from 1782 to 1785, chairman of the Annapolis Convention in 1786 and delegate to the Federal Convention in 1787.

Dickinson is frequently referred to by the title Tyler bestowed on him, "the Penman of the Revolution," for he played an important part in drafting several of the important constitutional documents adopted by the various congresses and conventions. It would, however, be more accurate to call him the penman of the early period of constitutional resistance to the taxing power of Parliament. The best known and most important of his writings is the series which appeared in the Pennsylvania Chronicle in 1767 and 1768 under the title, "Letters from a Farmer in Pennsylvania to the Inhabitants of the British Colonies." No essays except Paine's Common Sense (1776) equaled these in popularity both at home and abroad. They were directed against the Townshend acts and in particular against the principle that the British Parliament could levy revenue duties upon the colonies without their consent. Their argument is substantially the same as that advanced in Parliament by Pitt, Burke and Camden. Dickinson had relatively little to do with developing the final or dominion status principle of constitutional resistance. He opposed the revolutionary attitude, voted against the adoption of the Declaration of Independence in 1776, and although he almost immediately enlisted as a private in the army he suffered a great loss of popularity which he never entirely regained. Of his other writings the most important are the two series of letters signed "Fabius" in the first of which he advocated the ratification of the

constitution of 1788 and in the second defended the French alliance in 1797.

B. F. WRIGHT, JR

Works: Political Writings, 2 vols. (Wilmington, Del. 1801); Writings, ed. by P. L. Ford (Philadelphia 1895), excellent but incomplete.

Consult: Stillé, C. J., Life and Times of John Dickinson (Philadelphia 1891), unreliable on political theory; Tyler, M. C., Literary History of the American Revolution, 2 vols. (New York 1897) vol. i, p. 114-15, 234-41, and vol. ii, p. 21-34; Parrington, V. L., Main Currents in American Thought, 3 vols. (New York 1927-30) vol. i, p. 219-32.

DICTATORSHIP is a term which has undergone notable change in meaning. In the constitution of the Roman Republic it signified the temporary possession by one man of unlimited power, a trusteeship regarded as necessary to enable the state to weather a crisis. While ordinarily executive power was shared by two consuls, there was a constitutional provision that undivided power, essentially that of a king, might be restored in case of dire need, such as invasion, civil strife or administrative deadlock. The office was bestowed in solemn, legal fashion —the auspices were taken in the dead of night, the senate ordering, the consul appointing. But as significant as the absoluteness of the Roman dictatorship was the fact that it was temporary. When the task was performed, the power ended: when the Aequian enemy was disposed of, Cincinnatus returned to the plow. Of the eighty-eight dictatorships between 501 B.C. and the decline of the institution three centuries later, most were for a very short period, six months at the longest. At the expiry of the office an accounting of the stewardship had to be given. Responsibility to the governed and to the law was thus essential. When Caesar, repeating a practise of Sulla, held "dictatorial" office that was manifestly irresponsible and of indefinite duration, it was a sign that the republican constitution was breaking down. After the assassination of Caesar, Antony moved and the senate passed a law abolishing the dictatorship. Augustus carefully avoided the title of dictator but he did so mainly because it had a connotation of the temporary; permanence of power was as important to him as absolutism.

In modern times there have been numerous instances of absolutism, sometimes benevolent and acceptable, sometimes harsh and deserving the name of despotism or even tyranny. But the concept of dictatorship has until recently been kept separate and history has used it to design

nate an emergency assumption of power, such as that by the French Committee of Public Safety in 1793 and by General Cavaignac during a few months of 1848. The position of Cromwell would seem to be similar, although his eulogist, Carlyle, characterized it cuphemistically as a directorate. To escape from civil war England had to put herself temporarily in the absolute power of her one great man.

In the decade following the World War, however, there was a widespread tendency to use the term dictatorship as synonymous with absolutism or autocracy. In the true dictatorship the suspension of some constitutional features has in the past had as its aim the saving of the constitution as a whole. But in the post-war dictatorships constitutional government was ignored or encroached upon in the interest of an ambitious hero or a privileged class, with little evidence of popular consent save men's unwillingness to resist machine gun and police agent. Parliaments were abolished or toyed with, guaranteed private and public rights were nullified, all governmental powers heaped upon a duce. There is much variety, and yet there is something in common, in the figures of Mussolini in Italy, Primo de Rivera in Spain. Pilsudski in Poland, Mustafa Kemal in Turkey, Carmona in Portugal, Valdemaras in Lithuania, Pangalos in Greece, Zhivkovitch in Jugoslavia, Riza in Persia, Tsankoff in Bulgaria, Bratianu in Rumania, Bethlen in Hungary, Mahmud in Egypt. These men were widely called dictators, but their recognized superiority to ordinary constitutional rules was not limited to specific tasks or periods; it aspired to permanence. No clear vision was achieved of how the constitutional regime could be eventually restored.

Dictatorship is a phenomenon of highly unstable or revolutionary conditions, such as were to be found after the World War in the countries which had been most severely affected by it. The central type of dictatorship is that which, following the classical tradition, arises in a country where this instability is a contrast to a more or less sustained period of constitutional government. Strictly considered the dictatorship, ancient or modern, is regarded as a departure from the self-governing ideal. Numerically considered, however, most of the recent instances of dictatorship fall outside this central group. Such are those to be found in the relatively immature communities (for the most part Mediterranean, Balkan, Baltic) which lack experience in bearing the difficult burden of public liberty. Still another group are the pronunciamento regimes that crop up continually in countries where instability and revolution are chronic, such as those of Caribbean America. Because of its unique character the "dictatorship of the proletariat" in Soviet Russia must be entirely excluded from these categories.

In examining the special circumstances which produce in the post-war period a people's willingness to accept a dictator where such an acceptance involves a deviation from a previous norm, it is to be noted that the strain of the war had produced lassitude in the public mind. The war had imposed military discipline, utterly diverse from conscientiously directed selfdiscipline. Upon its removal there was a tendency to anarchic self-indulgence, until the extremes to which it was carried rendered society ready, in necessary reaction, to endure the reimposition of military discipline by a despot. War had meant regimentation and obedience in all social activities. Concentration of authority to an extraordinary degree, as required for military purposes, accustomed men to expect public problems to be solved not by rational persuasion of the people but by decision of an arbitrary, distant authority for which one had no responsibility. These problems with which the post-war state was confronted were of unprecedented difficulty: land distribution to satisfy the peasant's age old earth hunger, currency inflation, redistribution of the tax burden because of reparation and debt, widespread unemployment, racial discrimination and pogroms, uncertain national boundaries. Demanding quick solution but incapable of it they created often an atmosphere in which revolution was possible.

In the midst of this situation the democratic process seemed to disintegrate. Even before the war there had been in some quarters an intellectual protest against democracy, at least against the parliamentary system. Gentile, Maurras, Belloc, Faguet and Mencken are instances. Democracy had been accused of postulating a popular interest in public affairs which does not exist, of failing to make room for the infallibly necessary action of the "great man," of cultivating incompetence and the evasion of responsibility. Representative institutions had been accused, on the basis of several generations' experience, of facilitating corruption. It was charged that the tendency of modern parliaments is to represent not the nation but a multitude of social fragments whose conflicting

interests cancel out, leaving a vacuum of the public mind and a paralysis that deadlocks public action. It was held that such deep social cleavages as that between bourgeois and Communist, between Fascist, Catholic and Jewish liberal, denied the very possibility of a real national consensus on anything whatsoever; no general will could be ascertained from the usual parliament with its dozens of parties; the vaunted reform of proportional representation might be more just as regards the specific partial interests but would enhance the difficulty of finding a representation of the nation as a whole among so many overemphasized representations of parts.

If democratic institutions as currently applied disable the nation from acting at all in a multiform crisis that demands action, it is not surprising that the people accept, even welcome, the "strong man," with his boldness, his selfconfidence, his readiness without debate to make decisions of some sort, even when he identifies his personal decisions with those of the nation he purports to incarnate. He brings order and settles matters not by trying to persuade or by counting majorities but by his own fiat. The mass of the people dote on one who by a mystery of magnetism inspires respect, makes them feel great through their kinship with him, their national symbol. If he has the prestige of military success they love him as the nation's savior. If he has a journalist's flair for phrase making his slogans may kindle enthusiasm in a newspaper reading age, giving him power comparable with that of the sophistical demagogue in the days of oratory. But generally speaking the dictator is one who is admired as a door in contrast with the noisy, ineffective palaver of parliamentarians.

In such an environment what impels the individual to seek dictatorship? Motives are inextricably mixed. National service and the call of God may be discerned by seer or historian where opponents see only vulgar ambition for power or where the dictator himself is aware only of riding the storm of events and making the best adjustment possible from day to day. Characteristically the dictator is one new to power, an adventurer who has seized control through a coup d'état and who often operates behind the nominal authority of a puppet king. To gain this control blood need not be shed, if the threat of force is effective. But the continuity of law and hence its organic life are broken. The state is subjected to the new master, whose will becomes the new law. Sooner or later he

legalizes the new situation by decreeing new constitutional rules, which the people are persuaded or intimidated into ratifying by plebiscite.

The dictator need not always, however, operate from behind the constitutional power of another. He may be himself president or king or premier; he is actual dictator if his power is contrary to the tenor of the constitution. King Alfonso of Spain, tired of "rotative" alternation of party premiers who manipulate the spoils of office; King Alexander of Jugoslavia, despairing of the nation's life in the contest between Croat and Serb; King Fuad, distracted between Britain's power in Egypt and the influence of the Wafd-these are the actual wielders of dictatorial power. In such cases the power gives the appearance of residing in some general or administrator--Primo de Rivera, Berenguer, Zhivkovitch, Mahmud—who actually serves not the state or the law but the dictator king. Bethlen of Hungary and Bratianu of Rumania are names under which a narrow oligarchy by force and fraud manipulates parliamentary elections and administration in its own interest. In still other instances dictatorships have been instituted in direct imitation of the Roman plan—by a provision in the higher law. Section 48 of the Weimar constitution of 1919 in Germany makes provision for the suspension of fundamental rights in case of emergency. Likewise, as de Madariaga observes, the Spanish constitution of 1876 owes its longevity "to a provision (art. 17) which allows it to go to sleep now and then.'

Dictatorship is most frequently the refuge of social groups associated with reaction. Clericalism and royalism, throne and altar, have defended their privilege by dictatorial power against encroachment by the propertyless masses. From Roman days it has been a patrician arm against plebeian claims of equality. The possessing classes—big business and landed aristocracy-find their position insecure in face of an advancing parliamentary "demagogy"; they risk the nation's constitutional life by the appeal to force. On the other hand, there are cases like that of Pilsudski, who as dictator of Poland (sometimes also minister of war or premier) since May, 1926, has generally been opposed by the parties of the Right but finds his support in Polish nationalism in its pride in a characteristic hero. With law or without it, with parliament or against it, he is sole trustee of their precarious national fortune.

The army is frequently engaged on the side of

the dictator in his struggle for power. The officer class is psychically inclined to sympathize with a regime which lives by command, not persuasion. But since the policy of the dictator may clash with army interests he provides himself with a personally loyal praetorian guard, such as the "black shirt" militia in Italy, habituated to unthinking obedience to their partisan condottiere. Dictators find themselves embarrassed by their followers. There are the idealists, who hope all wisdom from the omnipotent one and would tead him in the ways of their several crotchets. There are also the "arrivists," or climbers, who seek careers in a society dislocated by the war or by civil breakdown. They are all too ready to follow one who promises change and freedom from the law. Unfortunately these henchmen require reward after power is attained. Then their irregularities occasion corruption and scandal, as in the regimes of Napoleon III and Mussolini.

But the modern dictator never omits to win popular support. The people may be merely apathetic to his seizure of power, but if he is successful they will applaud. Most intellectuals will oppose him in behalf of the underlying and long run benefits of law and liberty. In order to stifle their slow but potent action in the realm of ideas he will deny freedom of speech, press, association; he may even develop secret police repression and the inhumanities of exile and confiscation. In the realms of immediate economic interest and of sentiment, however, he has the advantage over them. He can make administrative action swift, while that of a parliament is vacillating. He can satisfy the more pressing demands at once in readjusted taxation, extravagant public works, "bread and circuses," although he may thereby be storing up difficulties for himself. He hopes to improvise a remedy in time. Haussmann rebuilding Paris to be the wonder of the world for Napoleon III is imitated by Mussolini throwing out clever reminders of a grandeur that not only was but shall again be Rome. There are stunts for the headlines—the raising of Caligula's barge from Lake Nemi, polar explorations, the excavating of the Rome of Augustus, the lictor's axes-manifesting Mussolini's canny sense for the imponderables of sentiment. He strives to secure economic prosperity for the rich, jobs and wages for the poor. He is under a heavy handicap in this economic field; for here is where he chiefly needs the "common counsel" which by definition his regime rejects. He must depend on his own intuition. For his omnipotence the dictator needs omniscience, but the indispensable critical advice is hard to get, and especially to accept, when one is maintained in office as the ineffable, all powerful, all knowing one. In external affairs the dictator's policy is cheap and easy nationalism. Hatred of the foreigner is something on which all classes may be united and stirred to an emotional pitch sufficient to divert them from consideration of lost liberty. Unluckily, caught as he is, the prisoner of the legend of his greatness that has been woven around him, the dictator is tempted into rash, perhaps disastrous adventures.

Dictatorial power is almost impossible to terminate except in the lawless fashion of its origin. Absolute power is as corruptive to its holders as it is oppressive to subjects. What succession can be imagined? The constitution's normal vigor has tended to atrophy during the dictatorship; the nation has been prevented from learning self-government by practise. After the dictator is gone there is the additional danger that would be successors will destroy the nation in their struggle for mastery. An Augustus, a Pepin, may transform his vast power into royalty and win a people's adoration for the Lord's Anointed, but in the nineteenth century a similar feat twice proved impossible even for a Napoleon. Yuan Shih-k'ai failed, and Mussolini, Pilsudski and the rest (with the significant exceptions of Zogu in Albania and Riza in Persia) give little sign of making any such anachronistic experiment.

HENRY R. SPENCER

See: Fascism; Absolutism; Coup d'Etat; Democracy; Liberty; Representative Government.

Consult: Schmitt, Carl, Die Diktatur von den Anfängen des modernen Souveränitätsgedankens bis zum proletarischen Klassenkampf (2nd ed. Munich 1928); Elliott, W. Y., The Pragmatic Revolt in Politics (New York 1928); Prozess der Diktatur, ed. by O. Forst de Battaglia (Zurich 1930), tr. by H. Paterson as Dictatorship on Trial (New York 1931); Bonn, M. J., The Crisis of European Democracy (New Haven 1925); Spencer, II. R., "European Dictatorship" in American Political Science Review, vol. xxi (1927) 537-51; Petrie, C., "The Dictatorship" in Dublin Review, vol. clxxxii (1928) 215-25; Séché, A., "De la dictature" in Mercure de France, vol. clxix (1924) 289-328; Abbott, W. C., "Democracy or Dictatorship" in Yale Review, n.s., vol. xvi (1926) 1-16; Bolitho, W., Italy under Mussolini (New York 1926); "An American Look at Fascism" in Survey, vol. lvii (1927) 677-765; Ortega y Gasset, E., La verdad sobre la dictadura (Paris 1925); Garcia Calderon, F., "Dictatorship and Democracy in Latin America" in Foreign Affairs, vol. iii (1924-25) 459-77; Cambo, F., Les dictatures (Paris 1930).

DICTATORSHIP OF THE PROLETA-RIAT. See Socialism; Communist Parties.

DIDEROT, DENIS (1713-84), French philosophe. Diderot was born in Langres and was the son of a cutler. He was educated by the Jesuits and early in life came to Paris where he became a free lance journalist author. He soon joined the ranks of the philosophes and devoted his entire life to the spreading of liberal ideas.

Diderot was a voluminous and versatile writer and his works include treatises on philosophy and science, dialogues, letters, plays, novels, essays and art criticism. But his chief title to fame comes from his being the editor of the famous French *Encyclopédie*. This great intellectual enterprise was conceived and planned by Diderot and was carried to completion mainly through his efforts. His part was not only that of editor: he also contributed many articles on all sorts of matters from philosophy to the mechanical arts.

Diderot was the incarnation of the libertarian spirit of the eighteenth century philosophes. He repudiated all authority and all tradition as obstacles to free inquiry and questioned every existing institution as a violation of the natural rights of man. Convinced that religious intolerance was the chief enemy of human progress he pleaded ardently for toleration and intellectual freedom. At first a deist, he later became an experimental materialist in philosophy and an atheist in religion. Even before the appearance of Rousseau's Contrat social Diderot had declared that "no man had received from nature the right to govern another" and that the only legitimate source of political authority was the social contract. He was emphatically opposed to benevolent despotism, which was in such favor among his fellow philosophes, and advocated a parliamentary monarchy in which the representatives would be elected by the propertied classes. He also advocated the establishment of a national system of free education, including free meals and free books and even subsidies to the children of poor parents.

The personality of Diderot is as indelibly stamped on the intellectual movement of the eighteenth century as are those of Voltaire and Rousseau. But, as Faguet correctly says, "his rôle was greater than his work." As the middleman of the *encyclopédistes* Diderot exerted a powerful influence in directing the liberal thought of his day. But his own mind, free, curious, "fermentative," was incapable of sus-

tained thought in one direction. His numerous writings are suggestive and illuminating but neither their content nor their style entitles any of them to the rank of masterpieces. Diderot himself was the perfect pattern of a French bourgeois éclairé, rationalistic, open minded, progressive and idealistic, yet with a clear sense of property and station.

J. SALWYN SCHAPIRO

Works: Oeurres complètes, ed. by J. Assézat and Maurice Tourneux, 20 vols. (Paris 1875-77).

Consult: Morley, John, Diderot and the Encyclopaedists, 2 vols. (new ed. London 1886); Faguet, Émile, Dix-huitième siècle—études luttéraires (12th ed. Paris 1894) p. 279-325; Ducros, Louis, Diderot, l'homme et l'écrivain (Paris 1894); Sée, Henri, "Les idées politiques de Diderot" in Revue historique, vol. lxv (1897) 46-60; Cru, R. L., Diderot as a Disciple of English Thought (New York 1913); Le Gras, J., Diderot et l'encyclopédie (5th ed. Amiens 1928); Hermand, Pierre, Les idées morales de Diderot, Université de Paris, Faculté des Lettres, 2nd ser., vol. i (Paris 1923); Tourneux, Maurice, Diderot et Catherine 11 (Paris 1899).

DIESTERWEG, FRIEDRICH ADOLF WILHELM (1790-1866), German educator. After studying at the universities of Herborn and Tübingen he taught for several years in secondary schools; but, influenced by the work of Pestalozzi and his disciples and by the condition of the lower classes in the industrial city of Elberfeld, he determined to devote himself to elementary education. In 1820 he was appointed director of the new normal school at Mörs. He combined a belief in individuality and the human capabilities of even the poorest child with the ideal of social solidarity. He protested against religious dogmatism and was himself a Universalist. The basis of his educational theory was the self-activity of the child and reasoning as opposed to mechanical cramming in a narrow curriculum. He advocated a state school system and liberation from church domination. Above all, he devoted himself to raising the despised craft of elementary school teaching to the dignity of a profession. His political and religious views, however, brought him into conflict with the authorities when he was director of the city normal school in Berlin from 1832 to 1847, and he was finally dismissed from his post. He continued to fight on behalf of the education of the masses, carrying his campaign into the Prussian legislature, to which he was elected in 1858. All his efforts were undone in the reaction which set in after 1848, but the spirit he aroused was kept alive by the teaching profession and bore fruit

after 1918. Diesterweg was the founder of the Rheinische Blätter für Erziehung und Unterricht (1827) and of the Pädagogisches Jahrbuch (1851). I. L. KANDEL

Important works: Wegweiser zur Bildung fur deutsche Lehrer, in collaboration with others (Essen 1854; 5th ed. in 3 vols., 1873-77), tr. in part by M. Wesselhoeft as "Instruction in History" in Methods of Teaching History, ed. by G. Stanley Hall, Pedagogical Library, vol. i (Boston 1883) p. 1-148; Strettfragen auf dem Gebiete der Pådagogik, 2 vols. (Essen 1837-38); Adolf Diesterweg, Gleanings from His Writings, compiled and tr. by F. H. Lohmann (Syracuse 1907).

Consult: Langenberg, E., Adolf Diesterweg, sein Leben und seine Schriften, 3 vols, (Frankfort 1867-68); Richter, Karl, Adolf Diesterweg: nach seinem Leben und Wirken (Vienna 1890); Sallwurk, E. von, Adolf Diesterweg: Darstellung seines Lebens und seiner Arbeit, und Auswahl aus seinen Schriften, 3 vols., Bibliothek padagogischer Klassiker, nos. xxxvixxxviii (Langensalza 1899-1900); Andreae, Carl, Adolf Diesterweg (Leipsic 1899); Adolf Diesterweg, ed. by Konrad Fischer, Die Klassiker der Pädagogik, no. xix (Langensalza 1899); Kreitz, W., Diesterweg und die Lehrerbildung (Wittenberg 1890); Wilke, E., Diesterweg und die Lehrerbildung (Berlin 1890); Milkner, Albert, Diesterwegs Gedanken über Schulgesetzgebung und Schulorganisation, Pädagogisches Magazin, no. 487 (Langensalza 1912), and Die politischen Ideen und die politische Arbeit Diesterwegs, Pädagogisches Magazin, no. 572 (Langensalza 1914).

DIET. See LEGISLATIVE ASSEMBLIES.

DIET. See NUTRITION.

DIETERICI, KARL FRIEDRICH WIL-HELM (1790-1859), German statistician. After obtaining a thorough training in mathematics and political science, the latter under Hoffmann in Berlin, he entered government service in 1812, was geographer-engineer in the campaign of 1813-14 against France and was appointed to an office in the ministry of education in 1820. In 1834 on Hoffmann's recommendation he was appointed full professor of political science at the University of Berlin. The following year he became assistant in the bureau of statistics, of which he was made director in 1844. Three years later he was elected to membership in the Berlin Academy of Sciences.

As director of the bureau of statistics Dieterici conceived it to be a disinterested agency which should undertake the quantitative study of all phases of national life and present the results clearly, accurately and without bias. In spite of the many obstacles arising from jurisdictional disputes with other departments he succeeded in carrying out his program.

Except for enlarging and improving the regular statistical material Dicterici followed the rules laid down by Hoffmann. His chief contribution lies in the fact that he did not confine himself to mere presentation of the statistical material but subjected his data to a thorough treatment and detailed analysis and made numerous calculations and estimates with a view to bringing out the broad quantitative relationships underlying social life; he taught the reader to think in quantitative terms.

In order to assure wide dissemination of the statistical material Dieterici started in 1848 the Mitteilungen des statistischen Bureaus, which appeared twice a month until his death, and beginning with 1851 he published Die Tabellen und amtlichen Nachrichten über den preussischen Staat (10 vols., Berlin 1851-60).

As a member of the Berlin Academy of Science Dieterici contributed eleven studies, most of them in the field of demography. They are painstaking studies although they do not reveal anything new of significance to vital statistics.

RUDOLF MEERWARTH

Important works: Der Volkswohlstand im preussischen Staat (Berlin 1846); Handbuch der Statistik des preussischen Staats (Berlin 1861).

Consult: Boeckh, Richard, Die geschichtliche Entwicklung der amtlichen Statistik des preussischen Staates (Berlin 1863); Seibt, Gustav, "Statistik" in Die Entwicklung der deutschen Volkswirtschaftslehre im 19. Jahrhundert, 2 vols. (Leipsic 1908) vol. ii, pt. ii, ch. xxxvii, p. 8-11.

DIETZEL, KARL AUGUST (1829-84), German economist. His inaugural dissertation, Das System der Staatsanleihen im Zusammenhang der Volkswirtschaft betrachtet (Heidelberg 1855), established his position in the field of economic literature. In this book he criticized the accepted doctrine of previous nineteenth century German writers on finance, that public credit is inherently different from private credit. He maintained that pure governmental functions are as productive as the manufacture of goods and that the fixed capital necessary for them may be supplied by borrowing just as legitimately as in the latter field. Since the state itself is the greatest immaterial capital of a nation, its expenses for maintenance, replacement, salaries and current expenses should be borne as a part of the aggregate costs of production of a nation's industry. Taxation should cover these expenses, which constitute the circulating capital of government. Public loans, however, should cover the cost of

fixed government capital, which is the aggregate of public works, institutions and buildings. Since these latter expenditures are for future as well as present benefit their cost should be spread over the full period, and hence public debts impose no undue burden upon future generations. The book made a deep impression and marked a complete change in the attitude toward public credit of later nineteenth century German writers on finance. Such men as Karl Umpfenbach, Adolf Wagner, Albert Schäffle, Erwin Nasse and Georg Schanz studied his theory and carried it further. His later work, Die Volkswirtschaft und ihr Verhältnis zu Gesellschaft und Staat (Frankfort 1864), showing the indebtedness of Dietzel to the earlier writings of Lorenz von Stein, was less successful.

FRANZ MEISEL

Other works: Die Besteuerung der Aktiengesellschaften im Verbindung mit der Gemeindebesteuerung (Cologne 1859); Strassburg als deutsche Reichsuniversität und die Neugestaltung des juristischen und staatswissenschaftlichen Studiums (Frankfort 1871); "Die Volkswirtschaftslehre als Wissenschaft" in Zeitschrift für die gesamte Staatswissenschaft, vol. xxii (1866) 329-84, and vol. xxiv (1868) 80-128.

DIETZGEN, JOSEPH (1828-88), German socialist philosopher. Dietzgen was born near Cologne and was a tanner by profession. He was self-educated and achieved the reputation of being the philosopher of the international working class movement. Although Marx and Engels praised Dietzgen for having independently discovered the principle of materialistic dialectics, in their private correspondence they drew invidious comparisons between him and Hegel. Dietzgen's dialectical monism is an attempt to establish the historical relativity of the natural and social process; its objectivity; and the importance of human activity, conditioned by the historical environment, in both processes. Accepting the Marxian theory of historical materialism, which explains social change and class ideologies in terms of the fundamental relations of economic production, Dietzgen tries to develop it by making explicit its psychological assumptions. He elaborates a theory of cognition which stresses the continuity of human thought with the natural environment on the one hand and with the social environment on the other. This principle of continuity, which Dietzgen calls naturalistic monism, he fruitfully applies to some problems of ethics and epistemology; but as is the case in Hegel, from whom the principle of dialectical continuity is adopted, it

often leads him to a confusion between proximate and ultimate causation. Dietzgen's earliest work, Das Wesen der menschlichen Kopfarbeit (Hamburg 1869), is an unsystematic, obscure, yet quite suggestive fusion of behavioristic psychology, idealistic logic, biological naturalism and historical materialism. He has had comparatively little influence on socialist thought. Outstanding critics like Plekhanov and Mehring have charged him with unoriginality and inconsistency, an impression due in part to his loose terminology.

SIDNEY HOOK

Works: Sämtliche Schriften, ed. by Eugen Dietzgen, 3 vols. (Wiesbaden 1911). Almost all of Dietzgen's writings have been translated by Ernest Untermann in The Positive Outcome of Philosophy . . . (rev. ed. Chicago 1928), and by Max Beer and Theodore Rothstein in Some of the Philosophical Essays . . . (Chicago 1906).

Consult: Hepner, Adolf, Josef Dietzgens philosophische Lehren (2nd ed. Stuttgart 1922); Untermann, Ernest, Die logischen Mängel des engeren Marxismus . . . (Munich 1910); Lenin, Nikolay, Materialism and Empirio-criticism, in the English translation of his collected works, vol. xiii (London 1927).

DIFFUSIONISM is the name currently given several theories of the development of culture which specially emphasize the factor of diffusion.

Diffusion is the process, usually but not necessarily gradual, by which elements or systems of culture are spread; by which an invention or a new institution adopted in one place is adopted in neighboring areas and in some cases continues to be adopted in adjacent ones until it may spread over the whole earth.

Diffusion is obviously allied to tradition in that both pass culture material on from one group to another. As usually understood, however, tradition refers to the transmission of cultural content from one generation to another of the same population; diffusion, from one population to another. Tradition therefore operates essentially in terms of time, diffusion in terms of space, although the spread through space may be rapid or slow and therefore involves a time factor also.

Both tradition and diffusion are conservative factors in culture history as contrasted with the creative one of invention, which in its broadest sense is denotive of the origination of new culture material or new cultural organization. Tradition conserves material or organization through time lapses within a greater or smaller population. Diffusion conserves it from the

point of view of human culture as a whole. This aspect of diffusion has been largely underemphasized because attention has been given to the mechanism of the spread of culture per se or because diffusions have been studied less from an interest in them than as a means by which historical events may be reconstructed or origins determined. Such interests are legitimate but do not exhaust the significance of diffusion. It is obvious that new cultural material which does not diffuse beyond the people among whom it originates stands little chance of permanent preservation. It is likely to perish with the particular culture to which it remains attached or even to be squeezed out of existence by new growths within this culture. Diffusion is then a process concerned with growth as well as preservation, whereas tradition as such affects only preservation. But neither in itself produces new culture content.

Diffusion and tradition also rest largely on the same psychological basis: imitation. In the case of diffusion one population imitates another at one or many points. In tradition it is one part of a population, usually the younger generation, that imitates another part. There is also a diffusion which takes place within the frame of a single culture from individual to individual, as when the leader of a fashion or propounder of a doctrine is copied by his followers or adherents. Psychologically this intracultural process of diffusion can hardly be distinguished from the intercultural one, since in last analysis all transmission must be from individual to individual. In modern anthropology interest has been largely directed to cultures rather than to the persons carrying them, so that attention has been centered on the relations between cultures or between the several parts of one culture. Diffusion as a technical and finally as a semipopular term has as a result come to be nearly restricted to its intercultural meaning. Gabriel Tarde, however, in his Les lois d'imitation treated of both kinds of diffusion on the same level. which is psychologically correct; some of the earliest analyses of diffusions of wide range and long duration are given in his work.

The mechanisms of diffusion are several: migration and colonization, that is, ethnic movements; conquest; missionization; commerce; revolution; and gradual infiltration ranging from the conscious to the unconscious or infiltration which comes into social consciousness only after it is an accomplished fact. The older anthropologists and the less subtle among his-

torians have relied chiefly upon the first and grosser of these mechanisms. Ethnologists, archaeologists and culture historians, on the other hand, recognizing more and more that these simple mechanisms are inadequate to explain the phenomena they are confronting, have increasingly discerned the importance of infiltration and have tended to emphasize it as in the long run the most important phase of diffusion. They seem to have shown that the main streams of culture permeation often run surprisingly independent of migrations and political and military events. In extreme instances this has led to an underemphasis upon these more obvious factors or even to impatience at their recognition. They can indeed be disturbing elements in the task of unraveling the full story of cultural events, which is normally both intricate and largely below the level of historic consciousness.

Both the culture area (q.v.) and the age-andarea concepts presuppose and rest upon diffusion, mainly of the infiltrating kind and as a normal process. But however normal the tendency of culture material to diffuse, it is clear that the actual spread of such material has not gone on irresistibly nor in any mechanically calculable manner, else all but extremely remote populations would long since have assimilated to nearly the same culture. Among the checks or limitations to diffusion—other than the self-evident ones of lack or scantiness of communicationsare the factors of resistance and displacement. Resistance is due to the presence in the recipient cultures of material and systems which are, or are felt to be, irreconcilable with the invading traits or system and therefore tend to block them, checking their farther diffusion. Frequently it is the presence of cultural habits functionally analogous to the new elements which results in a block. Coffee is unlikely to invade rapidly or successfully a nation addicted to tea drinking. Christianity and Islam, which are both monotheistic, Messianic and scriptural, have diffused into the territory of each other very much less, except by violence, than they have diffused into countries of a different type of religion. Sometimes the factors that defeat or facilitate diffusion are far more subtle or intricate than in these examples and yet are at least approximately determinable.

Displacement affects not the process of diffusion but its results. If representative government gains at the expense of monarchy, the distribution of the latter shrinks and the prod-

ucts of an earlier diffusion of the idea of kingship begin to be obliterated, until perhaps the institution remains only in scattered survivals. From such territorially discrete survivals the history of the growth and decay, or diffusion and shrinkage, of monarchy could perhaps be inferred even in the absence of documentary data, as among primitive or non-literary peoples. On the other hand, such sporadic occurrences might theoretically also be due to wholly independent origins, to parallel inventions of kingship. Convergent processes may also be the cause. Monarchy may arise in one place as a product of military defense, in another theocratically, and yet the two institutions may assimilate quite closely, although independently, with the lapse of time. It is even possible that each might then undergo diffusion until they met, and their coalesced areas would then look as if they were the result of a single origin and diffusion. Considerations of this sort make the unraveling of historically undocumented culture data a difficult and delicate task, calling for intensive knowledge, reliable analysis and a critically conservative judgment. Most of the controversies of anthropology have revolved about problems of precisely this order. The diffusionist schools, in the opinion of the others, have tried to hack their way through this intricate Gordian

On the other hand, the diffusionists have developed more clearly than before the important concept of degeneration, not only of whole cultures but of culture elements, and have provided some extremely suggestive examples. Their tendency has been to operate almost exclusively with rare and unique inventions and very widespread diffusions, tempered at need with degenerations. But this oversimplification of mechanisms should not lead to overdistrust of the concept of cultural degeneration.

There are two schools of diffusionism, the German-Austrian and the British. The former posits some seven or eight original Kulturkreise. These are not, as the name might seem to imply, geographical spheres or areas of culture, but are culture types or blocks of cultural material, each of which at one time in the past is assumed to have existed as a discrete, internally uniform culture, presumably of independent origin, in one part of the world and then to have diffused essentially as a unit. These several culture blocks originated successively in time as well as progressively in degree of advancement or complexity; and, through each spreading more or

less over the whole planet, have become represented in all cultures in an interpenetration or overlay of varying proportions. The task of culture history is the segregation of any given culture into the elements derived from the several *Kulturkreise*.

The Kulturkreislehre was first conceived by Foy and Graebner, promulgated chiefly by the latter, supported for Africa by Ankermann and attacked by Father Schmidt. The latter, however, soon became a convert and has since, with his associate Koppers and others, modified and amplified the hypothesis, depriving it of its original rigor and lack of specific placing in time and space by tying the scheme in wherever possible with linguistics, archaeology and history. The term Kulturkreis is being abandoned and the phrase kulturgeschichtliche Methode substituted, which is unfortunate in its implication that the study of culture history, at any rate among non-literary cultures, must be carried on through acceptance of the special assumptions of this school. Probably not far from half of the ethnologists of Austria and Germany either profess adherence to or have been influenced by the views of this school.

The British school originated a few years later with G. Elliot Smith, Perry and Rivers, whose respective roles might be roughly characterized as inspirer, protagonist and moderator. This school also has undergone some modifications and is best represented in its recent form by Smith's Human History. In contrast with the German school it is monogenetic. Primitive culture is conceived as essentially stagnant, inclined to retrogression as much as to progress. It is contended that at one time and place in human history, namely, in Egypt around 3000 B.C., an unusual constellation of events produced a cultural spurt leading to the rapid development of agriculture, metallurgy, political organization and kingship, priesthood, concern with the after life and mummification, writing and other cultural institutions. From this center of origination this great cultural complex was carried in whole or in part, with secondary embellishments and degenerations, to Mesopotamia and the Mediterranean world, to India, Oceania, Mexico and Peru and in fragmentary form even to remote peoples who remained otherwise primitive. The remainder of culture history is essentially the story of the minor modifications of this one great culture, until the Greeks began to dissolve and replace it by civilization.

The British school has won about the same degree of adherence at home as the German; and likewise has tended to label as evolutionists and antidiffusionists all students who showed themselves unsympathetic to its full tenets. It is perhaps significant that both schools have made practically no converts from each other nor outside their countries of origin. Scandinavia, France and the United States have held almost unanimously aloof.

The methodological weaknesses of both diffusionist schools may be summarized as follows. Granted a certain modest empirical beginning, they very early took a long a priori leap and since then have been forced to depend largely on selected evidence or construals of evidence to maintain the position thus taken, genuinely inductive inquiry being relegated to the background. The basic schemes are too simple to seem adequate to most culture historians and anthropologists. The mechanisms used, with their primary insistence on diffusion, are also too simple.

The virtues of the schools are in part associated with this overemphasis on diffusion, whose strength they have at any rate shown, thus helping to clear the ground of the older school of evolutionism or naïvely psychological theories of stages of progress. They have also made probable the specific connection between a number of geographically separate culture elements or complexes, and they have drawn fresh attention to culture history as a study of universal human interrelations. The future will probably characterize their theories as overshootings of a newly discerned and legitimate mark.

A. L. Kroeber

See: Anthropology; Culture; Social Process; Tradition; Imitation; Communication; Inventions; Migration; Conquest; Proselytism; Europeanization; Evolution, Social.

Consult: FOR THEORIES: Tarde, G., Les lois d'imitation (3rd ed. Paris 1900), tr. by E. C. Parsons (New York 1903); Graebner, F., "Kulturkreise und Kulturschichten in Ozeanien," and Ankermann, B., "Kulturkreise und Kulturschichten in Afrika" in Zeitschrift für Ethnologie, vol. xxxvii (1905) 28–53, 54–84, and discussion p. 84–90; Graebner, F., Methode der Ethnologie (Heidelberg 1911); Schmidt, W., "Kulturkreise und Kulturschichten in Süd-Amerika" in Zeitschrift für Ethnologie, vol. xlv (1913) 1014–1130, and Sprachfamilien und Sprachenkreise der Erde (Heidelberg 1926); Schmidt, W., and Koppers, W., Völker und Kulturen, vol. i– (Regensburg 1924–); Smith, G. Elliot, The Ancient Egyptians (new ed. London 1923), In the Beginning (London 1928), and Human History (London 1929); Perry, W. J., Children of the

Sun (London 1923), and The Growth of Civilization (2nd ed. London 1926); Rivers, W. H. R., Psychology and Ethnology (London 1926); Hocart, A. M., Kingship (London 1927).

FOR CRITICISM: Boas, Franz, review of Graebner's Methode der Ethnologie in Science, n.s., vol. xxxiv (1911) 804-10; Goldenweiser, Alexander, "Principle of Limited Possibilities" in Journal of American Folklore, vol. xxxi (1913) 259-90; Marett, R. R., The Diffusion of Culture (Cambridge, Eng. 1927); Dixon, R. B., The Bulding of Cultures (New York 1928) ch. vii; Snith, G. Elliot, and others, Culture: the Diffusion Controversy (London 1927).

DIGGER MOVEMENT. See LEVELLERS.

DILKE, SIR CHARLES WENTWORTH, SECOND BARONET (1843-1911), British statesman. After graduating from the Cambridge Law School Dilke traveled throughout the British Empire making an intensive inspection and embodied the results in Greater Britain (2 vols., London 1868; 8th ed. 1885). Entering the House of Commons as member from Chelsea he at once showed himself to be an extreme example of that saving virtue of the British conservative ruling class in contributing leaders to its political opponents, the progressives. He not only became the first and foremost leader of radical Liberalism but he was also the first and last leader of a revival of British republicanism. In his parliamentary indictment of the monarchy on grounds of economy (1871-72) he was not supported by his party, but he was sustained therein by his constituency (1874). When the Liberals returned to power in 1880 Dilke, with Joseph Chamberlain as his principal lieutenant, was the acknowledged leader of the radicalism which seemed to be the logical successor to Liberalism. Gladstone reluctantly took Chamberlain into his cabinet but under court pressure relegated Dilke to a minor post in foreign affairs. This was, however, work for which Dilke had prepared himself and in which he at once made his mark. He had to be admitted to the cabinet in 1882 and rapidly advanced to the position of heir presumptive to Mr. Gladstone and the Liberal premiership. Both in internal reform and in international affairs his mastery of detail and his grasp of principle, his commanding presence and his compelling powers, made him dominant. When the government fell in 1885 he had become not only the driving motive force but also the directing mind of British progressivism.

Dilke's career, just as it was reaching its culmination, was virtually ended by an unfor-

tunate divorce scandal in which he was implicated. He resigned his seat, devoted himself to imperial issues and published his Problems of Greater Britain (2 vols., London 1890) and The British Army (London 1888), which are still of value. He returned to Parliament in 1892 as a private member and put his exceptional information in industrial and international issues at the service of the new dynasty—the Labour party. If, as many of his friends believed, the British ruling class deliberately ruined their radical colleague for a private irregularity such as was considered no breach of their own code, then they paid heavily for their hypocrisy. For, had Dilke with Chamberlain succeeded to Liberal leadership in the eighties, the advent to power of a Labour party would have been postponed for another quarter century.

GEORGE YOUNG

Consult: Bodelsen, C. A., Studies in Mid-Victorian Imperialism (Copenhagen 1924) p. 60-75; The Life of the Rt. Hon. Sir Charles W. Dilke, begun by Stephen Gwynn, completed and ed. by Gertrude M. Tuckwell, 2 vols. (New York 1917); Morley, John, Life of William Gladstone, 3 vols. (new ed. New York 1911) vols. ii-iii.

DILL, SIR SAMUEL (1844–1924), British historian, philologist and administrator. He was educated at Queen's College, Belfast, and Lincoln College, Oxford. He taught Greek at Corpus Christi, Manchester University and Queen's, Belfast. In his later years he devoted much time to administration and to service on various educational boards and commissions. Dill's interests lay especially in cultural and religious history. His Roman Society in the Last Century of the Western Empire (London 1898; 2nd ed. 1899) attracted wide attention because of its thoroughness, sanity of judgment and charm of style. The next volume, Roman Society from Nero to Marcus Aurelius (London 1904; 2nd ed. 1905), based chiefly upon the extensive literary sources, provided a sounder and better balanced judgment of the epoch than did Friedländer's Sittengeschichte. For a description of the society of the period as affected especially by thought and creed it is still the best work in the field. His last volume, Roman Society in Gaul in the Merovingian Age (London 1926), not quite completed by the author and published by his associates, is of little value. It is merely a very successful recomposition of the materials found in the works of Gregory of Tours and the other literary sources, without any attempt at historical criticism and with an almost complete disregard for archaeological materials. The title itself is a misnomer. Dill's contribution lay not in a critical use of precarious sources or in the unearthing of new ones, but rather in a pene trating interpretation of sources that were in themselves fairly reliable.

TENNEY FRANK

DILLON, JOHN FORREST (1831–1914) American jurist. Dillon was admitted to the Iowa bar in 1852 and was a justice of the Su preme Court of that state from 1862 to 1869 For the next ten years he held office as United States judge for the Eighth Circuit. In 1879 he became a professor of law at Columbia University and lectured on real property and equity until 1882, when he devoted himself to the practise of law. He was the founder of the Central Law Journal in 1872 and was president of the American Bar Association from 1891 to 1892.

Judge Dillon's work upon the bench contributed largely to the development of American law, but his reputation as a legal scholar rests mainly upon his Law of Municipal Corporations (Boston 1872; 5th ed., 5 vols., 1911), the pioneer American treatise on the subject and a work which created municipal corporations as a distinct branch of the law. This legal classic, which was at once recognized as a profound and philosophic study of the law of local government in the United States, was and still is accepted by the courts as a leading authority in this field. More than any other work it has influenced both the legislatures and the courts in formulating that great body of law which delimits the relations of our local governments to the state and to the individual.

In 1894 Laws and Jurisprudence of England and America (Boston) was published. In it, despite the fundamental conservatism and deep veneration for existing legal institutions, Dillon showed himself a leading advocate of the modernization of the American real property law and also of the codification of specific fields of the common law. These aims are gradually being realized in our uniform acts and in the restatement of the law sponsored by the American Law Institute.

CHARLES W. TOOKE

Consult: Stiles, E. H., Recollections and Sketches of Notable Lawyers and Public Men of Early Iowa (Des Moines 1916) p. 183-211; Hubbard, Harry, "John F. Dillon" in American Bar Association Journal, vol. xiv (1928) 77-79.

DILTHEY, WILHELM (1833–1911), German philosopher. Dilthey was trained in the critical-historical school of Böckh and Ranke and in the philosophical tradition of Trendelenburg. In 1866 he became professor of philosophy at the University of Basel and later at Kiel and Breslau; in 1882 he succeeded Lotze in Berlin.

Dilthey's philosophical work was begun at a time when the metaphysical construction of a logical world order was losing favor and when, on the other hand, positivism and neo-Kantianism with their application of the methods of natural science were proving inadequate to the task of a general study of man and a philosophical approach to the social sciences. In a long series of papers and more especially in his Einleitung in die Geisteswissenschaften (Leipsic 1883) and in his Der Aufbau der geschichtlichen Welt in den Geisteswissenschaften (Berlin 1910) Dilthey attempted to construct a new methodology and a new interpretation of the study of society and culture. He drew a definite distinction between the social and the natural sciences: the latter aim merely to describe and conceptualize (begreifen); the social sciences, concerned with the realm of ends and values instead of laws, should aim to understand (verstehen). As a basis for such study he postulated the need of an analytic and descriptive psychology concerned with a systematic knowledge of the nature of consciousness and of the inner unity (Strukturzusammenhang) of individual and social life and an understanding of the historical development of this organic unity in scientific, artistic and religious forms. He was as a result led into a comprehensive research in the history of intellectual development, bearing fruit in his never completed Leben Schleiermachers (Berlin 1870; new ed. by Hermann Mulert, Berlin 1922); in his essays on the theme of human nature in the thought of the fifteenth to the seventeenth century and on the German philosophers, poets and historians of the eighteenth and nineteenth centuries; and in his brilliant Jugendgeschichte Hegels (Berlin 1905).

Dilthey is best characterized as the founder of the so-called *Lebensphilosophie*. The conception of life upon which his philosophy is based makes unnecessary the distinction between intellect and reality and the corresponding dichotomy of spirit and matter; it sets up his system in opposition to the traditional *Vernunftwissenschaft* type of philosophy. In social science Dilthey is important as the most famous exponent of the *Geisteswissenschaft* movement in

Germany. Throughout his work in this field he was concerned not with the problem of social control but with the conservation and objective revaluation of cultural forms. During his lifetime Dilthey's influence was limited to a small group of his students; but with the appearance of his collected works his influence permeated not only other schools of German philosophy but psychology, history, law and economics and resulted in the increasingly greater adoption of his methodology in these respective sciences.

LUDWIG LANDGREBE

Works: Gesammelte Schriften, 8 vols. (Leipsic 1914-31).

Consult: Misch, Georg, Introduction to 5th vol. of Dilthey's Gesammelte Schriften; Stein, Arthur, Der Begriff des Verstehens bei Dilthey (2nd ed. Tübingen 1926); Landgrebe, Ludwig, "Wilhelm Diltheys Theorie der Geisteswissenschaften" in Jahrbuch für Philosophie und phainomenologische Forschung, vol. ix (1928) 237-366; Stein, Ludwig, "Historical Optimism: Wilhelm Dilthey" in Philosophical Review, vol. xxxiii (1924) 329-44; Tapper, B., "Dilthey's Methodology of the Geisteswissenschaften" in Philosophical Review, vol. xxxiv (1925) 333-49; Friess, H. L., "Wilhelm Dilthey" in Journal of Philosophy, vol. xxvi (1929) 5-25; Troetsch. E., Gesammelte Schriften, 4 vols. (Tübingen 1912-25) vol. iii, p. 509-30.

DIMINISHING RETURNS is a general principle of productivity, pervading all forms of production. In its original and best known form it related to agriculture and would perhaps be most precisely stated as follows: apart from declining soil fertility and fluctuations due to the changes of weather increased use of other resources per acre of land yields increasing crops per acre but decreasing crops per unit of the other resources used. The other resources were originally spoken of as capital, which was understood to include amounts advanced as wages to labor during the period of the crop cycle.

In its more general form the principle applies to shifting proportions of different factors or groups of factors in any industry. When the physical output per unit of a factor or a group of factors is increased by increasing the amount of cooperating factors, the output per unit of the cooperating factors declines. It is thus a statement of elastic limits on the development of the latent possibilities of particular productive factors through the employment of larger amounts of cooperating factors. The term has been also applied to certain distinct though related facts, such as a decline in net financial yield or a historical trend toward higher agricultural costs of production.

Among the economists the principle of diminishing returns was first anticipated by Turgot in his comments on a prize essay written in 1767 (Oeuvres, ed. by G. Schelle, vol. ii, Paris 1914, p. 643-46). The principle of diminishing returns was implied by Malthus in his Essay on the Principle of Population (1798) when he stated that, while population tended if unchecked to increase in geometrical ratio and probably to double every twenty-five years, it was unthinkable that food production in England could maintain this rate of increase beyond the first quarter century, the utmost imaginable increase after that being represented by equal absolute increases in each twenty-five year period. In his Inquiry into the Nature and Progress of Rent (1815) he also suggested that increased use of capital on land already fully exploited would bring losses unless prices and rents should rise; he gave greater emphasis, however, to the necessity of taking up land of poorer quality. Later in an Encyclopaedia Britannica article on population (supplement to 4th ed. 1824, vol. vi, p. 307-33) he gave a definite statement of the law of diminishing returns. Before that, however, Sir Edward West declared that "each equal additional quantity of work bestowed on agriculture yields an actually diminished return" (Essay on the Application of Capital to Land ..., 1815, p. 6) and Ricardo published his Principles of Political Economy and Taxation (1817).

Ricardo in his theory of rent definitely assumed that hand in hand with the taking up of poorer qualities of land there would naturally go an increasing expenditure on the better lands, subject to declining yield for the additional outlays of capital. Such criticism of the Ricardian theory as that of Henry C. Carey, who deduced from American experience a tendency to progress from less fertile to more fertile soils, is to a large extent beside the point, as the more fertile soils either required more outlays for clearing and development than the early settlers could afford or were less accessible from the early centers of settlement. Accessibility is of course a relative and shifting thing as a country develops.

Senior in his Outline of the Science of Political Economy (1836) developed and emphasized a contrast between agriculture, subject to diminishing returns, and manufactures, in which increasing returns were possible with increasing output. It is true that increasing agricultural production with the factor of land limited is

likely to exhibit the effects of diminishing returns in visible form unless counteracted by improvements; while manufacturing output can be increased without corresponding limits on any one factor or group of factors, thus allowing other principles to dominate the visible result. Even in manufactures, however, a change in the proportion of factors is subject to the law of diminishing returns. A recent study (Cobb, Charles W., and Douglas, Paul H., "A Theory of Production" in American Economic Review, vol. xviii, 1928, supplement, 139-65) indicates that despite advances in technique during the two decades following 1900 the increase in fixed capital per worker in American manufactures has been from three to four times as great as that in physical product per worker.

Recent writers, particularly H. J. Davenport, have emphasized the distinction between the law of proportion of factors, in which the condition of diminishing returns is normal, and that of increasing productivity with increasing size of productive units or scale of operations. The mathematical implications of the former law were brought out by F. M. Taylor in an arithmetical example which he carried through all possible stages of varying return. Thus, operating with two factors, a constant area of land and an increasing amount of labor, five stages are possible. Product may increase faster than labor, as fast, slower, not at all, or it may decrease. When labor is in the first stage, land is in the fifth, since a concentration of all the labor on part of the land would actually increase the total product. Similarly, when labor is in the second stage, land is in the fourth, and when labor is in the third, land is also in the third. It is clearly wasteful to utilize any costly factor in either the fourth or fifth stage; hence economy requires that wherever technical conditions permit costly factors be used in the third stage, where both are under diminishing returns. The same principle applies to any number of factors and can be expressed by algebraic methods.

The generalized law of the proportion of factors underlies the theory of distribution of the marginal productivity school. It is possible to prove that if the price of each contributing factor is equal to the "marginal product" of that factor, the sum of the shares thus apportioned to the owners of the contributing factors would equal the total product. This is true, however, only under certain simplified conditions which are not fully carried out in practise. The principle of marginal productivity does not

apply fully to parts of an organic productive unit. Changes in the scale of production bring changes in efficiency which disturb the basic assumption that an evenly spread increase in the quantity of all factors employed will result in an equal proportionate increase of output. Management, research and the other overhead costs of plants working at part capacity do not fit into the simplified picture. Long run trends may exhibit diminishing returns while shorter fluctuations are dominated by other principles. The place of each in the complex reality has not been fully worked out.

The relation between diminishing technical returns and the behavior of financial returns is a source of some confusion, although the basic principles are relatively simple. The term diminishing returns is unfortunately often stretched to cover any decline in net money earnings, whether due to increased money costs of production or to the decline in price following an increase in the supply of the product. The application of the term diminishing returns to increased money costs may lead to confusion, because as has been shown above the use of costly factors in any but the stage of diminishing technical returns is financially wasteful. The decline of price, on the other hand, is a matter of demand schedules and not of the laws of production as such. An increase of a generic factor of production, such as capital, will not increase the output of one commodity only and thus will not be limited by the ordinary type of demand schedule.

It is true that many business activities are not directly concerned with the physical production of goods but with the creation of demand, the maintenance of prices, with financial operations, lawsuits and even political propaganda. But it is still possible to say that almost any technically definable end may be gained by using contributory factors in varying proportions, whether the proximate end be the creation of a cigarette, of a billboard advertising it or of political propaganda against anticigarette laws. And the proportioning of factors to secure any end exhibits the principle of diminishing returns.

JOHN MAURICE CLARK

See: Increasing Returns; Value; Cost; Distribution; Rent; Economics.

Consult: Cannan, Edwin, A History of the Theories of Production and Distribution (2nd ed. London 1903) ch. v; Clark, J. B., The Distribution of Wealth (New York 1899); Edgeworth, F. Y., "The Laws of Increasing and Diminishing Returns" in his Papers

Relating to Political Economy, 3 vols. (London 1925) vol. i, p. 61-99; Schumpeter, Josef, "Das Rentenprinzip in der Verteilungslehre" in Schmollers Jahrbuch, vol. xxxi (1907) 31-65, 591-634; Bullock, C. J., "The Variation of Productive Forces" in Quarterly Journal of Economics, vol. xvi (1901-02) 473-513; Carver, T. N., The Distribution of Wealth (New York 1904) ch. ii; Davenport, H. J., The Economics of Enterprise (New York 1913) chs. xxii-xxiiy; Taylor, F. M., Principles of Economics (2nd ed. Ann Arbor, Mich. 1913) ch. iv; Fetter, Frank A., Economic Principles (New York 1915) ch. xii; Esslen, Joseph, Das Gesetz des abnehmenden Bodenertrages seit Justus von Liebig (Munich 1905); Spillman, W. J., and Lang, Emil, The Law of Diminishing Returns (Yonkers 1924).

DIMINISHING U'TILI'TY. See VALUE; Economics.

DIOCLETIAN (C. Aurelius Valerius Diocletianus) (245-313), Roman emperor. Diocletian was born in Dalmatia and became emperor in 284. His reign ushered in an autocracy characterized by deification of the ruler, prostration in his presence, elaborate court ceremonial, the exclusion of the senate from participation in imperial government, reduction of Italy to the status of the provinces and the concentration of all authority in the hands of the emperor. By sharing his power with a colleague and choosing two Caesars as their successors designate Diocletian discouraged rebellion and rendered possible a more effective conduct of the administration. The bureaucracy was reorganized by separating the civil and military careers and filling the administrative departments with a subordinate personnel organized on a strictly military model. Its numbers grew greatly with the doubling of the list of provinces and the creation of four prefectures and twelve dioceses. The military establishment was increased and was rendered more efficient by the organization of a central field army. The provincial garrisons were placed under the authority of military dukes and counts. Economically as well as politically the interests of the state overshadowed those of its population. The older taxes were abolished in favor of the hitherto irregular requisitions of supplies (annona), now made a permanent levy based on units of land (juga) and number of men and animals cultivating it (capita). Diocletian's edict of prices was a well meant but futile effort to check an increase in the cost of living resulting from an attempt to reform the coinage. Influenced by the Caesar Galerius in 302 A.D. Diocletian initiated the last and greatest persecution of the Christians in the

empire. At his retirement in 305 this great organizer had laid solid foundations for the administrative, fiscal and military systems that characterized the late Roman Empire.

A. E. R. BOAK

Consult: Seeck, O., Geschichte des Untergangs der antiken Welt, 6 vols. (Berlin 1897–1921) vols. i-ii; Rostovtzeff, M. I., The Social and Economic History of the Roman Empire (Oxford 1926) ch. xii; Stein, Ernst, Geschichte des spätrömischen Reiches, vol. i- (Vienna 1928–) ch. i.

DIPLOMACY is the method in common use today of communication between governments. All governments at all times and in all parts of the world have used envoys in communicating with other governments or authorities. There are traces of the practise recorded on Assyrian tablets, in Greek and Roman history and in ancient China and India. But there is no direct connection between such practises and what we call diplomacy. Nor is there any direct connection between the modern system and the practise of the mediaeval Roman church in sending legates or dealing in the Curia with representatives of local interests, ecclesiastical or political. In its present form diplomacy bears the marks of conceptions of government dominant during the Renaissance, when the system and methods now operative had their origin. The republic of Venice may be considered to have founded diplomacy as we know it. In the sixteenth century it maintained envoys in Switzerland, Naples, Turin, Milan and London as well as ambassadors at the courts of the emperor and of the kings of France and of Spain. Later the kings of France and of Spain maintained continuous representation in various cities. But the practise of sending special missions for specific purposes continued to be prevalent until the seventeenth century. Indeed, the business of government in earlier times did not require a system of intergovernmental relations, and even when permanent contact between governments was found indispensable it remained the practise in many cases to maintain abroad a subordinate class of envoys as distinguished from ambassadors with full rights and powers. Thus the United States did not maintain abroad any officials of a higher rank than that of envoy until 1893. The essential characteristic of the diplomatic system, however, is the permanence of the agent in residence at some foreign seat of government. Although the method called diplomacy was practised by temporary agents at all periods, the status and

function of the diplomat were not recognized until the chief governments came into continuous contact through agents residing abroad. The existing system first operated in Europe in the early seventeenth century; it has since become world wide, having proved itself essential to modern government.

When the diplomatic system arose, most states were monarchical and the court was the center of political and economic power and of cultural influence. Even today diplomatists are supposed to be accredited to courts, where such exist. Furthermore, early diplomatic representatives, as the personal deputies of sovereign monarchs, were generally of the courtier type and frequently members of the highest nobility or, due to their international connections and their relatively superior education, members of the high clergy. Non-professionals are sometimes chosen ambassadors or ministers, in the United States especially, in reward for political services or as a consolation for political defeat or in many countries for specific competence, such as a knowledge of finance or a close connection with the particular foreign nation. Most diplomatists, however, are professional. They have been trained as attachés abroad or as secretaries in their ministries for foreign affairs. The development of a permanent professional diplomatic service, while tending to replace the monarch's personal choice with systematically trained and chosen officials, retains the general atmosphere of the restricted capital society in which as an agent of royalty the older type of diplomat moved. In almost every country the diplomatic service is practically closed to citizens of all but the most wealthy class. In some countries not even the sons of wealthy merchants or industrialists obtain easy entrance into the service, which is reserved for those who bear names of ancient dignity. In the United States, where there is less admission of such facts than in most other countries, the practise is supported by the government's refusal to provide public moneys for the use of diplomats in carrying on the lavish and extravagant entertainment functions expected of them. Hence the diplomatic caste is highly selected at the outset from among the wealthiest and most aristocratic group of citizens, and even within the service advancement is granted largely on a basis of wealth and social prestige. The manners of the drawing room are regarded as the most important qualification for diplomatists rather than a knowledge of foreign

culture, business or political affairs. The social prestige which in mediaeval civilizations distinguished those unconnected with trade leads diplomatists to adopt the manners and customs of small cliques, which in old capitals often preserve a traditional culture unconnected with any political or economic power. Thus there also exists a tradition which in certain services divides the diplomatic career from the consular service. Diplomatists in addition to some knowledge of foreign tongues have also skill in adopting the forms of politeness common in circles in which they live in foreign capitals. The departments of governments dealing with foreign policy are usually staffed by the same social and intellectual types as are to be found in embassies and legations abroad.

The functions of a diplomat are still usually conceived to be mainly those of guarding the interests of his government in negotiations with the government of the country in which he resides. In each embassy or legation of important states in foreign capitals there is a staff of officials theoretically subordinate to the ambassador or minister. The most powerful of these, however, belong to the home war department and exercise an influence upon their government often independent of and sometimes contrary to that of the civil diplomatic staff. In very recent times commercial counselors and attachés have been added to the staff, and in a very few cases social attachés have been appointed for reporting upon industrial and similar problems. All these agents of each state at the capital of every other state constitute a body called the diplomatic corps. Thus in connection with the chief officials of the ministry for foreign affairs in each capital the diplomatic corps forms a microcosm of the state system of the world. The London diplomatic corps, for example, includes fifty-six embassies and legations, the smallest composed of two officials, the largest of seventeen. Among these are naval and military attachés in great numbers and a few commercial attachés. Such a body in each capital is in continuous contact with the foreign office (or ministry of foreign affairs or, in the United States, State Department) and communicates daily with its superior officials at home. The presence of other diplomatists and agents in any capital makes a difference in the work of each, since the influence of one diplomatist may be thrown against that of another. Certain common and largely formal interests of the whole corps in each capital, however, tend to create an international caste of diplomatists. Such persons spend most of their lives away from their own countries. So far important posts in this caste have been held by only one woman, Mme. A. Kollontay, appointed to ambassadorships by the Soviet Union, but marriages occur which connect the diplomats of one country with those of another. The members of the corps in any capital are traditionally much concerned with precedence of one over another. The titular head of the corps, the doyen, has a social status of considerable importance as representative in some matters of the corps in a capital.

The rights of the diplomatist in a foreign country are the result of Renaissance conceptions and later adjustments to meet new needs. The diplomatist was originally a kind of spy. The general practise noted by Machiavelli and advocated by de Callières gave good grounds for suspecting the character of the influence wielded by a foreign diplomatist. The diplomatist used money, when he could, or any other means available to spread propaganda in favor of his own interests (even when designed to shake the stability of the local government), to undermine local political parties and to obtain secret information. Such influences still exist. as the Great War and more recent revelations of spying in foreign countries have revealed. The presence of military and naval attachés in foreign capitals is in fact an open form of the spying which is incidental to preparation for future war. Since it is necessary to grant certain facilities to diplomatists on the basis of reciprocity, international law recognizes that diplomatists have immunity of person and residence from the action of the law in the state in which they reside. A fiction has been created to support this practise: the diplomatist's residence has been supposed to be exterritorial, or to be a part of the state which sent him out. Immunity of residence has sometimes been used to shelter refugees from the pursuit of their opponents and to maintain habits forbidden in the country at large. The case for the personal immunity of the head of an embassy or mission and certain of his staff seems to rest upon the need of free communication between diplomatists and their home governments, although here too a fiction has been created, namely, that as the personal representative of his sovereign the diplomatist enjoys the same immunities as apply to the sovereign's person. The reciprocal obligations on the part of the diplomatist are not clearly established; but the old practise that the head of a mission should act as a judge and police authority within the area of immunity seems to be dying out. Informally, at least, the diplomatist submits offenses to the courts in the country in which he resides.

Under the protection of these privileges the normal diplomatic practises have developed in the same way in all states. There is daily personal contact between the members of the diplomatic corps and officials or responsible ministers in the several foreign offices. Information is exchanged. Formal ceremonies occasionally give an opportunity for making public the friendliness of the relations between the governments concerned. But a great part of the normal work of a legation is the collection of information from the press and other sources for forwarding to its home government. Reciprocally the legation supplies information about its home country to newspapers. Although it is still usual for diplomatists to confine their activities and restrict their knowledge to the capital, which is often quite different in social character and outlook from the country as a whole, the increased importance of newspapers in politics, especially that part of politics affected by foreign affairs, has resulted in great extension of the work of legations. The great press agencies (Associated Press, Reuter's, Havas, Wolff, Press Association, Tass and others) are closely connected with the diplomatic system, sometimes through legation attachés who are also agents of one of the agencies. Sometimes such channels of approach are widened by the purchase (usually secret) of a controlling interest in one of the major daily papers, which thereupon becomes in effect part of the legation apparatus. A particularly convenient manner of reaching the press is open to the foreign minister. Most foreign offices establish intimate relations with foreign newspaper correspondents in their capitals, winning their support by sagacious distribution of convincing arguments, professional favors, decorations of honor and even money. Such practises have gained sufficient influence over some newspapers to make the entire policy of their foreign correspondents consciously one of presenting only or chiefly the point of view of the government in power in the country in which they are working.

Such activities are supplemented by others, including those of a variety of institutions, international committees, exchange professorships and the like. The ambassador is usually

honorary president of an organization devoted to furthering cordial relations between his country and the country in which he is operating. Important natives with financial or sentimental interests in the foreign country serve in such an organization, whose activities include sentimental gestures (donating monuments, presenting medals and prizes and financing good will tours) and propaganda activities through the publication of specialized literature, the distribution of inspired news to the local press and the establishment of friendly contacts with politicians, journalists and other persons of influence.

Despite the commonness of such practises the exposure of secret machinations by diplomats is always the signal for a violent outburst against the responsible government, which is accused of base immorality in carrying on a practise general in all diplomatic services. A case in point is that of the Soviet Union. If the Soviet government may be said to have the same general views as the Third International or to control the latter body, then supporters or propagandists or representatives of the latter are presumably agents of the Soviets. If this be the case, their diplomatic work is similar to that of the semi-official or secret (and sometimes the accredited) diplomatists of other governments. That their subversive propaganda is open and frank is a minor technical difference. Similar agents of other governments carry on propaganda substantially subversive. The resentment stirred up against Third International or Soviet propagandists is similar to that against other diplomatists discovered to be engaged in similar activities, intensified by the anti-Soviet counterpropaganda of special interests. Thus a government can reach the general public in any foreign state by other means than those provided by the government of that state. The realities of diplomacy then are often quite different from the system described by international lawyers.

Consuls are agents, generally for commerce, residing abroad. The name and office arose in the eastern Mediterranean after the crusades, when Italian, Spanish and French merchants residing in the Levant elected one of their number in a city to exercise jurisdiction over their countrymen resident in that city. The powers of these consuls granted voluntarily by Islamic monarchs were later made a part of international law through treaties called capitulations. Similarly the chief foreign agents of

European merchants became government appointees. They remained, however, without diplomatic functions or privileges outside the Levant. Usually two kinds of consuls are to be found: one a professional, full time official who promotes the trade of the country from which he is sent; the other a local merchant, often of foreign nationality, who attends occasionally to matters of interest to merchants of the country whose government pays him. I:. the nineteenth century the growth of commerce and the increase in the number and importance of commercial treaties led to the appointment of more consuls and a recognition of the great importance of their work. Incidentally, since consuls were resident not only in capitals but in several districts of a foreign state, they could provide a much more general view of the situation abroad than the old fashioned diplomatist. 'This as well as the democratization of the diplomatic services has led to the closer association of consular and diplomatic functions, and some states have amalgamated the two services.

The minister or secretary in any state who is supposed to be responsible for the foreign policy of the government forms part of the whole diplomatic system. In traditional autocratic forms of government he is usually a trained official belonging to the diplomatic service. In monarchies the monarch is traditionally given more influence in foreign policy than in domestic affairs, partly because of the mediaeval and Renaissance custom of intermarriage between monarchical families and because in Europe at any rate there is a blood relationship connecting the caste of royal families, but partly also because the political intelligence of citizens in most countries has not been so far developed as to affect foreign policy. In republics, similarly, the president tends to have more influence over foreign than over domestic policy. The foreign minister or secretary, however, deals with normal intercourse between governments; and in this, if he is an amateur or untraveled, he comes very easily under the influence of the caste of diplomatists inside his office and in his legation abroad. That permanent officials such as Sir Eyre Crowe in the British Foreign Office and Baron von Holstein in the pre-war German Foreign Office often dominate foreign policy has been revealed by published foreign office documents. A foreign minister, however, may resist or even control such influences if he has political power outside the world of officials. The policy of each

minister is delimited not only by influence of professional officials and diplomatists but also by existing treaties and even current negotiations begun by a predecessor. Even when a change of party in control of the government takes place, the so-called continuity of foreign policy holds good to a considerable degree. Extreme nationalism also prevents differences between parties or groups from showing in foreign policy. Hence diplomacy has tended to be conservative and traditional.

The growth of political intelligence in foreign affairs has made possible some changes of policy and reforms of the traditional system. The telegraph and in capitals not too far distant the telephone have reduced the importance of the ambassador or envoy. In the days when he was not in direct contact with his own responsible minister at home the diplomatist was able to negotiate and personally decide issues which he is now compelled to leave to his superiors. Much is still left to personal initiative where no great issue is involved, but in a crisis the diplomatist tends to become simply an office boy at the end of a wire. This naturally involves less responsibility and requires the employment of a kind of personality different from that of the diplomatists of the past. The old method, however, is continued in the practise of sending written documents through the ambassador, who then discusses the situation with the foreign minister. The personal influence of the ambassador (who generally represents the older traditions of nationalist and conservative diplomacy) may thus be very important in foreign policy.

For dealing with exceptional situations the traditional diplomacy provides the congress or conference. A congress as distinct from a conference is usually a meeting of responsible foreign ministers, prime ministers or other heads of governments for the settlement of peace terms after wars or for the framing of other treaties of multinational scope. The negotiations preceding such treaties have often been secret in that some of the parties affected entered into private understandings unknown to other parties. Thus there arise secret clauses of treaties or secret treaties. In order that these secrets may not be known to third parties, which are other governments, it is necessary that they should be secrets also unknown to the citizens in whose name or for whose interests the obligations involved have been contracted. Such citizens may eventually be com-

pelled to take action resulting as a consequence of agreements of which they never hear. Hence some feeling in modern states has arisen against secret diplomacy. The traditional method of defending the ancient practise is to urge that all negotiations or conversations must be secret or private while they are being carried on. This argument is in itself of little weight and irrelevant to the real issue, which is concerned with the binding character of the agreement ultimately reached but kept secret from the citizens whom it concerns. The Covenant of the League, which attempted to prevent such secrecy by requiring registration of treaties, has failed to prevent a new growth of secret military understandings which are not registered. In practise most citizens, even in states in which citizens are supposed to decide upon policy, eventually undertake under the pressure of propaganda in critical situations obligations to which their agents have committed them and which may or may not be to their real interest.

Conferences as distinguished from congresses are usually meetings of ambassadors or official plenipotentiaries for settling minor issues. A long series of congresses and conferences have been held ever since the Middle Ages. Most of them have produced treaties. After the Great War the practise of conference between heads of states was found useful until about 1924. There arose a peculiar institution, the so-called Ambassadors' Conference in Paris, a permanent body including the diplomatic representatives of the ex-Allied Powers and a French official, to carry on current business which the peace treaties of 1920-22 had left to the "Allied and Associated Powers." This form of diplomacy by conference between heads of governments and foreign ministers, from which great results were once expected, has been displaced since about 1924 by the older diplomatic methods and the growth of the activities of the League of Nations.

The League system provides the elements of a new diplomacy. First, it is the occasion for periodical personal meetings, at council and assembly sessions, of responsible ministers of the member states. Foreign ministers and consequently the political opinion and active political influences of their states come into close contact. A foreign minister, at any rate in a "democratic" state, usually knows more about the political or economic tendencies in his own country than does a diplomatist. This new form of diplomacy by conference, which has dis-

placed the occasional conferences that took place from 1920 to 1923, has the immense advantage of providing means whereby disputes can be settled by conciliation, and the League system may thus (under article II of the Covenant especially) prevent such a serious crisis as would before 1920 have inevitably led to war. Secondly, the League Secretariat provides skilled assistance for cooperation between governments, based not upon the traditional assumption of diplomacy that each diplomat stands for a separate interest but upon the assumption that common interests are important for all states.

The League system is new, and at first it grew in the dark. When it attracted the attention and jealousy of members of the old diplomatic services, a struggle arose. Within the Secretariat governments attempted to use the old methods, and the League system became in some cases merely a cover for the old game of "pull devil, pull baker" in the attainment of the fantastic "balance of power" which has been the evil dream of diplomatists since the Renaissance. This brought the League system into the diplomatic world. Although minor issues may be dealt with by cooperation, underlying such cooperation is the old preparation for future war which still dominates the foreign policy of most states. Foreign ministers and other representatives of political opinion are accompanied to League gatherings by staffs which include permanent officials representing the old type of diplomacy and exercising considerable influence over the heads of the delegation. Members of the Secretariat, which is hypothetically an international service paid out of common funds contributed by many states, are often looked upon by the governments whose citizens they remain as diplomatic agents of the old tradition seeking a special advantage, and they often act in that capacity.

Behind the old system, the new League system and the current practises of diplomatists, League officials and foreign ministers lies the issue of peace or war. The traditional diplomacy expresses the present social order's assumption of the possibility and even the probability of war. In the minds of the actual persons who have influence upon diplomacy and foreign policy there remains the conscious idea that "the state" is essentially opposed to other states. The state is therefore conceived primarily as a defense organization and secondarily as the instrument by which national or dynastic or

merely governmental interests are gained or defended against external groups called foreign or alien. Some vague doubt seems to have reached official quarters as to the distinction between "defense" of interests and the promotion of interests. In the Kellogg, or Paris, Peace Pact of 1928, for example, war is implied to be wrong except for defense, which presumably therefore is not "national policy"; and yet all national policy is explained as defense of legitimate interests. There is no way out of the logical impasse as long as the state is conceived as a defense organization and diplomacy as one of the instruments of the national policy of pressing interests opposed to other interests. Since diplomacy is assumed to be the advocacy of one interest against another and as the advantage of one state and its friends is assumed to be the disadvantage of other states, the methods of diplomacy are still often those suggested by Hobbes and Machiavelli. The interstate system, such as it was, of Renaissance states was a war system, in which peace was only an interval between wars. Each state had to use war as part of government, and diplomacy became an extended preliminary skirmish. The effort of diplomatists then is to secure allies and to obtain advantages of a strategic character in view of future danger. Thus finance and foreign investment and especially loans for expenditure on armaments have been the instruments by which diplomacy has secured friends for a future quarrel. Furthermore, to gain one's end in a war system deceit was necessary, especially in the preliminary diplomatic skirmish, and it still remains necessary in so far as there is a possibility of future wars.

The fraudulent character of diplomatic technique is then not altogether due to the nature of diplomacy itself but to the war system. The result upon the moral responsibility of agents has been noteworthy. All advocates pleading a special case tend to suppress what does not suit their case on the assumption that the other side also has an advocate. Thus diplomatists in the old diplomacy, regarding themselves as agents for one interest, lied and deceived on the assumption that they were advocates. The fundamental responsibility for such conduct rests upon those who derive advantage from force and fraud. But even foreign ministers sometimes still make the ancient plea of raison d'état or that other theory of irresponsible sovereignty salus rei publicae suprema lex as an excuse for acts that are considered as immoral or even as

illegal according to the accepted code of ordinary behavior.

Today, however, there is a vague feeling that honesty pays, and the rapid growth of international law and the much more exact thinking devoted to it may produce a new understanding of the comity of nations, with which Renaissance diplomacy will be inconsistent. The state, once conceived as only or mainly a defense organization, now deals with commercial intelligence, employment, public health and education, none of which are understood by the traditional diplomacy. Thus experts are continually used to assist diplomats ignorant of the real issues which concern modern states. Modern finance, commerce, industry and science have modified the state, or the nature of government, since the days when diplomatists were regarded as the chief experts on what was happening abroad. As a result the League system includes technical or specialist organizations and officials who connect the machinery of government across the frontiers of states in matters relating to labor legislation, public health, transport, finance and the like. Administrative offices and ministers of different states are in contact, often without the intervention or assistance of the foreign services.

Again, a new attitude among diplomatists, which may be called the new diplomacy, has begun to exist even if it is not understood by most diplomatists or most traditional authorities upon foreign affairs. This new attitude assumes the existence and the predominant importance of interests common to many states and to the peoples of those states. Health, social stability and the repression of violence are instances of such common interests. Upon this basis diplomacy is the pursuit by each government of interests common to many, and the method of diplomacy is cooperation not controversy. Should this view, not yet dominant in diplomacy, prevail it would make a great difference not only to the current business of diplomacy but also to the system and the persons employed. For example, such a conception displaces the military and naval attachés and removes such influences altogether outside the diplomatic system. These attachés stand for the old diplomacy of threat as a method of negotiation. They are "the state as defense." Their presence abroad depends upon the willingness of their governments to use threats of force as means of "persuasion" or to counter such threats by force. Again, the services of the

pleader or the advocate are less important and those of the expert in a special subject are more important in proportion as each state tends to cooperate with other states for specific purposes. The influence upon public opinion of the success of the League system in particular issues has had a very great effect upon the assumptions underlying criticism of foreign policy. It is not so commonly believed in modern states as it once was that diplomatists are augurs with a specially wonderful knowledge unattainable by common folk. Thus the social atmosphere surrounding diplomacy is changing; and even the most expert diplomatist has to breathe an air contaminated or invigorated by international finance, commerce and scientific intercourse. There is an immense increase in the influence of the newspaper, whose correspondents sometimes venture to know more about foreign countries than the diplomats of their own country resident abroad.

The value of these new developments depends of course on the character and objectives of the persons involved. In so far as the members of the new types of international organizations, conferences and the like are scientific experts or officials genuinely concerned with developing international cooperation rather than advantage seckers with the possibility of war corrupting their whole approach to international questions, the new bodies will function beneficially. In so far as journalists and publicists have the new approach, the press provides a channel for the new diplomacy. It must not be overlooked, however, that the same influences as those which molded the older diplomat have access to the new diplomat whether he be a member of the diplomatic service, an expert sitting on a technical commission or a journalist. The amount of change will be in direct correlation with the increased remoteness of such influences. The change of form in itself is significant only in so far as the new individuals functioning in substantially diplomatic capacities are free from the traditional group characteristics of the older diplomatists. The significance of the change depends on how free such individuals actually are of such characteristics. If they are altogether free, we are at the beginning of a new era in the relation between peoples.

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See: International Relations; Foreign Policy; State; Sovereignty; Nationalism; Capitulations; Exterritoriality; Consular Service; Immunity,

POLITICAL; ROYAL COURT; PUBLIC OFFICE; CIVIL SER-VICE; PRESS; PUBLIC OPINION; ESPIONAGE; TREATIES. Consult: HISTORICAL AND ANALYTICAL STUDIES: Krauske, Otto, Die Entwicklung der ständigen Diplomatie, Staats- und sozialwissenschaftliche Forschungen, no. 23 (Leipsic 1885); Genet, Raoul, Traité de diplomatie (Paris 1930); Szilassy, J. de, Traité pratique de diplomatie moderne (Paris 1928); Satow, Ernest, Guide to Diplomatic Practice, 2 vols. (London 1917); Callières, F. de, De la manière de négocier avec les souverains (Paris 1716), tr. by A. F. Whyte (London 1919); Finett, John, Finetti philoxenis (London 1656); Cambon, Jules, Le diplomate (Paris 1922); Clemens, Severus, Der Beruf des Diplomaten (Berlin 1926); Mendelssohn-Bartholdi, Albrecht, Diplomatie (Berlin 1927); Butler, Geoffrey, and Maccoby, Simon, Development of International Law (London 1928) p. 73-106; Hothorn, Carl, "Die völkerrechtliche Sonderstellung des Gesandten" in Zeitschrift für Völkerrecht, vol. xiv (1928) supplement no. 3; Dunn, F. S., The Practice and Procedure of International Conferences (Baltimore 1929); Rodd, J. R., Diplomacy (London 1929); Hale, O. J., Germany and the Diplomatic Revolution (Philadelphia 1931); Norton, H. K., Foreign Office Organization (Philadelphia 1929); Cecil, Algernon, "The Foreign Office" in Ward, Sir A. W., and Gooch, G. P., eds., The Cambridge History of British Foreign Policy, 1783-1919, 3 vols. (Cambridge, Eng. 1922-23) vol iii, ch. viii; Nightingale, R. T., "Personnel of the British Foreign Office and Diplomatic Service, 1851-1929" in American Political Science Review, vol. xxiv (1930) 310-31; Hatschek, J., and Strupp, K., Wörterbuch des Völkerrechts und der Diplomatie, 3 vols. (Berlin 1924-29).

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DIPLOMATIC PROTECTION. The modern institution of international law which authorizes a state to interpose with another on behalf of its

nationals there residing or present does not much antedate the French Revolution. It came into being with the migration of citizens to foreign countries at a time when the system of national states had become highly developed. While that period happened to be one also of a growing individualism and laissez faire, the institution of protecting citizens abroad is not primarily a reflection of those modes of thought. It may better be assimilated to the primitive form of social organization in the clan and to an early and deeply ingrained way of thinking which deemed an injury to a member of the clan to be an injury to the clan itself, justifying collective revenge.

The modern legal foundation of the institution is said to rest upon a principle enunciated by Vattel: "Whoever uses a citizen ill, indirectly offends the State, which is bound to protect this citizen; and the sovereign of the latter should avenge his wrongs, punish the aggressor, and, if possible, oblige him to make full reparation; since otherwise the citizen would not obtain the great end of the civil association, which is, safety" (Chitty-Ingraham translation, Philadelphia 1854, bk. ii, ch. vi, § 71). This principle is ambiguous and misleading, and unjustified conclusions have been drawn from it. Not every injury to a citizen is an injury to his state. The citizen abroad does not carry his national flag with him. Like every other inhabitant he is subject to the local law. It is only when he is "denied justice," by being refused access to the courts or to other remedies or by being maltreated in defiance of local law or of the so-called elementary principles of civilized justice or of treaties, that his state has a ground for international complaint. If he is injured by a private person or even in many cases by a minor official he must seek the means of redress which the local law affords and then show a denial of justice before an international claim becomes justified. If there are no local remedies to which he can resort, the case is of course different. He is also excused from exhausting local remedies where there is obvious bias against him, where the courts are unable or unwilling to render justice, or where legislation requires them to decide in a way contrary to international law. In the case of unredressed injuries by higher officials an international claim for indemnity may also be justified, for the state is deemed to assume liability. In general, it is only when the state has after opportunity failed to prevent the injury or failed to afford redress or to punish the

guilty, and has thereby indicated indifference or complicity, that a legitimate claim arises.

The seriousness of the problem of diplomatic protection lies in the fact that the entire population of two states may become involved in a controversy over an individual or a private corporation. Arguments for and against the continuance of the institution have therefore been urged with considerable insistence. In its favor it has been said that it affords a guaranty of stability in the treatment of foreigners in less developed countries; that it tends to establish a process and measure of justice consistent with international law; that it thereby benefits indirectly the local population; that by its promise of aid to the maltreated national abroad and its prevention of future maltreatment of foreigners it gives an assurance which promotes investment and migration abroad and the development of countries not yet fully exploited; and that when life is in imminent danger it is humanitarian in its manifestations. Against the policy it has been urged that the clan conception is obsolete and that protection abroad involves the people of two countries in a dispute essentially private; that its tendency is to place a premium on superior military strength in contacts with weaker countries; that it substitutes the methods of politics for those of law; that it constitutes an invasion of the sovereignty and jurisdiction of weaker countries; that it makes the intervening state plaintiff, judge and sheriff in its own cause without adequate opportunity for an impartial investigation of the facts; that it thereby promotes injustice rather than justice; and that in its support of economic nationalism it makes for imperialism and war.

In the analysis of both argument and actual current practise with regard to diplomatic protection it is important to distinguish between the protection of life and of property. Arguments drawn from the necessities of protecting life in imminent peril under circumstances where law has broken down can hardly be invoked to sustain the protection of property interests. In current practise an increasing restraint in the protection of property is already evident in the hesitation to intervene on behalf of citizens when foreign nations default in their bonds or in cases of mere breach of contract, since these are not regarded as international offenses. Where only property is involved, armed force is being used now not nearly so often as formerly.

But there are still many defects in the operation of the institution. Whether the citizen

abroad has sustained a denial of justice is a purely legal question. The methods to be used in settling it should be exclusively legal and judicial. Actually, to a considerable extent, they are political and occasionally military. Under the present system all three parties to the issue—the individual claimant, the defendant nation and the claimant nation—are in a precarious position. If the individual is a citizen of a strong state he may be able, at its discretion, to obtain its aid; if not he is helpless. Whether he can obtain protection depends often on the momentary political relations between the plaintiff and defendant states, on the political strength of the defendant state and on other non-legal factors. Thus the individual's relief, which should be governed exclusively by legal rule, depends on the accident of his nationality and on the political balance of power. The defendant state, moreover, is in danger of having coercion exercised against it on the unilateral decision of a foreign government that its citizens' rights have been violated. The weaker the state, the more exposed is it to arbitrary intervention; in very weak states a liability amounting almost to a guaranty of security of foreigners and their property has on occasion been imposed. Such a state may, to avoid the threat of intervention or coercive measures, pay a claim essentially unjust. A strong defendant state, on the other hand, may without fear of interposition violate the rights of an alien and may decline to arbitrate. Nor, finally, is the plaintiff state exactly in a happy position. It must make ex parte determinations on inadequate evidence and may be influenced by domestic political considerations to espouse a claim it should not support. On the other hand, it may be unable, by virtue of its political relations, to press a claim essentially sound.

Such a system of arrangements does not make for the growth of law or for peace. As an alternative it has been suggested in numerous circles both in the "exploiting" and "exploited" countries that the citizen abroad be left to bear the risk of his location and that he should take the law unqualifiedly as he finds it. The effort of defendant governments to force aliens to abide by a "Calvo clause" and forego the privilege of invoking the diplomatic protection of their own governments, whether embodied in constitution, law or contract, has not been generally successful; and states have refused to be bound by such an alleged waiver on the part of their citizens abroad. The suggestion of leaving the

citizen unreservedly to the local law for his redress, however, may on occasion result in depriving him of due process.

The weakness in the administration of protection can be to a considerable extent remedied by making a resort to arbitration more automatic than it now is. At the Pan-American conferences of 1901-02 and 1910 and at the Washington conference of 1929 the nations on the American continent committed themselves to arbitrate pecuniary claims. By article 36 of the Statute of the Permanent Court of International Justice the signatory nations commit themselves to obligatory arbitration of such claims. Possibly the habit of such judicial submission and the wider reign of law which it implies will gradually limit the defects of political protection. A movement has also been in existence for some years contemplating the possibility of permitting individual aliens, where denial of justice can be alleged, to sue states before an international forum, thus making diplomatic recourse less necessary. The primary purpose to which all remedial proposals must be directed is to assure the alien the protection of due process of law without involving the necessity of political coercion and all its international complications.

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See: Citizenship; Intervention; Jurisdiction; Externitoriality.

Consult: Borchard, E. M., Diplomatic Protection of Citizens Abroad (New York 1915); Eagleton, C., The Responsibility of States in International Law (New York 1928); Strupp, K., Das völkerrechtliche Delikt (Stuttgart 1920); Decencière-Ferrandière, A., La responsabilité internationale des états (Paris 1925); Borchard, E. M., "The Access of Individuals to International Courts" in American Journal of International Law, vol. xxiv (1930) 359-65; Harvard Law School, Research in International Law; Nationality, Responsibility of States, Territorial Waters (Cambridge, Mas., 1929).

DIPLOMA'TICS. See History; Records, Historical.

DIRECT ACTION. The use of this term to denote a theory of the methods of the labor movement dates from the beginning of the twentieth century, but as a vague phrase it occurred in labor and socialist discussions a generation earlier. Its origin is connected with the emergence of mass labor movements between 1868 and 1872 in France, Belgium, Switzerland, England, the United States and other countries and with the activities of the First International. These mass movements

revealed for the first time the power of economic labor organizations and their potentialities in the socialist and anarchist struggles against private property and state authority and gave the anti-Marxian elements of the day an argument in favor of what they called direct methods as opposed to governmental protection and parliamentary procedure.

With the development of trade unionism and socialism in western Europe and the United States between 1880 and 1900 the vague antithesis between political and economic action became a more definite issue. Owing to the unevenness of industrial development as well as to variations in national tradition and cultural antecedents the solution of this issue proceeded along different lines in the several countries. In Germany a reconciliation between the two methods was achieved in the social democratic movement, which recognized trade unionism and political action as its "two arms." In England a state of mutual tolerance was effected, though economic methods remained for the time being in the ascendancy. But in France the trade unions, annoyed and hampered by the overshadowing prestige of the political socialist groups and by the disruptive competitive bidding of these groups for the loyalties of the workers, turned sharply against all politics and in favor of the complete independence and selfsufficiency of economic organization and industrial methods.

Had this tendency worked alone it might have given rise in France to a labor movement similar to that which was developing simultaneously in the United States. The leading elements in the French trade unions were, however, traditionally socialist or anarchist and were as much concerned with doctrines and methods for the abolition of capitalism as with problems of trade unionism. This condition brought to the fore in the French trade unions the anarchists and other anti-Marxians who derived their inspiration from the First International and from older French revolutionary movements. These groups impressed the trade unions and the discontented socialist workers with the anarchist criticism of parliamentary democracy. Their contention that parliamentary democracy is merely a sham and a delusion for the workers was strengthened by the evidence that the growth of democratic government did not always help the workers in their disputes with employers, that parliamentarism tended to divert the labor movement from revolutionary aims to political issues and social reforms, and that political democracy favored the intellectuals in monopolizing the political and economic leadership of labor. As a result the French trade unions fell under the influence of the antipolitical, antidemocratic and anti-intellectual element which had been active in the French labor movement since the days of Proudhon, and between 1895 and 1906 they developed the theory of revolutionary syndicalism, in which the concept of direct action held the central place.

This development in French trade union circles was paralleled by two movements among French socialists to revise the philosophy and methodology of Marxism. The right revisionists, led by Jaurès, tried to orient socialism toward Kantian moral precepts and a greater faith in political democracy. The left revisionists, Sorel, Lagardelle and Berth, stimulated by the writings of Nietzsche, Renan and Bergson, drifted toward intuitionism, creativism and a moral activism which stressed the value of the strenuous life and the historic role of the trade union movement; between 1900 and 1906 these writers helped to give the idea of direct action a larger moral content and philosophical clarity.

As the characteristic and challenging doctrinal element of revolutionary syndicalism direct action is bound up with the idea of class struggle. It is conceived as the dynamic power which transforms the vague class feeling of the workers into a clear class consciousness, giving vitality to the class struggle—presumably the only creative force for improving the position of the workers in the present and for developing the will power and the moral character of the workers necessary for their final emancipation. Direct action can perform this function because it calls for activities in which the workers are themselves the participants and in which their intellectual and moral capacities and energies are fully aroused and put to the test.

Direct action includes various specific methods which may be classified into two groups: those used against employers and those used against the state. Among the former are the well known devices of the strike, the boycott, the label and sabotage. These methods have of course been most frequently used entirely apart from any conscious program of direct action. Nevertheless, even in the form in which they are used by conservative trade unions they tend to pit the workers directly against employers and to educate them concerning their economic

status and social possibilities. But direct action tries to refine and develop these devices so as to accentuate their revolutionary and educational effects. The exponents of direct action have perfected various forms of strike strategy as well as the "strike on the job" (bad, slow or stupid work), the grève perlée (misdirection of baggage or perishables) and other forms of sabotage. Some of these forms tend to produce violence, which, however, is not always intended and is not a necessary part of direct action. The essential element in all the economic methods of direct action is the great extent to which the workers are made to act individually and collectively and are brought face to face with the economic and social implications of their economic status.

The methods of direct action used against the state include mass propaganda, agitation, manifestations, demonstrations, antimilitarism, antipatriotism and any other means which may compel a government to make concessions to the workers. They exclude participation in parliamentary politics and in electoral campaigns because the parliamentary system is regarded as the opposite of direct action and as tending to develop policies of bargaining, compromising and collaboration which are destructive of the moral character and militancy of the workers.

By direct action against employers and the state the workers can wrest from the ruling classes reforms which may improve their condition today. Such reforms, however, cannot pacify the working class because they do not alter the fundamental evils of the wage system. On the contrary, every successful strike, every effective boycott, every gain in wages, every shortening of hours of work, every improvement in the general conditions of employment, strengthens the workers' urge for more power and sharpens their will for the final battle. That battle, which will be the supreme and last act of the class war and which will free the workers forever, will be the general strike.

Direct action implies the initiative, the example and the leadership of a conscious minority devoted to the interests of its class. Every strike, every labor demonstration, every movement of the working class, is generally started and guided by such an active minority. The conscious minority, however, can succeed only by setting in motion the generally inert mass of the working men and by making them participate directly in the struggle. The action of the conscious minority is thus the opposite of

the action of parliamentary representatives, who are bent on doing everything themselves and on keeping the masses quiet and inactive. The conscious minority is the true advance guard of the working class and comes into being through a natural process of selection in the trade unions of the more sensitive, able and alert workers, who assume the leadership and direction of the mass.

Direct action as a doctrine of methods and of collective labor action was definitely adopted, to the exclusion of political action, by the French Confédération Générale du Travail at its congress in 1906 in a resolution known as the Charter of Amiens. Between then and 1910 the doctrine spread to England, the United States, Italy and several other countries, giving rise in those countries to new political and industrial labor movements. In its migrations it underwent many modifications. The Industrial Workers of the World in the United States altered the doctrine in its application to collective agreements by renouncing them. The Italian trade unionists applied it in somewhat different form in their agricultural syndicates. In England it was reinterpreted by the guild socialists and by the British syndicalists. In all these countries the adoption of direct action was due to disappointment with parliamentary labor parties and with the slow methods of the older trade unionism and reached its climax during the great labor unrest from 1911 to 1913 caused by industrial depression, stagnant wages and the rise of the unskilled.

After the eclipse of all revolutionary doctrines during the first three years of the war direct action again became a subject of discussion in labor and socialist circles with the formation of the Third International in 1919. The Russian Communists, in their efforts to form an alliance with the syndicalists of France, Spain and Italy and with the American I.W.W., were forced to consider the theories of direct action advocated by these groups. The discussions of these theories were carried over from the Communist International to the Red International of Labor Unions in 1921. There seemed a possibility for a while of some reconciliation of the syndicalist doctrine of direct action with the communist theories of social revolution and proletarian dictatorship. The attempt failed, however, and in 1923 the syndicalist advocates of direct action broke away from the Third International.

Since then the outstanding exponents of

direct action have been the anarcho-syndicalists, who form small groups in the labor movements of Germany, France, Holland and Sweden and are of greater importance in the labor movements of Spain and of Latin America. In its present day version direct action is essentially a restatement of the pre-war doctrine. The difference lies in the incorporation of some of the newer methods and strategies developed since the war, such as the demand for comanagement in industry and the struggle for the six-hour day, and in the opposition to the communist idea of the dictatorship of the proletariat on the one hand and to the International Labour Office of the League of Nations on the other. The present day theorists of direct action also draw a clearer line between mass strikes by workers of the same trade or industry or several related industries for some improvement under capitalism and the social general strike which will usher in the social revolution. They also put greater emphasis on the need for international organization and look to the lead of their International Workingmen's Association, whose headquarters are in Berlin.

The concept of direct action has exercised considerable influence in contemporary political and labor movements and on contemporary political and social thought. The ideas of the general strike and of the conscious minority can be traced directly and indirectly in communist thinking and action. Through the I.W.W. the idea of direct action has influenced American trade union structure and strike strategy. On the other hand, direct action was the first significant revolt against the reformist interpretation of Marxism, the first proclamation of the moral character of the social struggle and the first effort to apply the newer philosophical and psychological ideas to the problems of the labor movement. Through its influence on the younger French, British and American political writers and sociologists the doctrine of direct action has contributed to present day criticism of sovereignty and of the democratic state, and through its analysis of the processes of the social struggle it has augmented the interest in the study of the dynamics of economic and social institutions.

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See: Labor Movement; Socialism; Syndicalism; Communism; Anarchism; Industrial Workers of the World; General Strike; Labor Disputes; Violence; Revolution; Class Struggle.

Consult: Levine, Louis (Lewis L. Lorwin), "Direct

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DIREC'I' LEGISLATION. See Initiative and Referendum.

DISABILITY INSURANCE. See HEALTH INSURANCE.

DISARMAMENT. According to common usage the term disarmament is synonymous with reduction of armaments. Although international efforts to achieve general voluntary reduction or limitations of national armaments have fallen short of their objectives (see Limitation of Armaments), partial and local disarmament may be said to have resulted, first, as a consequence of bilateral agreements and, second, as a result of compulsory disarmament imposed from time to time upon a defeated power as a sequel to conquest or as a condition of peace terms.

The first type is exemplified in the Rush-Bagot Agreement of April 8, 1817, in which Great Britain and the United States limited the naval armament on the Great Lakes to three vessels for each power. It appears, however, that neither party has strictly lived up to the terms of the agreement, apparently because it has not been revised to correspond with modern conditions. Nevertheless, the Rush-Bagot Agreement has had the effect of preventing the construction of large and hostile fleets on the Great Lakes. Had the United States and Great Britain been involved in serious disputes for which no pacific solution could be found, it is doubtful whether the Rush-Bagot Agreement would be in effect; but few such disputes have existed. Since 1909 many controversies between Canada and the United States have been settled by a joint high commission. The Rush-Bagot Agreement illustrates the thesis that disarmament and effective machinery for the settlement of disputes must go hand in hand.

A large number of agreements have been concluded which have provided for the razing of fortifications on strategically located territory. For example, the Peace of Utrecht of April 11, 1713 (art. 1x), provided that the king of France should demolish the forts of Dunkirk. In the Treaty of Paris, February 10, 1763 (art. VI, XVII), Great Britain ceded the islands of St. Pierre and Miquelon to France on condition that they should not be fortified and that only a guard of fifty men for police purposes be maintained. Great Britain also agreed to demolish the forts erected by British subjects on Spanish territory in the Gulf of Honduras (for similar provisions see also art. vi, Treaty of Lunéville, February 9, 1801; art. 12, Treaty of May 30, 1814, between Prussia and its allies and France; art. IV, convention of August 13, 1814, between Great Britain and the Netherlands; arts. 111, v, second Peace of Paris, November 20, 1815; art. III, Treaty of London of May 11, 1867; Treaty of the Fortresses, December 14, 1831). Within recent years agreements have provided that no fortifications shall exist in Luxemburg, in the Strait of Magellan, in certain parts of Bulgaria and Montenegro, below the Iron Gates of the Danube, in a ten-mile zone along the frontier between Burma and Tibet, on the island of Sakhalin, on the Moroccan coast across from the Strait of Gibraltar, in a zone along the frontier between Sweden and Norway, on the Aland Islands or on Spitsbergen. The Treaty of Versailles required the dismantling of German fortifications in certain regions of the Baltic and of all fortifications within fifty kilometers east of the Rhine and prohibited the construction of new fortifications in the latter region as well as in the Saar. Military and naval bases and fortifications were also prohibited in the B and C mandates. By article 19 of the Naval Treaty of February 2, 1922, concluded at the Washington Conference, the construction of new fortifications and bases in certain possessions of the United States, the British Empire and Japan in the Pacific was prohibited. Finally, the Straits Convention of July 24, 1923, provided for the demilitarization of both shores of the Dardanelles and the Bosporus, except for Constantinople. To prevent this demilitarization from injuring Turkey the Allied Powers agreed to meet any act of war or threat of war in regard to the straits "by all the means" that

the League Council "may decide for this purpose." Thus while defortification agreements have been numerous they have been applied only to small areas and have not therefore met the major problems of disarmament.

With respect to compulsory disarmament one of the earliest examples was that imposed by Rome upon Carthage at the end of the Second Punic War. Under the terms of the treaty of 201 B.C. Carthage promised to surrender her war vessels, except ten triremes, and all her elephants (Polybius, xv: 18). In modern times the United States has used its influence to induce contending factions in Central American and Caribbean revolutions to disarm. Such was the case in the Honduras revolution of 1911, brought to an end by a peace agreement which included a provision for disarmament, and in the Nicaraguan revolution of 1925 to 1927, which was brought to an end by the Tipitapa Agreement of May, 1927. In negotiating the latter agreement the American representative, Colonel Henry L. Stimson, declared that if the Nicaraguans did not voluntarily disarm the United States would forcibly oblige them to do so. Likewise at the beginning of the occupation of Haiti in 1915 the American authorities signed an agreement with the cacos chiefs whereby the latter agreed to turn in their arms and ammunition. Those cacos that did not do so were to be treated as bandits.

The two outstanding historical examples of compulsory disarmament, however, are the famous Articles séparés, concluded during the Napoleonic wars, and the provisions of the peace treaties of 1919–20. Prince William of Prussia, following his defeat by Napoleon, signed at Paris in September, 1808, an agreement which required the reduction of his army to 42,000 men for a period of ten years and which, moreover, prohibited the organization of a militia. Prussia soon evaded these provisions, however, by passing through the ranks as large a number of men as possible, thus building up a trained reserve and foiling French inspection through various means.

At the Paris Peace Conference of 1919 the allied governments imposed drastic disarmament provisions upon the defeated powers. The size of the armies of the defeated powers was fixed as follows: Germany, 100,000; Hungary, 35,000; Bulgaria, 33,000; Austria, 30,000. Conscription was abolished and voluntary enlistments must be for a term of twelve consecutive years; discharges must not exceed 5 percent

of the total effectives in any year. Educational or sporting organizations must not concern themselves with military matters (part v, Treaty of Versailles). The purpose of these provisions was to prevent the building up of a large trained reserve. Moreover, the German general staff was abolished, munitions factories with certain exceptions had to be closed and the export and import of arms were prohibited. Germany was forbidden to manufacture or import any tanks or armored cars or to maintain any guns and howitzers of a caliber exceeding 7.7 cm. and 10.5 cm. respectively, except when already mounted in fortifications not ordered disarmed. The armament establishment of the German army cannot be changed without the consent of the League. Furthermore, the size of the German navy was drastically reduced to six small battleships, six light cruisers and twelve destroyers. Germany was forbidden to maintain any submarines or military aircraft or to manufacture and use poison or other gases; nor is Germany allowed to send any military, naval or air mission to any foreign country nor to permit any such mission to leave her territory. The other parties to the treaty undertake not to engage any German in their military establishments. Similar drastic provisions were imposed on Austria, Hungary and Bulgaria.

Although these provisions represented the most ambitious effort that had yet been made to reduce and limit armaments of all kinds they omitted to limit military expenditure. Consequently the German government in 1928–29 was spending 769 million marks upon an army of 100,000 men as compared with 1948 million marks spent in 1913 upon an army of 842,000 men. The result of such expenditures was to give Germany a highly skilled professional army, which according to some military observers was more proficient, man for man, than any conscript army in Europe.

In order to enforce these restrictions the peace treaties provided for the establishment of interallied control commissions with powers of inspection to see that Germany actually reduced its military establishment. Apparently the intention of the treaties was that these control commissions should be dissolved as soon as reduction took place. But according to article 213 of the Treaty of Versailles the Council of the League of Nations, acting by majority vote, may investigate the armaments in Germany so long as the treaty remains in force. The activities of the interallied control commissions

aroused intense resentment in Germany, and following the establishment of a plan by the League Council in 1924 whereby a commission of inquiry may be sent into any of the four countries bound by the disarmament clauses upon the demand of any member of the League the Allies agreed to abolish the control commissions. These bodies were withdrawn from Germany in January, 1927, and from the remaining countries during the next few months. Germany undoubtedly prefers the intermittent inspection of the League (which apparently has not yet been resorted to) to the continuous inspection of an exclusively interallied commission. Nevertheless, doubts have been expressed as to whether the League of Nations should attempt to enforce disarmament provisions imposed by one group of powers upon another as a result of war.

So long as the Allies maintain large armaments the German government has no incentive to live up to the disarmament provisions of the peace treaties. Whether or not these provisions have been evaded as in 1808, nationalist sentiment in allied countries has used the suspicion that such evasion is taking place as an argument in favor of maintaining a large military establishment. German opinion, on the other hand, has been antagonized because the Allies have so far failed to disarm. According to part v of the Treaty of Versailles the armaments of Germany were reduced "in order to render possible the initiation of a general limitation of the armaments of all nations."

While the leading governments have expressed a desire for disarmament they have invariably contended that they cannot disarm until their neighbors do so. Otherwise they might be exposed to attack from a greatly superior force. While this argument may have some validity so far as the relation of one great power to another is concerned, it is clearly impossible for a country as small as Belgium or Denmark, no matter how much it strains its resources, to develop military strength equal to that of a powerful neighbor. According to the view of some observers it is to the interest of such small powers not to attempt to maintain armaments but to trust their independence to political guaranties and international organization, thus giving evidence of an earnest desire for peace. Such arguments were responsible for the passage of a bill which provided for nearly total disarmament by the lower house of the Danish parliament in the spring of 1926. Oppo-

nents argued, however, that even though Denmark could not maintain an army as powerful as that of rich neighbors, nevertheless in time of invasion an inferior force would be better than no force at all. Moreover, certain foreign commentators declared that as a member of the League Denmark was bound to assist in the carrying out of articles x and xvi of the Covenant and therefore should not reduce her armaments except in connection with a general international reduction. These latter arguments prevented the passage of the bill by the Danish senate. Nevertheless, it is interesting to speculate as to whether or not in time of war the population of a country as small as Denmark would not be better off if it made no military resistance to an invader but merely followed a policy of passive non-resistance similar to that applied by Gandhi and his followers against British rule in India.

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See: Armaments; Limitation of Armaments; Arbitration, International; Peace Movements; Conquest; World War; League of Nations.

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DISASTERS AND DISASTER RELIEF. The functioning of society is from time to time disturbed by such occurrences as pestilences, floods, fires, famines, storms, earthquakes, volcanic eruptions and large scale industrial accidents. Property is destroyed and lives are lost in such disasters, and there are social complications of peculiar character. The study of such disasters has begun only recently and little of conclusive character can be said about them. In a sense wars, or more properly some of the particular incidents of war, are similar disasters, but there essentially different problems are involved.

Man's view of the causes of disasters has undergone several historic changes. In early times it was widely believed that demons or deities caused them, and such theories survive in

the legal phrase "act of God." The ancient prophet and sage was often called on to explain to his ruler and people the cause of such anger and to advise how repetitions might be avoided. Propitiatory sacrifices were offered, flagellation and vows undertaken. Such interpretations were made throughout the Middle Ages and today are held in some regions or strata of civilized society. Some nineteenth century Malthusianists considered disasters necessary to prevent the multiplication of man beyond the limit of his food supply, a theory which has an interesting counterpart in recent arguments presented by scientists that plagues operate in this way among wild animals. Modern sciences, particularly epidemiology, seismology and meteorology, have contributed knowledge of the natural and physical causes of disasters and have led to a new attitude which regards disasters as a problem to be approached scientifically.

The principal epidemic diseases are malaria, influenza, cholera, plague and smallpox. Plague alone is known to have assumed pandemic proportions three times: during the reign of Justinian; in the fourteenth century, when it was called the Black Death; and in the last decade of the nineteenth century. War is accompanied by outbreaks of whatever disease may have been indigenous among the civilian population. The introduction of non-immunes into infected territory, intense congestion, absence of sanitary safeguards, severe economic stress including exposure and starvation, combine to give rise to epidemics. Famines are always associated with typhus, relapsing fever and malaria.

Disastrous floods are caused by the breaking of dams, by cloudbursts, by sudden melting of snow and ice or excessive precipitation over a considerable portion of a watershed. The monsoon rains of the Asiatic interior reach China in late summer, and millions have perished in the floods of the Hwang Ho and the Yangtze River. Heavy crop loss caused by floods may result in famine. In the United States floods are most common in the Mississippi valley and occur in winter and spring. The Mississippi flood of 1927 affected seven states and covered 26,000 square miles.

The principal destructive storms are tropical cyclones and tornadoes. The former are peculiar to five regions: the West Indies, the Gulf of Mexico and Florida; the China Sea, the Philippine Islands and Japan; the India coast both on the Bay of Bengal and the Arabian Sea; east of Madagascar; and east of Australia near Samoa.

Among the most destructive tropical storms were that which demolished Galveston in 1900, that which affected Porto Rico and Florida in 1928 and that which swept Santo Domingo in 1930. Tornadoes are the most violent of all storms. Completely destructive wherever they touch the earth, they are peculiar to the Mississippi valley and the southern United States. In the past ten years about one hundred have been recorded.

There are two great zones in which earthquake and volcanic eruptions are probable: one outlined by the Alps and Mediterranean, the Caucasus and Himalayas; the other surrounding the Pacific Ocean, following the Cordilleran mountain system and the festoons of islands on the borders of eastern Asia and Malaysia. Earthquake shocks occur with little or no warning, like that in 1923 which cost Japan 200,000 lives. Submarine earthquakes may cause destructive waves of excessive height. Although volcanic eruptions do not usually cause great loss of life, that of Vesuvius which buried Pompeii and Herculaneum is epic; and in 1815 Timboro, a supposedly extinct volcano in Java, is said to have caused the death of 100,000 persons.

Famines were once common throughout the world and still occur from time to time, particularly in economically backward areas such as India, China and Russia. The most frequent cause is crop failure, due to drought, excessive rains, untimely frost or insect pests. In some cases they have been aggravated by an economic system which strips a wide area of necessary reserves or interferes with importation. War may produce famine directly through the destruction of standing crops and reserves or indirectly by blockades and sieges. Temporary and localized famine is often a complication of other disasters, as when earthquakes and volcanic eruptions destroy food stores and the arteries of transportation or when plagues cut man power and food production.

The effects of disasters have been little studied and are difficult to summarize; it is especially hard in the present state of knowledge of the subject to differentiate accurately between the effects of catastrophic and long drawn out disasters. Where a disaster does not wipe out the social organism at one blow, as it presumably did in the case of Pompeii, there seems to be a fairly high potential of economic recovery, especially where assistance may be had from neighboring regions. Often, especially where a wide area is affected, there ensues a period of

economic and social instability characterized by fluctuating prices, shift of class lines and movement of population. The shock of disaster often produces unusual or extreme types of human behavior. On the one hand, acts of heroism, altruism and a strong sense of mutual dependence and obligation are called forth and, on the other, there are exhibitions of unusual greed and depravity. Long drawn out disasters, such as the Black Death and other plagues, seem to result in widespread unbalancing of manners and morals; the aftermath is characterized by social unrest, profiteering, unproductiveness, extremes of debauchery, extravagance, avarice, sexual looseness, hysteria and insanity. The desire to fasten blame for the disaster has sometimes led to the persecution of alien or suspect groups in the community. The relation of disasters to pessimistic philosophy and religious skepticism has its classic illustration in Voltaire's Candide. Sometimes the occurrence of a disaster is utilized to stimulate emotions and demonstrations of group solidarity, as when the Italian earthquake of 1928 was made a mobilization point for national effort and a stimulus for emotions of national solidarity directed to ends far beyond the repairing of disaster damage, or when the Black Death became the occasion for wholesale Jewish persecution and eviction.

The emotions stimulated by disasters, combined with the opportunity to rebuild along new lines at a cost no greater than that of duplicating what has been destroyed, have resulted in various reforms. More directly such significant institutions as the English Poor Law of 1586, government relief works and in part the English corn laws were outgrowths of disasters which came to play a crucial role in subsequent history. Careful town planning, including the laying out of parks and the abolition of slums, has followed several disasters. Even political reforms have come about; in the stress of the Galveston flood the commission plan of municipal government was given its first trial with such success that it spread to many other American municipalities. After the Tokyo earthquake of 1923 experts in town planning, municipal government, social work and the like were called from all parts of the world to aid in rebuilding the city along improved lines. Governments collapse, sometimes with the assistance of subversive elements: ordinary authority ceases to function and new leaders take power. Where the stabilizing influence of outside regions unaffected by the disaster is brought to bear, recovery is generally attended by political restorations; but such disasters as famine, especially where long continued warfare has contributed to bring it about, frequently result in basic social change and even in revolution. Indeed, famines are sometimes utilized if not created as instruments of policy in social conflict. This is the case in a successful wartime blockade and was so in the advocacy of enforced famine by anti-Communists during the early years of the Soviet Republic. The employment of sabotage tactics may involve the same principle.

As social problems disasters involve a double task: prevention or control, and relief after the occurrence. Prevention and control have long received attention from state and private agencies, and although handicapped by the fact that each new disaster occurs under conditions peculiar to its geographical region have had increasing success as the methods of applied science have improved. The work of epidemiologists and sanitarians, supported by public health measures, is effective in epidemic control, although there is not yet assurance that malaria, plague, cholera, influenza and smallpox may not again assume epidemic or pandemic proportions. Improved agricultural, storage and transportation methods have eliminated famine from most parts of the world. Floods may be guarded against by the building of dams and reservoirs and by preventive forestation. Floods, tropical cyclones and tornadoes can be predicted by meteorologists, and weather bureaus are equipped to warn those in danger. Annual fire loss has been reduced as municipalities have improved their fire departments and established building regulations. Government assistance has reduced danger from forest fires. Although earthquake prediction is still uncertain seismologists have made contributions to the establishment of such a science. In storm or earthquake regions city codes favor the use of types of buildings less likely to be destroyed. In rebuilding after an earthquake lines of fault may be avoided for business and residential sections and used for parkways. Floods may be somewhat controlled by means of levees, reservoirs, dredging, spillways and flood ways. Although it is possible to carry insurance for almost any type of disaster loss, hazards are seldom so great that it is considered feasible and consequently few are protected in this manner.

The attitude toward the problem of relieving sufferers and repairing damage has been different at differing stages of social development. In the antique and mediaeval worlds, when the distribution of grain was regarded as a matter of public concern, the state normally undertook relief, at least in so far as the problem of food was involved. Where public granaries existed surplus supplies were made available by the state for the relief of the stricken areas. Sometimes military forces were dispatched to the scene of the disaster to maintain order and assist in relief or reconstruction.

The development of modern economic and political theory resulted in a change of attitude toward the problem of disaster. Aside from the effects of Malthusianism, which tended to accept disaster as a necessary evil, the shifting of responsibility for economic welfare from the state to the individual diminished considerably the sense of public concern; it was easy to take the view that the sufferers might have avoided their difficulty if they had taken proper precautions. Since the distribution of grain was no longer a matter of public policy there were no public stores which the state might dispose of, nor were public funds readily available for medical or other relief. Private individuals who had stored grain had done so with a view to future commercial possibilities and were anxious to realize this profit rather than to relieve sufferers at their own cost. Such an attitude was particularly strong where the sufferers differed either in religion or in nationality from those who might potentially give relief. Although it remained customary for Jewish communities and other special groups to provide relief from communal funds for disaster victims, even in distant places, who were bound to them by particular ties, in general older views of obligation were being abandoned.

The development of humanitarian thought and the growth of a new wealthy class possessed of considerable sums of mobile capital combined to create a new method of relieving disasters. Along with other philanthropic developments it became common for wealthy individuals to provide large sums for disaster relief, and such funds were supplemented by smaller contributions. Especially is this true in recent years when high pressure campaigns have been conducted, bringing the apparatus of publicity and propaganda to bear and exploiting among large masses the strong emotional appeal of a disaster. The development of a scientific approach in social work makes clear the fact that disaster relief cannot be a simple process of sharing between a community with a surplus and one in dire tem-

porary need. With great sums of money, however, and a large personnel involved disaster relief shares some of the unfortunate characteristics of any great human undertaking. Sometimes secondary political considerations play a role in the work of organizing and distributing relief. Organizations may permit racial, religious or political criteria to influence their distribution of relief funds. Disaster relief sometimes is made a vehicle for propaganda. Famine relief in Soviet Russia would, it was hoped by many of its supporters, help to win the Bolshevists or their followers to a new view; in the campaigns for funds for famine relief in India and China it has often been urged that such relief would advance the interests of Christian missions in the Far East; it has been charged that famine relief for the Jews of eastern Europe undertaken by American and west European Jewry has been attended by a more or less concealed effort at remolding traditional attitudes along new lines. Inside the relief organizations personal, political and social ambitions and interests find expression, sometimes with the result of great loss in efficiency; but in spite of these drawbacks the situation of individual sufferers in a disaster cared for by a large philanthropic organization using scientific methods is infinitely better than it has ever been before.

The trend of private disaster relief has latterly been toward the centralization of organizations and the establishment of permanent relief bodies. The Red Cross movement, organized in 1864 to aid war sufferers, has undertaken peacetime activities, one of the chief of which is disaster relief. In this movement there are sixtyseven national societies, the international Red Cross organizations, a staff of medical and other technical experts and mobile reserve funds available for quick distribution. During and after the World War there arose such organizations as the American Relief Administration, the American Committee for Devastated France, the Near East Relief, the Friends' Council for International Service, the Jewish Joint Distribution Committee and the Workers' International Relief (a Communist body which regards its work as military rather than charitable). Through all of these, orphanages, schools and hospitals have been established and provisions made for suffering refugees. The International Relief Union, proposing to replace wasteful and confused relief methods with a unified program, is in process of formation under the auspices of the League of Nations. Such institutions are

equipped to conduct effective campaigns for voluntary contributions to meet relief expenses and to procure trained and efficient personnel. They are supplemented by churches, lodges, clubs and similar organizations, which appeal to their own membership for funds, for general relief or for the relief of particular groups.

While the state has shifted fundamental responsibility to private individuals, most governments assist relief work through the loan of equipment, troops, technical personnel and sometimes even financial contributions. Such government cooperation is often of extralegal character, reflecting an official reaction comparable to that of the private individual rather than a sense of state responsibility. This fact along with the development of an international organization under League auspices might be an indication of a return to the older attitude. As a matter of fact, disasters have on the whole tended to deflect state attitudes from a course consistent with laissez faire theory. The appeal of a disaster to the emotions is so compelling, the social dangers involved so great, so obvious and so dramatically presented that the most antipaternalistic states have in a sense been manoeuvred into adopting paternalistic if not socialistic policies as a result of disasters. When the British crown took over power in India in 1858 it substituted a policy of laissez faire for the commercially motivated famine fighting policy of the East India Company, but by 1873 the state was importing food for famine relief. Since the Famine Commission Report of 1880 the state has accepted responsibility for preventing starvation, leaving to private charity the care of other less basic needs. Scientific and intelligence staffs, relief workers, food purchase funds and distributing machinery are provided by the state. Disasters have tended on the whole to increase the distance between political theory and reality and to drive into the modern state another wedge through which paternalistic attitudes may enter.

Increased interest in social control in recent years has provided a technique, which is still imperfect but evolving, for handling the problem of relief. The work of relief involves a number of technical and social problems, for many of which no satisfactory solution has yet been found. There have been differences of opinion in regard to the advisability of the distribution of money or goods and in regard to the principles of indemnity for loss, equal distribution or relief according to need. Experience has

shown that the best results follow the giving of relief on an individual basis and of a kind and in a manner indicated by a study of individual needs. Sometimes employment on special public works is resorted to as a means of enabling sufferers to earn relief, a system prevailing especially in India. In any case, immediately following a disaster there is an emergency period when it is necessary to supply food, clothing, shelter and medical care as expeditiously as possible, usually upon a group basis. The restoration of normal conditions can be best approached through a program of family rehabilitation on a social case work basis with the needs of the family the determining factor. Such a program may include the construction or repair of homes; the restoration of small businesses; the provision of furniture, seed and livestock; long time medical care; legal aid, establishing trust funds for the vocational training of widows or young persons or giving support during the minority of children; in short, whatever meets the needs of the individual affected by the disaster. It is deemed unwise to assume responsibility for social problems not caused by the disaster, although such problems are called to the attention of local organizations. It is not the practise to undertake the reconstruction of public or community projects such as schools, churches, streets or public utilities. Satisfactory family rehabilitation should make it possible for citizens to accept normal social and civic responsibility. Such a program requires the employment of trained and experienced personnel, the gathering of individual records covering social data, losses, liabilities and assets, reports of the progress of the work, a final report and strict public accounting of all funds received and expended.

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See: EPIDEMICS; FAMINE; BLACK DEATH; PUBLIC HEALTH; SANITATION; COMMUNICABLE DISEASES, CONTROL OF; FIRE PROTECTION; FLOODS AND FLOOD CONTROL; RED CROSS.

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DISCOUNT RATES. See Banking, Commercial; Central Banking.

DISCRIMINATION, PRICE. See Price Discrimination.

DISCRIMINATION, SOCIAL. See Social Discrimination.

DISCUSSION. As a social phenomenon discussion implies preceding or potential conflict. In this sense it is an instrument employed to resolve differences prior to overt conflict or a means whereby overt conflict itself is brought to resolution. More rigorously defined discussion is an orderly procedure of oral exchanges between participants involved in an immanent or social conflict, designed to resolve differences and permit joint action. In so far as discussion is utilized prior to overt conflict it may be regarded as an educational tool designed to establish harmonious relations between individuals and groups through the revelation of their differences. When used in this manner conflict is regarded in an anticipatory sense and to a certain extent is resolved once discussion has begun. The establishment of a group for discussion which includes two elements previously in a state of overt conflict brings into existence a situation similar to that prevailing within any group including variations of interest not in a state of overt conflict. That is to say, a bipartisan body for discussion and resolution of differences is essentially the same in function as a partisan body which by including a number of individuals inevitably must eliminate differences by discussion before even a partisan conclusion is reached.

Wherever parliaments, assemblies or committees exist, some form of discussion is utilized. Indeed, it may be stated that discussion is the recognized substitute for the use of force, coercion or arbitrary authority; to confer—that is, to discuss—is to grant that if any solution is found for a problem it will be one in which joint interests have been so far taken into account as to render absolute and arbitrary authority impossible. It thus happens that parliamentary or congressional bodies are representative of diverse interests; likewise, parliamentary committees are invariably constituted in such

manner as to permit representation of both majority and minority parties. The general assumption underlying all joint deliberative bodies is that the procedure of discussion (conferencing) will somehow lead to conclusions in which all valid interests are represented.

The orthodox conception of discussion, as simply stated in the above paragraph, has been radically altered during the past two or three decades. All forms of discussion procedure in common usage have been challenged by the advocates of so-called new or progressive education. These critics have pointed out that arbitrariness is not eliminated merely because participants meet face to face and exchange facts, experiences or opinions; this procedure, so the critics claim, amounts to nothing more than superficial homage to a naïve conception of democracy. The crafty chairman or the forceful individual is able to gain his way as easily in a committee as in a mass meeting. As a result of this criticism discussion has come to take on some of the aspects of a skill or device, if not a technique. As currently conceived, the orderly procedure of discussion involves a sequence similar to that of the learning process as analyzed in Dewey's How We Think. Those who now advocate the use of discussion as an instrument for resolving social conflicts affirm that the skilled leader of discussion or the chairman should be an educator rather than a person seeking followers. He should assume as his main function the tasks of maintaining relevancy in discussion, securing adequate representation of all involved interests, refining the contributions of participants and adhering to a consciously conceived outline of procedure or method.

Discussion considered from its methodological or procedural side may be viewed as involving seven distinct steps, namely: (1) an examination of the nature of the problem or situation confronting the group in order to ascertain that all participants understand the situation in relatively the same manner; (2) the discovery of the most important problem or aspect of problem in the total situation—ordinarily it would be at this point that the greatest diversity of opinion would arise; (3) the revelation of differences of interest, attitude, opinion, conception of fact, or of value—at this point devices intended to reveal differences without allowing the heightening of emotions are employed; (4) a reevaluation of interests, attitudes, opinions, conceptions of fact, and of valuesthe assumption here is that a candid confrontation of differences leads naturally to modifications; (5) refocusing the isolated problem within the total situation as initially confronted—at this stage attention is directed toward a reconfiguration of the total situation in terms of the preceding discussion of the specific item or problem, to make sure that all participants view the problem in its realistic setting and to indicate the extent to which a restatement of the total situation is now necessary; (6) presentation of various steps which might, if acted upon, carry the group toward a solution of the problem and a resolution of differences with consideration of all possibilities of action which the group is capable of suggesting or inventing; (7) acceptance of an experimental program of action with the assumption that activities will alter the situation as a whole and that therefore the program of action together with its consequences is to be subject to subsequent review.

Discussion procedures approximating the above outline are being utilized by numerous types of conference groups, particularly those representing educational, religious, interracial and social work and industrial interests. At least one agency exists for the purpose of studying and promoting discussion as an instrument for social adjustment, and two institutions of higher learning offer courses of study purporting to train discussion leaders. Thus it appears that discussion as a social device rooted in educational theory and democratic philosophy is likely to become incorporated within the texture of various administrative techniques. Governmental bodies for the most part continue to utilize the method of debate and have not yet begun experiments with true discussion. Joint committees in industry consisting of representatives of employees and of management have begun such experiments but only in isolated cases.

In the foregoing analysis discussion has been spoken of as a device, tool or instrument with the intimation that it may develop a special technique, perhaps in the same sense in which pedagogy has a technique. With this development in view several theorists have proposed certain arbitrary standards of measurement for the results emanating from discussion. One scale of this sort suggests that a discussion procedure may produce results ranging from acquiescence to integration. The intermediate terms as proposed are assent, compromise and consent; in this scale of qualitative values it is assumed that acquiescence in a solution ac-

cepted but unchanged by discussion is the lowest form of conclusion, whereas integration, the social invention of a wholly new solution, represents the highest form of result or emergence. Integration is considered a creative mode of resolving differences since it not merely gives security to all interests but utilizes these very differences as the dynamic elements in an inventing, creating enterprise.

E. C. LINDEMAN

See: Conflict, Social; Group; Interists; Public Opinion; Procedure, Parliamentary; Freedom of Speech and of the Press; Arbitration, Industrial; Arbitration, International.

Consult: Dewey, John, How We Think (Boston 1910) ch. i; Elliott, Harrison S., The Process of Group Thinking (New York 1928); Sheffield, A. D., Joining in Public Discussion (New York 1922); Bogoslovsky, B. B., The Technique of Controversy (New York 1928); Lindeman, Eduard C., Social Discovery (New York 1924); The Inquiry, Training for Group Experience (New York 1929), Community Conflict (New York 1929), The Worker and His Job (New York 1927), Creative Discussion (2nd ed. New York 1927), All Colors (New York 1926), What Makes Up My Mind on International Questions? (New York 1926), A Cooperative Technique for Conflict (New York 1924), The Question of the "Right to Strike" (New York 1924), and The Question of "Recognizing the Union" (New York 1924); Follett, M. P., The New State (New York 1918), and Creative Experience (New York 1924).

DISFRANCHISEMENT. See Negro Problem; Suffrage.

DISRAELI, BENJAMIN. See BEACONSFIELD, EARL OF.

DISTRIBUTION. The central problem of distribution in economic theory may be defined as the analysis of the forces which under free exchange govern the division of the product of industry between those who perform different functions or supply different factors. The shares may, however, be differently distinguished: according to the contractual arrangements under which the proceeds are received, according to the persons receiving them and according to the underlying functions or factors which constitute the sources of the incomes. Thus there are contractual distribution, personal distribution and functional distribution. Although these distinctions are generally made in economic textbooks and may be useful for didactic purposes, the main body of economic theory has for a long time concerned itself with functional distribution only.

While quantitative studies of distribution were early made in connection with estimates of the national income undertaken by such exponents of political arithmetic as Petty, they must be considered, as Cannan called them, "a statistical accident rather than a contribution to economic theory." The beginnings of abstract study of distribution were made by the physiocrats, who were the first to use the conception of a closed economy based on free exchange. But Quesnay and the other économistes were mainly interested in distribution between "sterile" and productive expenses; between handicrafts and trade, the sterile occupations, and agriculture, the only productive employment; and between consumption, replacement of capital and increase of capital. Land rent was the only true net product. Turgot thought that wages were based on subsistence and justified interest both on general grounds of natural liberty and as the necessary supply price of capital funds.

By the time of Adam Smith the wage system and the administration of land on a commercial basis were well established, but the typical organization of business managed directly by capitalist entrepreneurs did not lend itself to the distinction of the shares due to capital and management. Thus it was natural that Smith should have distinguished three shares: wages, rent and profits, the last including the earnings of capital.

These shares are treated as the "component parts of price": their natural levels govern the natural price, since the latter must be large enough to cover them. In harmony with this approach rent includes the rental value of land in the hands of the owner and contractual interest is almost neglected, being treated as something which, if paid, comes out of profits. Consistency might seem to require that wages be treated as the reward of labor whether hired or independent. But while this concept is mentioned, wages are in the main treated as a contractual payment. The three shares are viewed as the incomes of three fairly well marked classes: laborers, landowners and capitalist entrepreneurs.

The "natural levels" of these shares are described in a fairly empirical fashion, attention being paid both to the general levels of wages and profit and to the differences between different occupations. Some differences in wages tend to equalize the "real attractiveness" of different occupations, others not. Wages gravitate toward subsistence, but may be maintained indefinitely

at a higher level by continued progress. Other shares are less satisfactorily explained.

With Malthus the subsistence theory of wages gained scientific support from his elaborately buttressed law of population. This theory was employed to demonstrate the helplessness of communist utoplas based on equal distribution to raise the standard of living of the masses. Such leveling could only be a leveling downward. The law had more practical application, however, as a weapon against the prevailing poor laws with their indiscriminate outdoor relief. virtually resulting in an accepted system of subsidizing low wages. This system, Malthus held, could end by absorbing all the income of the richer classes without raising that of the poor. The latter, by their unchecked multiplication, were responsible for their own poverty.

With Ricardo value and distribution become the central problems of economics and are approached deductively. Yet the three shares are still determined by different principles. The Ricardian law of rent, credit for which must be shared with James Anderson, is the first great example of the marginal method, later to become the keystone of the entire Austrian system of economic theory. Rent proper is only that part of the payment to landlords which is due to the "original and indestructible qualities of the soil" as distinct from profit on capital improvements. Since land is subject to diminishing returns and graded from better to poorer, the rent of a piece of land is the surplus of its total product, when cultivated with the proper quota of capital and labor, above the increment of product secured by a similar amount of labor and capital applied at the margin where this increment is smallest and yields no rent.

Wages are basically governed by subsistence according to the "iron law," with some slight allowance for rising standards of living. They are proximately governed by the ratio between population and the amount of circulating capital available for wage advances. This proposition constitutes the basis of the "wages fund" theory. With wages thus determined and rent fixed on a basis which excludes it from marginal costs of production, profit is a residuum.

The historical prospects afforded by this theory are based on the assumption of an inevitable increase in population. With more mouths to feed, a larger amount of capital and labor is applied to fertile land and poorer soil is brought under cultivation; consequently the marginal yield of land declines. It is to be anticipated therefore that rent will rise, wages will absorb an increasing portion of the remainder and profit will correspondingly decline. When the point is reached at which further accumulation ceases, more workers cannot be supported and the "stationary state" is reached.

Senior traced the distributive shares other than rent to a basis in ultimate human sacrifices, the "abstinence" of the capitalist taking its place beside the toil of the worker. Senior follows the Ricardian treatment of rent and wages but considers that increases of fixed capital may increase profits by increasing productiveness. Although he notes the economic function of government in affording protection as a basis of economic action and states that distribution is affected by human institutions, he does not develop these principles but occupies himself with the "natural" Ricardian laws of distribution conceived without reference to alterable human institutions.

With John Stuart Mill the Ricardian scheme is built upon, but modified by, the infusion of social and institutional material. Mill stated that the laws of production "partake of the character of physical truths," while "the distribution of wealth is a matter of human institution solely"; and he took account of laws of property (including "property in abuses") and inheritance, systems of land tenure and customary practises as affecting rents and wages and the distribution of ownership. He noted the possibility of varying the scope of property rights, found that "sacredness does not belong in the same degree to landed property" as to property in movables and argued that "when land is not intended to be cultivated no good reason in general can be given for its being private property at all." He observed that personal shares in distribution overlapped the threefold scheme of rent, wages and profits, thus affording the basis for the distinction between personal and functional distribution. Mill displayed a humanitarian interest in the future of the laboring class but stressed the difficulties of permanently raising their standard of living. Originally committed to the wages fund doctrine, he made his famous recantation following Thornton's criticism. He improved upon his predecessors by making the rate of profit depend upon the cost of labor and by distinguishing in profits the elements of interest, insurance and wages of superintendence. Yet the theoretical underpinning of Mill's analysis of distribution is still the same as that of the other classical writers; rent is the surplus over

marginal yield, wages are determined by the standard of living of the laboring people and profits absorb the residuum.

Among the contributions of the later writers in the classical tradition must be mentioned the doctrine of non-competing groups of Cairnes as applied particularly to wage recipients. Together with the wages fund doctrine, a partial rehabilitation of which he attempted, it suggested that in the numerous more or less segregated compartments of the economic system distribution is governed by relations of demand and supply. II. von Mangoldt's clear distinction between interest and profit and his treatment of rent as a surplus element which may be present in the other distributive shares were more integrally incorporated into distribution theory by Francis Walker. He distinguished between interest, which is due to abstinence, and profits, which are governed by the same principle as rent, and designated wages as the residual share while holding them governed by the wages fund principle.

The classical theories throw varied side lights on the interests of the different classes. Since with progress rents rose and profits fell, Smith considered the interests of landowners in harmony with those of society and those of capitalists opposed to progress. As rent signified to Ricardo an increasing impoverishment of society, his view of landowners and capitalists was the precise opposite of Smith's view. According to Smith labor produced all wealth and should in fairness be tolerably well provided for, while the shares of land and capital were deductions from the product of labor. On the other hand, capital was regarded, in a fashion characteristic of classical economics in general, as giving employment to labor, "setting it in motion"; and capitalist entrepreneurs were therefore considered the most progressive group in society. While the classical economists were personally humanitarian, this obviously finds little reflection in their theories of wages or of poverty.

The pessimistic trend of the classical economics was combated by Bastiat in France and by Henry C. Carey, founder of the "American school." Bastiat was an extreme individualist and Carey a believer in state action, but their views on distribution were alike. Both merged land value with capital, regarding it as the result of human improvements, and thought labor's share an increasing fraction of an increasing whole. Carey denied Ricardo's law of the trend from better to poorer lands.

While classical economists envisaged the division of society into classes and formulated principles in accordance with which national income is divided among them, the rigidity of their formulation precluded serious intellectual concern with the struggle among the classes for a larger share of the income. As to the justification of property and incomes based on property they were content with hypothetical history beginning with a primitive state of equality and tracing the accumulation of capital from savings made out of personal product. But their theories raised problems to which later thinkers offered a different answer, and which contained germs of doctrines that emphasized class antagonisms and class exploitation. A significant forerunner of the exploitation theorists, Sismondi, writing in the first quarter of the nineteenth century combated the hypothetical history of Smith, whom he followed in many matters of strict economic theory, with actual studies of the evolution of economic institutions, revealing much injustice and hardship in the development of property and of the content of property rights. He related distribution to overproduction in a theory strongly suggestive of the later views of John A. Hobson. The income from previous production pays for current production, and a lack of equilibrium may cause overproduction or underproduction. The share of profits and rent and the use made of it, in spending or saving, are important in determining whether or not an equilibrium can be maintained.

The first fully developed exploitation theory was given by Rodbertus, who built on the view that labor is the source of all wealth, the shares of the other factors being deductions from it which are to some extent justifiable. But he held that since the productivity of labor constantly increases and wages are limited by the iron law, labor's share is a decreasing one. The resulting inability to buy the whole product of industry explained the recurrence of overproduction and crises. Rodbertus, the Prussian landowner, was a liberal rather than a revolutionist; he proposed therefore a compromise system in which the decline of labor's share would be prevented without the abolition of the distributive shares accruing to property holders.

A more elaborate exploitation theory was developed by Karl Marx, that many sided thinker who combined Ricardian theory with historical and institutional economics. His theory of wages and profits is not based like that of Rodbertus on the simpler expressions of Smith but is essen-

tially an implacable carrying out of Ricardo's theory of value and distribution. The value of goods is the crystallization of the socially necessary labor time required for their production. The value of labor itself similarly determined is the labor time necessary to produce the worker's subsistence. If this represents half a day's work, the other half is appropriated by the employing capitalist as surplus value. Thus if the working day is long and the productivity of labor high, the capitalist wage system enables the capitalist to appropriate a part of the value the labor has produced and gives rise to a class struggle between labor and capital for the distribution of the surplus product. The ease with which appropriated surplus value may be accumulated and the competitive advantages of large scale production and capital investment lead to a concentration of economic power in the hands of a few and the proletarization of the small scale producer and independent artisan. In this process an "industrial reserve army" of unemployed is created which tends to depress the condition of the workers to a level of inevitably increasing misery.

The chief logical difficulty of this theory arises from the fact that prices do not follow the labor time formula, because the relationship between fixed capital and the outlay for wages varies with industry and period. This difficulty has never been satisfactorily dealt with, despite numerous attempts following the posthumous third volume of *Das Kapital*. But Marx' theory is not simply a logical construction. Marx also finds historical bases for existing inequality in many acts of expropriation through the long history of the class struggle. Some later exploitation theorists, notably Franz Oppenheimer, fixed upon one of these acts, the monopolization of land in the hands of private owners, as the taproot of exploitation incomes.

The marginal theories of distribution were developed after Marx; their bearing on the doctrines of Marxian socialism is so striking as to suggest that the challenge of Marxiam acted as a stimulus to the search for more satisfactory explanations. They undermine the basis of Marxian surplus value doctrine by basing value on utility instead of on labor cost and furnish a substitute for all forms of exploitation doctrine, Marxian or other, in the theory that all factors of production are not only productive but receive rewards based on their assignable contributions to the joint product.

The great forerunner of marginalism was you

Thünen. He broadened the concepts of diminishing and marginal productivity from the single case of land, which formed the basis of the Ricardian rent doctrine. He did not, however, consider the marginal productivity principle a satisfactory basis for distribution but developed a theory of the "natural" wage, which should be a mean proportional between subsistence of the laborer and total product, expressed in the celebrated formula: √AP.

The marginal theories, which reigned well nigh supreme among "orthodox" economists through the last quarter of the nineteenth century, insisted that value of products is not derived from costs but that costs, i.e. value of factors used, are derived from value of products. The problem of distribution is for that group of theories essentially a question of imputation; that is, of allocating the value of the product among the factors cooperating in its production. The methods by which this problem is solved vary with different writers. To Menger the per unit productive contribution of a factor is measured by the diminution of product resulting from the loss of a unit of the factor, while Wieser employed for the same purpose a system of simultaneous equations based on forms of production in which the factors were employed in different proportions. The marginal productivity theorists, notably J. B. Clark, equate the productivity of each unit of a factor to the addition made to the product by the marginal increment of this factor. One much neglected contribution is that of Stuart Wood (in American Economic Association, *Publications*, vol. iv, 1889, p. 5-35), who developed a form of productivity imputation based on competitive equivalence between labor and labor saving machinery at the margin of indifference. One point, obviously crucial to all marginal theories of distribution, is that the sum of the marginal contributions of productive factors must equal the total product. Wicksteed evolved a mathematical proof of this proposition but abandoned it on Edgeworth's criticism that the form of productivity function which it required was not plausible. This form of function was essentially static, involving no change in efficiency with change in scale of production.

The marginal theorists sensed a special problem in explaining the appropriation by the capitalists of interest on capital funds. Solutions were attempted by introducing a consideration relevant to the supply of capital funds, the tendency to discount future as compared with present

goods. Böhm-Bawerk combined with this an explanation based on the "technical superiority" of present goods as means to the utilization of the more productive roundabout processes, thus introducing a productivity element into interest theories. On these matters he had a forerunner in John Rae. Among later writers Fetter rejected all productivity elements and based interest solely on time discount. Irving Fisher discussed the assimilation of personal marginal time discount rates to the market rate of interest by the process of borrowing and lending as well as the influence of the shape of the income stream on the effective desire of accumulation. Schumpeter relegated interest to the realm of dynamic phenomena.

Marginal theories assume the persistence of essentially static conditions; also their central formula concentrates on forces operating from the demand side, supply being taken for granted. Forces governing supply are thus left for separate treatment. Only the mathematical theorists, who expressed in one system of equations the conditions of equilibrium for both products and productive factors, are able to make one set of formulae take account, even though in a severely abstract form, of supply as well as demand conditions. Marginal theories recognize, however, the existence of some phenomena produced by dynamic conditions. Such are entrepreneurs' profits and losses and surplus returns yielded by productive equipment not reproducible within a short time (quasi-rent).

The marginal approach has the notable effect of making possible a homogeneous theory of distribution: at least on the demand side all shares are governed by an identical principle. This group of theories, therefore, offers less reason for distinguishing between the various factors of production. The differentiation between land and capital is no longer necessary; in fact, some writers have designated as rent the specific shares of any tangible factor, while they used interest to describe the same share as a percentage of investment or capital value. For the same reason this approach makes possible classification of productive factors into an indefinite number so long as they are susceptible of marginal analysis. The share of government -taxes-has, however, never been fully assimilated to this unitary scheme of explanation.

In the hedonistic form of the marginalist theory "product" meant a social gain, a creation of utility. With the general abandonment of utilitarian psychology and the striving for some-

thing more realistic than the "benevolent abstraction" of the static state it has seemed to some that the product which governs rewards must be defined as anything that commands a price, with no implications of a social character. The principle of marginal imputation is naturally still applicable, but the dynamic standpoint brings into view imperfect markets, bargaining handicaps, cases where the minimal dose is large, organic wholes like Davenport's threelegged stool--in short, numerous departures from pure marginal equilibrium, until the marginal method itself seems in danger of being discarded. Pigou, however, still uses it as a powerful weapon for tracing discrepancies between private acquisitive standards and the maximizing of the "social dividend."

Any static or equilibrium theory must recognize the existence of bargaining and the effect of unequal bargaining power in actual practise in causing departures from static standards as well as the importance of many social forces not included in the formulae of economic equilibrium. But most theories of this type tend either to dismiss the "higgling of the market" as a negligible disturbing element not capable or worthy of receiving scientific study or to consider that it operates within fairly narrow limits set by such strictly economic factors as productivity. Bargain theorists, on the other hand, regard these forces as so decisive that they tend to neglect the conditions of abstract equilibrium as not having sufficient force and reality, even as a point of departure for market variations, to repay serious analysis. They treat the market not as a passive machine whose function is limited to the registering of results rigidly predetermined by the independent forces of supply and demand but as an institution whose behavior may itself have some influence on the result.

Early anticipations of modern bargain theories may be found in Sismondi. The importance of non-economic factors is brought out very clearly in the writings of Dühring, who insisted that the phenomena of distribution are better explained by reference to forces of political compulsion than to economic laws. Elaborating on Dühring, Tugan-Baranovsky formulated what he calls a "social theory" of distribution. He maintained that the buyer and seller in the market for productive factors do not meet each other on the basis of equality and that the relations between them are basically conditioned by a number of non-economic factors, a situation which does not obtain in the market for final

goods. This distinguishes the problem of distribution from that of value and price. Among American writers the effects of property and contract in their varying specific forms on production and distribution were traced at length by Ely and in a different way by Commons, while coercive elements in the economic system are stressed by Commons and R. L. Hale. In his "functional" theory of wages W. H. Hamilton translated the elements which are dealt with by the institutional and bargaining theories as well as by the equilibrium theories into a list of specific variables which influence the rate of wages.

In this group belong also a number of doctrines developed outside of the domain of strict theory. Such for instance is the view that trade unions bettering conditions in a limited field help unorganized labor by setting standards which will tend to spread rather than injure it by limiting access to the favored field and leaving other fields overcrowded. Another example is the theory of Sidney and Beatrice Webb that businesses paying wages too low to maintain labor in a state of efficiency are parasitic, laying the burden of necessary maintenance on other industries. Akin to this is the doctrine that a legally fixed minimum wage which the least efficient employers cannot pay is not necessarily a violation of economic law, since it merely hastens and strengthens the process of economic selection by transferring business and workers to more efficient employers.

The recent theories of high wages offer a peculiar reversal from the institutional point of view of some of the older doctrines. Thus the view that high wages may sustain themselves by causing increased productivity makes productivity the effect rather than the cause. Another example is found in the doctrine recently enunciated by the American Federation of Labor and adopted by progressive business men. In a fashion somewhat reminiscent of Rodbertus it regards high wages as essential to the prosperity of business: they offer the means of sustaining purchasing power necessary to absorb the output of modern mass production. This doctrine calls for the relaxation of exploitation in the sense of the nineteenth century exploitation theories, and assumes that business men may act in the interest of business as a whole rather than in the single interest of their own concern.

While distribution theories deal primarily with the forces which govern the division of the national product, inductive studies of income distribution aim in a majority of cases at the determination of the proportions in which income has been distributed among groups classified by size of income. The two types of study have therefore little in common except that generally labor incomes will be found in the lower income groups and property incomes in the upper. Even the national dividend in the two types of study is not exactly the same, since quantitative studies limit themselves as a rule to realized income only.

A number of quantitative studies have also been made of wages and profits in different industries and countries. Some of them, such as H. L. Moore's analysis of wages in France (Laws of Wages, New York 1911), have represented attempts at inductive verification of distribution theory. Others have had as their goal the ascertainment of trends in wages or profits. The results of these studies in so far as they bear on the amount of income from labor relative to other shares do not corroborate earlier theories of either a general upward or a general downward tendency; they indicate rather a considerable degree of stability.

The quantitative studies most relevant to the purposes of this discussion are those differentiating national income by functional shares. Such studies, few in number, have been undertaken only recently and the results obtained have not so far been very significant. The chief difficulty with which such studies must contend is that the available material does not allow the segregation of income by abstract economic functions. Thus American studies of farm incomes have habitually deducted 5 percent on the value of land and capital and reported the remainder as the farmer's labor income. This remainder was usually astonishingly small. But the rate of 5 percent appears arbitrary as applied to land, because in sections that were marked by rising land values farmers were buying land at prices representing much lower rates of capitalization, and were virtually taking part of their return in the appreciation of their investment so long as that appreciation continued. In regions where a system of customary share tenancy or the cropper system prevails quantitative records of farm incomes inextricably merge rent, interest, wages and profits and make impossible any exact Ricardian adjustments. Corporation reports furnish difficulties of their own, although the requirements of reporting income for taxation have to some extent standardized the form of the report. The lack of uniform practise in

accounting for capital makes the rate of return on investments a matter of estimate, and the practise of investing surplus funds in other industries makes the exact nature and the source of the income difficult to trace.

The limitations of such distribution studies are clearly exemplified in the estimates of national income made by the National Bureau of Economic Research in the United States. These estimates make the best of the refractory material available, classifying it according to industrial groups and differentiating three functional shares: wages, salaries and income from entrepreneurship and property. The concept of income employed is that of "realized income," received by individuals from industry. This conception of income yields a highly significant figure but not the one figure most logically adapted to the requirements of all possible problems. Taxes paid by business are deducted; those paid by individuals are not. Corporate savings are left for separate estimate, with the result that in manufacturing, for example, wages and salaries averaged over 80 percent of the total realized income received by individuals from 1909 to 1925. For industrial groups as a whole from year to year amounts invested by the corporations are shown to have little or no relation to changes in the market values of the corporations as going concerns. This does not, of course, dispose of the question whether such investments have an effect in maintaining the values of the concerns over long periods.

The quantitative analysis of the functional distribution of income is still in its infancy. Improvements in data and developments in methods of analysis should yield in the future increasingly significant results.

JOHN MAURICE CLARK

See: Economics; Income; Rent; Interest; Profit; Wages; Value; Cost; Class; Bargaining Power; Exploitation; National Income.

Consult: Oncken, A., Geschichte der Nationalökonomie (Leipsic 1902); Cannan, E., A History of Theories of Production and Distribution (3rd ed. London 1924), and A Review of Economic Theory (London 1929); Davenport, H. J., Value and Distribution (Chicago 1908); Suranyi-Unger, T., Die Entwicklung der theoretischen Volkswirtschaftslehre im ersten Viertel des 20. Jahrhunderts (Jena 1927), tr. by H. Moulton as Economics in the Twentieth Century (New York 1931); Mayer, H., "Zurechnung" in Handwörterbuch der Staatswissenschaften, vol. viii (4th ed. Jena 1928) p. 1206-28; Schumpeter, J., "Das Rentenprinzip in der Verteilungslehre" in Schmollers Jahrbuch, vol. xxxi (1907) 31-65, 591-634, and "Das Grundprinzip der Verteilungstheorie" in Archiv für Sozialwissenschaft und Sozialpolitik, vol. xlii (1916-17) 1-88; Albrecht,

G., "Zur sozialen Theorie der Verteilung" in Jahrbücher fur Nationalökonomie und Statistik, n.s., vol. xlvii (1914) 71-85; Landauer, Carl, Grundprobleme der funktionellen Verteulung des wirtschaftlichen Wertes (Jena 1923); Heimann, E., "Macht und ökonomisches Gesetz" in Archiv fur Sozialwissenschaft und Sozialpolitik, vol. lv (1926) 780-99; Diehl, Karl, "Zurechnungstheorie und Verteilungslehre" in Jahrbücher für nationalökonomie und Statistik, 3rd ser., vol. lxxvi (1929) 641-87; Smart, William, The Distribution of Intome (London 1899); Friday, David, Profits, Wages and Prices (New York 1920); Cobb, Charles W., and Douglas, Paul H., "A Theory of Production" in American Economic Review, vol. xviii (1928) supplement, 139-65.

DITHMAR, JUSTUS CHRISTOPH (1677-1737), German economist. When Friedrich Wilhelm I of Prussia created the first two German chairs of politica, oeconomica und cameralia in Halle and in Frankfort on the Oder in 1727, Dithmar became the first incumbent at Frankfort. The king believed that the landowners should be taught the principles of true economy and the young civil servants trained in the fundamentals of administration and public finance. Dithmar, who was a historian of erudition but a person with little practical experience, was not entirely fitted to carry out these intentions of the king. He was quite competent, however, to offer a description of the technical and legal aspects of current Prussian administration and finance. In his Einleitung in die öconomischen, Polizei- und Cameralwissenschaften (Frankfurt a. O. 1731; 6th ed. by D. G. Schreber, 1769) he took for granted the need for the new science and defined its scope as the teaching of "how wealth may be acquired, how acquired wealth may be retained or employed with moderation to the honor of God." Dithmar is also known as the founder of the first magazine devoted to economics, the Okonomische Fama, of which ten issues were published beginning in 1729 (reprinted Frankfurt a. O. 1743).

WILHELM STIEDA

Consult: Roscher, W., Geschichte der Nationalökonomie in Deutschland (Munich 1874) p. 431-32; Stieda, Wilhelm, Die Nationalökonomie als Universitätswissenschaft, Koniglich-sächsische Gesellschaft der Wissenschaften, Abhandlungen, vol. liv (Leipsic 1907) p. 21-22; Small, A. W., The Cameralists (Chicago 1909) ch. x.

DIVINATION is essentially a method of arriving at a judgment of the unknown through a consideration of incomplete evidence. Accurate observational science, which is present to some degree in all human societies, offers one method of discovery and of anticipating developments.

But in no society is science adequate to facilitate judgment of all the unknown matters that it is desired to prejudge or to know. Everywhere therefore systems of divination are employed in addition to careful empirical observation which welcomes test, which takes negative instances into consideration and which is adjusted to probabilities empirically reckoned. Because in all primitive and ancient societies most systems of divination which ignore scientific ideals are connected with the sacred, the term divination is sometimes used in a restricted sense to refer exclusively to the occult. This use is possible only because exact correlates of contemporary systems that dispense with claim of sacred validation, such as gamblers' systems or the psychoanalytic determination of the mental processes of infants, are not known in primitive society. When North American Indian medicine men diagnosed the ills of newly born infants by avowedly holding private communication with them, the ability to hold this communication was ascribed to supernatural inspiration. This distinction between divination based on the unaided human reason and that based on human reason aided by supernatural power is a widespread conventional distinction closely corresponding to the use or disuse of scientific ideals.

In spite of this difference in formal classification of types of divination a system of occult divination may conform more closely to the ideal requisites of scientifically valid judgment than a system of secular divination avowedly nonsacred. Much depends on what is believed to be ascertainable by sacred divination and to what degree the judgment of the diviner is confined by the artificial system of his craft. In the Manus tribe of the Admiralty Islands, the diviner, the medium and the seer are all employed to divine the sins that their fellows have committed. They unearth by efficient observation and judgment many sins unknown to the general community and by using their fellow tribesmen's confidence in their supernatural power to obtain secret information they extort a confession from the sinner whom they have good prior ground for suspecting. Dreams of the seer, apparently possessed utterances of the oracle, an itch in the back of the diviner, are the material of divination. But dreams and utterances are judiciously interpreted, and whether an itch is felt on the left side or on the right side of the back of a diviner depends on what the diviner believes about a suspected sin. In the Dobuan tribe of the D'Entrecasteaux Islands,

where divination by water gazing is used to discover sorcerers and witches, the water gazer detects persons who had real cause for quarrel with the person supposedly bewitched and consequently had actually engaged in sorcery or witcheraft. Diviners among the Manus and the Dobuans engage in a most dangerous profession if they are not correct as to facts; but as long as they are accurate they ply their trade without danger.

Dreams, avowedly inspired utterances from ghostly or godly possessions of a medium, itches, twitches, sneezes or other involuntary movements in an oracle's body or, supposedly or really, in a corpse or in the bodies of the bearers of a corpse and gazing in water or crystal or looking glass are methods of divination of such wide distribution that a single origin can be inferred. There are a prodigious number of methods of divination limited to local distribution.

A distinction must be made between discovery divination, used to detect guilt, and prediction divination, used to forecast luck in connection with proposed action. Prediction divination methods are used in such a manner that there is no possibility of a test of the diviner's fiat. The diviner forbids or permits action; and although the allowed action may be found unlucky, this offers no direct check on the possibly more disastrous results of the prohibited action. Omens from the flight of birds or direction of travel of animals have universal distribution. Divination from the appearance of the internal organs of sacrificial animals, from the stars or in connection with the calendar occur both in the Americas and in the Old World. Divination by casting of lots was widely distributed in the Old World, and gambling had a slight divinatory character in the Americas. These methods of prediction divination, as opposed to the methods of discovery divination, permitted less freedom for the exercise of the diviner's judgment. In some places, however, the thrower of lots might be his own arbiter as to the point at which he ceased throwing and gave his oracular decision.

Ordeal is allied to discovery divination. It may be contrasted with the latter in that it takes advantage of the qualms of the person under ordeal to extort confession; discovery divination depends upon the judgment and detective work of the diviner.

Social organization enters in determining the nature of divination. In large parts of democratic Oceania discovery divination by professional diviners is constrained by some need of selecting according to actual guilt. In Africa the diviner may be bribed or his judgment may be determined by autocratic constraint. In North America the sorcerers may also be the diviners. They are generally associated in societies and do not divine against their own society interest. Among the Menomini Indians, however, the diviner is pitted against the sorcerer.

In the civilizations of Europe and Asia discovery divination and ordeal do not figure as prominently as in the primitive world. Religious persecution functioned less impeded by the constraint of the occult. New adaptations were used for discovery divination, such as apparently inexplicable movements of a suspended Bible; the opening of a book of Vergil or of a sacred book at a chance passage was used for prediction divination. In ancient Assyro-Babylonia there was extensive professionalism in prediction divination; in Greece there was the oracle at Delphi; in Rome and in Egypt there was very little professionalism. The Roman method of divination was the drawing of lots, the sortes, and the use of bird omens; the Egyptians divined from fancied movements in the statues of god kings. In Mongol civilization divining by appearances in the shoulder blade of a deer or a sheep was widely performed by priests. Prediction divination by the sacred books survives in Europe and in India and the older methods are still found in peasant communities. In modern spiritism the emphasis is less on prediction divination than on supernormal communication for its own sake.

The development of political organization did not everywhere weaken the position of professional diviners. The state officials in Rome often did their own divining to prevent outside interference in state policy. The oracle at Delphi generally avoided political partisanship. In Indonesia and Polynesia the professional diviners' advice was important in war.

REO FORTUNE

See: Magic; Priesthood; Medicine; Superstition.

Consult: Articles under Divination in Hastings' Encyclopedia of Religion and Ethics, vol. iv (Edinburgh 1912) p. 775-830; Frazer, J. G., The Golden Bough, 12 vols. (3rd ed. London 1907-15); Sumner, W. G., and Keller, A. G., The Science of Society, 4 vols. (New Haven 1927); Tylor, E. B., Primitive Culture, 2 vols. (6th ed. London 1920); Hocart, A. M., Kingship (Oxford 1927); Bouché-Leclerq, A., Histoire de la divination dans l'antiquité, 4 vols. (Paris 1879-82); Fischer, Oskar, Divinations-Formen der Primitiven Afrikas (Munich 1929); Callaway, Henry, The Religious System of the Amazulu, Publications of the Folk-Lore Society, vol. xv (Natal 1870); Hose, Charles, and

McDougall, William, The Pagan Tribes of Borneo, 2 vols. (London 1912); Fortune, R. F., The Sorcerers of Dobu (London 1931); Meek, C. K., A Sudanese Kingdom (London 1931); Fortune, R. F., Omaha Secret Societies (New York 1931); Olbrechts, F. M., "Some Cherokee Methods of Divination" in 23rd International Congress of Americanists, Proceedings (New York 1930) p. 547-52; Kittredge, G. L., Witchcraft in Old and New England (Cambridge, Mass. 1920) ch. xi, xii, xv; Murray, M. A., The Witch-Cult in Western Europe (Oxford 1921).

DIVINE RIGHT OF KINGS. The theory of kingship to which the phrase the divine right of kings properly applies must be carefully distinguished from one or two other political concepts in some respects similar. It is not the same as the belief in the divinity of a monarch such as is found among the Greeks of the Hellenistic period or in the Roman Empire before Christianity became the established religion. Nor is it identical with the theory of the divine origin and authority of a king's office which was held practically universally throughout the Middle Ages and persists in modern times in parts of the world. In some important respects it must be distinguished even from the legitimism which became the central idea of the French monarchy with the accession of Henry IV.

Under the theory of the divine right of kings the monarch is not in person divine, but he does enjoy and exercise a personal right to rule in virtue of his birth alone and not of his office, a right based not merely upon national and customary law but founded in the law of God and of nature. Under it no king de facto can have any legitimate authority: all true kings must be kings de jure; under the law of God and the law of nature they succeed by heredity alone to the rights of their ancestors, who in the beginning were divinely appointed to rule. They are never the creatures of the people, their authority does not come from the people's law, and their powers are not derived from their predecessors in the royal office but from their ancestors alone.

This peculiar theory is found in varying forms, such as that of James I of England, who traced his rights to the "conquest" made by his ancestor William I, which he distinguished from a usurpation; or the patriarchal theory of Sir Robert Filmer, who essayed to derive the rights directly from the early Hebrew patriarchs. The idea common to these theories is that of a personal and hereditary right of divine institution.

Such an idea has few roots in the Middle Ages. In the eleventh century Peter Crassus

put forward such a personal claim in defense of the Emperor Henry IV, but he based it mainly on Roman not divine law. In the Middle Ages generally royal authority was believed to be of divine origin and sanction, but it inhered in the king's office and not in his person. The divine rights of kings is a modern and not a mediaeval theory, and it is not the only modern theory of monarchy nor even the typical one. In France, for example, notwithstanding the arbitrary character of the personal monarchy of the Bourbons, the words of Philippe Pot in the Estates of 1484 were still accepted in theory: "The kingship is a dignity and not an inheritance." As Adam Blackwood put it (c. 1580), kings "are the heirs, not of kings, but of the kingdom."

In fact, it is in England that the widest acceptance of this particular doctrine of monarchy is to be found, and by only a minority there except for the brief period between the execution of Charles I in 1649 and the revolution of 1688-89. Before the outbreak of the civil war the theory was held by very few. It was mainly the reaction caused by the execution of the king that led to its wider extension among the royalists, and after the Restoration it became the central theory of the Tory party. This seems a truer explanation of its vogue than that of Dr. Figgis, who attributed it chiefly to reaction against the Jesuit theory of the indirect power of the pope in secular government.

But even in England the theory was short lived: the arbitrary rule of Charles II and James II killed it. The end virtually came at the revolution. Thinning numbers of Jacobites and non-jurors continued to adhere to it until the middle of the eighteenth century, and probably even now a few romanticists who hold it may be found. But all life really went out of the doctrine of the divine right of kings at the accession of William and Mary, whose tenure depended on no personal right, divine or other, but solely on the vote of the representatives of the people of England.

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See: Monarchy; Absolutism; Succession, Political; Deffication; Papacy.

Consult: James 1, "The Trew Law of Free Monarchies" in his Political Works, Harvard Political Classics, vol. i (Cambridge, Mass. 1918) p. 53-70; Filmer, Robert, "Patriarcha" in Locke, John, Two Treatises on Civil Government, ed. by Henry Morley (London 1884) p. 9-73; Figgis, J. N., The Divine Right of Kings (2nd ed. Cambridge, Eng. 1914); Lemaire, André, Les lois fondamentales de la monarchie française (Paris 1907); Weill, Georges, Les théories

sur le pouvoir royal en France pendant les guerres de religion (Paris 1892); Funck-Brentano, Franz, L'ancienne France, le roi (4th ed. Paris 1920); Lacour-Gayet, G., L'éducation politique de Louis XVI (Paris 1898); Viollet, Paul, Droit public. Histoire des institutions politiques et administratives de la France, 3 vols. (Paris 1890–1903) vol. ii, ch. i; Declarcuil, J., Histoire générale du droit français (Paris 1925) p. 389–449; Gooch, G. P., English Democratic Ideas in the Sevententh Century (2nd ed. by H. J. Laski, Cambridge, Eng. 1927); Allen, J. W., A History of Political Thought in the Sixteenth Century (London 1928) pt. ii, ch. x, pt. iii, chs. ii-iii, vi-vii.

DIVISION OF LABOR. See Specialization.

DIVORCE, or the formal dissolution of marriage, is in any society a corollary of the theory and practise of marriage and a direct measure of marital stability. It is designed primarily to relieve the hardships imposed in individual cases by the customary marriage rules. Its frequency does not seem to vary directly with any one feature of marital institutions but reflects the composite influence of all the cultural traits affecting the rights and duties of the sexes. Among primitive peoples customs differ widely. They frequently permit dissolution of marriage at the will of either party during the first days or months but hold it disgraceful when the union has endured for a considerable period, especially if a child has been born. In general, primitive mores require that husband and wife should not separate except for just cause, but such cause may vary from sterility or adultery to mere desire for novelty. Barrenness or adultery by the wife is a widespread but not a universal ground for divorce; in some cases impotence or adultery by the husband is held as a legitimate reason. Divorce of the wife is also permitted by different peoples on grounds of laziness, unskilful cooking, neglect of children, bad temper, disobedience, thievishness, suspicion of witchcraft, incurable disease, desertion and old age. Husbands may be divorced for laziness, neglect, ill treatment, bad habits and desertion.

As marriage is a form of cooperation between the sexes in race perpetuation and maintenance, economic factors deeply affect divorce at all levels of culture. Among primitive peoples it is notably true that individual happiness is secondary to practical considerations and among them frustration of economic cooperation shatters marriage. A wife who is costly or brings a dower tends to be valued and treated with forbearance. The difficulty of securing a return

of the bride price, the necessity of surrendering the dower, the cost of a new wife, the rules for the division of property and division and care of children or danger of a blood feud deter dissatisfied husbands from terminating a union. Dissatisfied wives are often strongly deterred because of the difficulties of self-support; they may also risk loss of dower or rights in common property or children. Religion and romantic sentiment play a slight role in the permanency of primitive marriage. Divorce customs always make provision for children, although in highly variable ways. Group solidarity sufficient to give force to community supervision and opinion may render divorce rare, because of public reprobation, even when theoretically easy.

In oriental cultures divorce has differed greatly in frequency, the differences of time and place often reflecting subtle rather than major cultural variations. Mohammedan tradition permits a man to have several wives and to repudiate them at will by a simple formula, but a wife may procure dissolution of marriage by mutual consent or by judicial procedure. Among the Arabs divorce is frequent but among the Mohammedans in India it is rare. Among Mohammedan Algerians divorce has long been from one third to one half as frequent as marriage, while among the Turkish Kirghiz the bride price is so high that monogamy is nearly universal and divorce infrequent. In Morocco a Mohammedan woman can divorce a man only by fleeing to another man's abode, while among the Bedouins of the Euphrates her rights of divorce equal those of her husband.

The new civil code adopted in Turkey in 1926 abolished polygamy and gave women equal rights with men in marriage and divorce. In addition to the usual grounds for divorce the law permits suit if either party has committed an act dishonoring the nation. Any decrease in the common property of husband and wife must be borne by the former in case the property is divided following divorce. In India divorce varies much from caste to caste. Orthodox Hindus permit no divorce but an adulterous wife may be made a slave in her husband's household. Some low castes permit divorce by mutual consent but such divorce is rare because of caste opinion. The Buddhists of Burma regard marriage as a civil contract to be dissolved for a variety of reasons.

Jewish law permits divorce by mutual consent and in addition allows a husband to repudiate a wife for good cause and a wife to secure dissolution of marital bonds for bigamy, consanguinity, repeated ill treatment, gross immorality, neglect to provide, repulsive chronic disease contracted after marriage, or impotence. Before the World War the Jews of eastern Europe, especially in Russia, Poland, Austria and Rumania, followed the Jewish law in regard to marriage and divorce but they have become increasingly subject to the civil codes of the countries in which they reside.

Divorce is unusual among the Chinese. Women have traditionally almost no power of divorce but were divorced for the seven reasons laid down by Confucius: barrenness, lasciviousness, disregard of parents-in-law, talkativeness, thievishness, jealousy or aversion and continuous infirmity. A husband who keeps an adulterous wife is himself liable to punishment. Recent social ferment has tended greatly to liberalize ancient marriage and divorce customs. A Chinese provisional civil code was enacted in 1913, but because of the political situation in China it has never been authoritatively promulgated. Its regulations regarding divorce, however, are enforced in the native courts and may be considered the law of the land. The judicial grounds for divorce under this code are: bigamy, adultery of wife, conviction of husband of adultery, attempt upon life of spouse, cruelty, malicious desertion, absence without news for three years and ill treatment of kin.

Among the Japanese previous to 1898 the Confucian code prevailed, under which statutory provisions were vague and divorce frequent. The new code, promulgated in 1898 as amended in 1914, permits divorce by mutual consent and establishes the following grounds for judicial divorce: bigamy of either partner, adultery by the wife and adultery by the husband if he has been convicted therefor, conviction of husband of criminal carnal intercourse. sentence of either party for a serious offense, absence without news for three years, malicious desertion, grievous insult or injury and various minor grounds. Collusion or connivance debars divorce. Divorced persons may remarry but one divorced for adultery may not marry the accomplice. The number of divorces dropped sharply from 124,075 in 1897 to 99,464 in 1898 and to 66,626 in 1899. Thereafter the number declined almost yearly to 50,119 in 1926. There was a decrease from nearly three per 1000 population in 1897 to less than one in 1926.

Among all the early Aryan cultures divorce

seems to have been very infrequent, although custom accorded the husband freedom to repudiate a wife no longer attractive. In Greece and Rome women were under the perpetual tutelage of fathers and husbands, so that wives could be repudiated at will. Moreover, at Rome if the wife remained in the potestas of her father he could separate her from her husband against the wishes of both. Infrequency of divorce in early periods seems to have been due to the universal high regard for family stability and the requirement that the dowry be returned. Generally speaking, throughout ancient times divorce remained a private or at most a family affair little affected by religious or legal regulation. As a primary object of marriage was the perpetuation of family name and household gods, the repudiation of a wife for barrenness or even for her failure to produce male descendants was to some extent a religious and civic duty. Adultery by the wife was also an almost universally recognized ground for repudiation but adultery by the husband was not.

In Greece wives could secure divorce by mutual consent or in cases of gross neglect or cruelty by application to the chief archon, but they were restrained by economic and social considerations from frequent use of this right. Divorce seems to have been less common in Sparta than in Ionia, partly because children were viewed as belonging to the state and adultery for the purpose of insuring offspring was not only condoned but frequently encouraged. In Rome the frequency of divorce varied with the type of marriage. Whereas a wife in manu could be repudiated by the husband at will and those secured by coemptio or usus with little ceremony, a wife married under the sacred rites of confarreatio customary among early patricians could be divorced only with difficulty. Grounds for divorce included not only barrenness and adultery but the commission of a capital offense, wine drinking or the counterfeiting of keys. The rise of "free marriage" after 250 B.C. was associated with reduced paternal authority, increased female prerogatives and a rapid increase in the divorce rate. Concurrently with the increase of wealth and security women, especially in the upper classes, came to enjoy increased education, property rights and personal independence. They acquired a power of divorce similar to that of men and divorce by mutual consent or at the will of either party came to require little legal formality beyond the service of a libellus repudii, or notification

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of intention to dissolve the union. In the later days of the republic and during the empire divorce was a commonplace occurrence; Cato, Sulla, Pompey, Caesar, Antony and Pliny the Younger, for example, divorced and remarried from three to five times. Various emperors, notably Augustus, sought to check the rising tide of divorce by laws imposing economic and social penalties. But marriage remained a contract under patriarchal rather than civil control and divorce essentially a private affair. Public opinion rarely supported the penalties for adultery, and the social forces of the imperial era rendered the laws ineffective. The decay of the patriarchal family at Rome has been variously explained. The rise of divorce, associated as it was with decline in marriage and birth rates, indicates a complete revolution in marital institutions. Contributing factors were the increase of wealth, luxury and slavery, involving a decline of simplicity and the domestic virtues and increased desire for a life of ease and sophistication; pessimism as to the civic merit attaching to parenthood, following the civil wars and proscriptions and the enormous influx of landless peasants and foreigners; and increased influence of oriental standards of luxury and sensualism, with which was associated the growth of prostitution and concubinage.

The western Christian church made both marriage and divorce difficult because of its doctrine that sex is inherently sinful. Marriage was made a sacrament and under the influence of St. Augustine became indissoluble. But the impossibility of forcing people to live together in the intimacy of marriage compelled the church to authorize separation from bed and board. Moreover, the numerous impediments to marriage enabled the church lawyers to find grounds for declaring any marriage invalid from the beginning provided plausible reasons whether personal, political or pecuniary could be brought forward. Catholicism has steadfastly maintained this traditional attitude. Papal canon law, which prevails in Italy, Spain, the Irish Free State and Austria (for Catholics) and among faithful Catholics everywhere, permits separations for adultery or unnatural offenses, cruelty, infidelity, impotence, entering into religion, and consanguinity. Incontinence before marriage discovered after marriage is one of several grounds for annulment of marriage. Recent studies indicate that numerous divorces in the United States are procured by persons of Catholic affiliation.

The Protestant reformers held that the severity of the traditional doctrine fostered immorality among the masses while maintaining relatively easy divorce for the rich and powerful, and they regarded marriage as a civil contract. All of them admitted the rightfulness of divorce on grounds of adultery and malicious desertion; some added excessive cruelty, insanity and incurable disease. Contrary to Catholic precedent they fully sanctioned the remarriage of the innocent party. In Protestant and Catholic communities alike, however, marriage continued to be surrounded in popular esteem with religious sentiments, and divorce was viewed with the dread attached to whatever is tabu. Secular views of marriage and divorce have won increasing acceptance since the French Revolution and have steadily been reenforced by the intellectual and industrial changes of recent times.

Aside from the Catholic countries above mentioned European countries present considerable uniformity in both grounds and frequency of divorce. The Orthodox Eastern church, whose canons long prevailed in Russia and Hungary and are still influential in Serbia, Bulgaria and Rumania, permits absolute divorces but not judicial separations. In the last three countries named the basic grounds for divorce are adultery, attack on life, serious maltreatment and sentence to penal servitude. Bulgaria also recognizes as grounds wilful desertion, absence without news or non-support for four years, impotency, insanity, epilepsy, idiocy, syphilis, unnatural sex congress, restraint of religious liberty, drunkenness aggravated by waste of estate or dissoluteness, persistent immorality and unsustained charge of adultery. Serbia recognizes as additional grounds absence without news for four years and apostasy. In Rumania divorce may be secured by mutual consent under special judicial procedure. Hungary recognizes the grounds common to the three foregoing countries, except apostasy, and adds bigamy, unnatural crime, malicious desertion, persistent immorality and inducing or attempting to induce one's own child to commit an immoral or criminal act. In Greece the Justinian code of the sixth century was given statutory authority in 1822 and 1835 and has remained in force. This permits divorce to the husband on grounds of his wife's adultery, staying a night in another house except that of her parents without his consent, attending theater or sports without his consent, attending

dinners or bathing in the company of men against his wishes, inducing abortion, attempting life of husband and failure to inform him of a plot against his life or of conspiracy against the government. A wife may secure a divorce if the husband conspires against the government, attempts her life, plots against it or shields those doing so, attempts to induce her to commit adultery, falsely accuses her of adultery, commits adultery in the home or persists in doing so in the same town or is impotent when married and continues so for three years. The Roman law as in force in Holland authorizes divorce for adultery, malicious desertion, imprisonment for four years, gross ill treatment, or by mutual consent after five years of judicial separation whether procured by mutual consent or trial. All divorce suits are heard in camera. By the act of 1910 Portuguese law permits divorce on grounds of adultery, conviction of a major crime, ill treatment, desertion for three years, absence without news for four years, incurable insanity, de facto separation by mutual consent for ten years, habitual gambling, incurable contagious disease, unsustained charge of adultery, criminal conviction, cruelty, desertion, gambling or infectious disease. Divorce is possible by mutual consent subject to specified conditions.

The grounds for divorce are almost the same in Austria (for Protestants), Germany and Switzerland although they differ from each other somewhat in wording. They include adultery, bigamy, unnatural crime, attempt upon life, wilful desertion and gross abuse. In addition German law specifies insanity, violation of marital duties and dishonorable or immoral conduct; the Austrian, immorality, infectious disease, sentence to penal servitude and long absence without news. In both Austria and Switzerland invincible aversion may lead first to judicial separation and then to divorce and in the latter country insanity may also be a ground for divorce. Belgium permits divorce by mutual and unwavering consent with judicial approval, also for adultery of wife or of husband if he has kept his mistress in the house, excessive violence or cruelty, grave indignities and conviction of an infamous offense. The grounds in France include adultery, personal violence, cruelty, grave indignities, conviction of a crime involving imprisonment and moral degradation, and three years' judicial separation. The above grounds also serve for separations. As elsewhere in western Europe

divorces in France have greatly increased since the war; they numbered, excluding separations, 6431 in 1891, 8841 in 1901, 15,261 in 1911, 41,-279 in 1920, 30,490 in 1921. After 1921 they decreased almost yearly to 18,487 in 1927.

The Swedish law of 1915, enacted after extensive study by a joint Swedish, Danish and Norwegian commission, provided for divorce by mutual consent where deep and constant discord exists. In such cases the final decree must be preceded by one year's separation during which efforts at reconciliation must be attempted by the pastor or some person designated by the court. Other grounds in Sweden are: living apart three years, wilful desertion for two years, absence with whereabouts unknown for three years, neglect of domestic duties, bigamy, adultery, exposure of spouse to venereal infection, plotting against the life or severe physical mistreatment of spouse, sentence to hard labor for three years, drunkenness, and incurable insanity for three years. Similar laws were enacted in Norway in 1918 and Denmark in 1920. These laws were expressly designed to preserve the ethical character of marriage as a union based on mutual sympathy, love and confidence and represent a strictly modern viewpoint in making mutual consent the basic ground for marriage dissolution. The number of divorces in Sweden increased from 847 in 1915 to 1040 in 1917 and to 1310 in 1920.

In imperial Russia marriage and divorce were controlled by the ordinances of the various religious bodies. The Bolshevists introduced civil marriage at the beginning of the revolution of October, 1917, and provided for divorce by a simple judicial process. The 1927 Family Code of Soviet Russia abolished all court procedure and authorized divorce by mutual consent or upon the request of either party without specification of grounds. The registrar must record the date of marriage, children born thereto, which family name each party will retain and the agreement as to the disposition and support of the children. In case of failure to agree either party may take the case to court. The marital right of support continues for one year after divorce. Both parents must contribute to the support of children. The rules for the Caucasus, the Ukraine and White Russia are very similar but differ in details. The numbers of divorces per 1000 population were as follows for Leningrad: 1920, 1.75; 1923, 3.50; 1926, 3.43; 1927, 9.83; and for Moscow, 1926,

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2.12; 1927, 9.59. These figures for 1927 represent the first effects of the new law in urban centers and are probably unduly high.

In Great Britain previous to 1857 absolute divorce was procurable only through an act of Parliament although separations a mensa et thoro were granted by the ecclesiastical courts. The act of 1857 set up a Court for Divorce and Matrimonial Causes with power to grant a divorce to a husband for his wife's adultery and to a wife for her husband's incestuous adultery or for bigamy with adultery or adultery combined with cruelty or desertion for two years or upward, rape or unnatural offenses. Judicial separation is procurable on various grounds including cruelty and desertion for two years or more. A royal commission reporting in 1912 favored liberalizing the grounds and increasing the facilities for divorce. Strong opposition prevented modification of the law until 1914 when the Poor Persons' Rules designed to meet the cost of procedure for the very poor were passed, providing for the hearing of undefended divorce suits in certain courts of assize. These rules were amended in 1920 and in 1926. In 1923 the sexes were placed on an equality in divorce suits, and in 1926 newspaper reports of divorce suits were sharply limited by statute. In 1930 divorce jurisdiction was extended to additional assize towns and local registries. All English decrees are nivi for six months; no decree can be granted if there is evidence of connivance, collusion or condonation. A wife is entitled to alimony pending suit and thereafter unless guilty; a guilty wife with property may be required to pay costs. A man cannot marry the sister of his divorced wife during the latter's lifetime. The total number of absolute divorces and annulments in England and Wales fluctuated about 160 from 1858 to 1870, rose slowly and irregularly to about 350 from 1890 to 1895 and attained a pre-war maximum of 694 in 1909. In 1919 the number was 1654; it jumped to 3000 in 1920 and to 3522 in 1921, averaged 2671 from 1922 to 1927, rose to 3190 in 1927 and to 4018 in 1928 and declined to 3396 in 1929.

In Scotland divorces are procurable on grounds of adultery or wilful desertion for four years, and remarriage at once is permitted. The number was only 250 in 1913, 829 in 1919, 776 in 1920 and 500 in 1921; it averaged 412 from 1922 to 1926 and rose to 474 in 1927 and to 504 in 1928. In Ireland absolute divorce requires a private act of Parliament and is

expensive and extremely rare—only thirty-nine were granted in sixty-five years preceding 1922—but separations are permitted.

In Canada divorces originally required an act of Parliament except in the provinces of Prince Edward Island, New Brunswick, Nova Scotia and British Columbia, but various acts, especially those of 1918 and 1930, set up special courts for matrimonial cases in all provinces except Quebec. The grounds for divorce include adultery, impotency, consanguinity, cruelty and desertion. The number for the dominion exceeded ten for the first time in 1883 and reached a pre-war maximum of 60 in 1913. It jumped abruptly to 114 in 1918, 376 in 1919, 429 in 1920 and 548 in 1921. For the years 1922 to 1929 the numbers were 544, 505, 543, 551, 608, 748, 785 and 816—the later figures representing somewhat more than one per 100 marriages annually. Divorce is easier and more frequent in the Union of South Africa, in New Zealand and in Australia than in England. In Cape Province, South Africa, where Roman Dutch law is in force, divorce is granted on grounds of adultery, wilful desertion, unnatural crime, life imprisonment, long absence and refusal of conjugal rights. Grounds for divorce in New Zealand include, in addition to adultery and wilful desertion for five years, habitual drunkenness for four years combined with cruelty or desertion by husband or neglect of duties by wife, sentence of seven years' penal servitude, and incurable lunacy for seven years. In New South Wales and Victoria the grounds are adultery of wife or adultery of husband coupled with bigamy; incest; cruelty or desertion for three years; malicious desertion for three years; habitual drunkenness combined with non-support or neglect of domestic duties; non-compliance with decree for restitution of conjugal rights, imprisonment for three years under a commuted sentence for a capital crime or sentence of seven years' imprisonment; conviction for attempt to murder or for the infliction of grievous bodily injury; repeated assaults and cruel beatings during preceding year; and frequent criminal conviction of husband coupled with desertion or non-support. The total number of divorces in Australia averaged 29 a year from 1871 to 1880, 70 from 1881 to 1890, 358 from 1891 to 1900, 401 from 1901 to 1910, 707 from 1910 to 1920 and 1564 from 1921 to 1926.

For the United States reasonably complete data have been gathered by the federal government for the forty years 1867 to 1906, for the

year 1916 and annually beginning with 1922. The actual number of divorces (with a few counties missing at the first three dates) rose from 9937 in 1867 to 27,919 in 1887, 72,062 in 1906, 112,036 in 1916 and 195,939 in 1928, nearly every year showing an increase over its predecessor. There were about 30 percent additional divorce suits denied or discontinued. The rate of divorces per 100,000 population was 28 in 1870, 73 in 1900 and 163 in 1928. It was 81 per 100,000 married persons in 1870, 200 in 1900 and 399 in 1928. The number of marriages to one divorce was about 33 in 1870, 12.3 in 1900 and 6 in 1928. Since divorces are increasing faster than marriages, the proportion of marriages ultimately dissolved by divorce is greater than the foregoing ratios.

The most frequent legal grounds for divorce as classified by the Bureau of the Census are adultery, cruelty, desertion, drunkenness and neglect to provide. The less frequent grounds are bigamy, coercion, conviction of crime, fraudulent representation, gross neglect of duty, illegal marriage, impotence, incompatibility, insanity, misconduct, physical incapacity, separation, vagrancy and venereal disease. During the half century between 1867 and 1916 desertion was by far the most important single declared ground for divorce, accounting for 36 percent to 40 percent of all cases. By 1922 it was surpassed by cruelty, which was the chief declared ground in 12.9 percent of cases in the five years between 1867 and 1871 and in 40.6 percent in 1928. Desertion, however, has remained the primary ground for divorces granted to husbands, while cruelty has since 1916 been more frequently than desertion the ground for divorces granted to wives. Adultery, which was the ground for divorce given in 25.6 percent of all cases during the years 1867 to 1871, was only one third as important in 1928. In 1867 it was alleged in 38.6 percent of divorces granted to husbands and in 18.4 percent of those granted to wives, but in recent years it has been alleged in one divorce in seven granted to husbands and one in sixteen granted to wives. One fourth of all divorces due to adultery occur in New York, where adultery is the one ground for divorce. The most striking change in the legal grounds for divorce is the increase in cruelty, especially of wives. This term has come to cover a great variety of marital difficulties and is used to conceal causes which are viewed as disreputable or which injure the personal pride of the complainant.

The proportion of all divorces granted to wives remained steadily at about 66.6 percent from 1867 to 1916 but since then has regularly exceeded 70 percent. Since 1867 this percentage has been lowest in the south Atlantic division and highest in the Pacific, followed closely by the north central. The greater number of divorces granted women is in part accounted for by the greater number of legal grounds granted them, but it is due also to the custom which permits the wife to bring suit when both parties desire a divorce. A striking feature of American divorce statistics is that from 1887 to 1906 only 15.4 percent of all cases were contested and that latterly this percentage has decreased to less than 12. Since in many of these cases the contest consisted merely in filing an answer in order to expedite proceedings, one seems warranted in saying that divorce is the result of mutual consent in at least six out of seven cases. The longer a marriage endures the less is the probability that it will be dissolved by divorce. In comparison with the forty years from 1867 to 1906 there has been a considerable increase in the proportion of divorces in which marriage has been of short duration.

The proportion of American divorces reporting minor children has varied from 34 to 40 percent since 1887. Considered in conjunction with the fact that considerably more than one third of divorced unions endure less than five years (separations take place even earlier) this suggests that a large number of marriages are in the nature of trial or experimental unions subject to dissolution unless they lead to the founding of a family. Divorce also varies with occupation, but the only extensive data available relate to about one fourth of the divorces from 1887 to 1906. These show in terms of the husbands' occupations that persons engaged in agricultural pursuits have furnished less than their proportion of divorces, those engaged in manufacturing and mechanical pursuits and trade and transportation a due proportion and those in domestic and personal service and professional pursuits an unduly large proportion.

Legal grounds for divorce and its frequency vary greatly from state to state. South Carolina permits no divorce, New York and the District of Columbia permit absolute divorce on the sole ground of adultery, New Jersey permits it on grounds of adultery, cruelty or desertion and the other states have an average of eight grounds each. Migration for the sake of divorce from states of difficult to those of easy procedure

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is so infrequent that true rates differ little from the official rates except for Nevada. The rates, moreover, seem to bear little relation to the number of grounds for divorce. Pennsylvania with eight grounds and New Jersey with three have very similar rates per 1000 population; Iowa with six grounds has a much higher rate than Nebraska, South Dakota or Minnesota with seven each; Michigan's rate is more than twice that of Wisconsin although each has eight very similar grounds. Because of legal differences divorces procured in one state are not always recognized in others; a marriage following divorce may be legal in one state but illegal or bigamous in another. The status of children is correspondingly affected. The Supreme Court has, however, sustained the right of each state to determine the marital status of those domiciled within it. Confusion likewise arises, notably in New York, from divorces secured abroad and especially in the Mexican states. The divorce rate is least frequent along the Atlantic seaboard, Florida excepted; it rises as one moves westward and reaches its apex in the Pacific states. These differences have prevailed continuously for sixty years. Similarly in Canada the rate rises sharply from Prince Edward Island and Quebec with almost no divorces to Alberta and British Columbia with rates per 100,000 population only slightly lower than those of some of the eastern United States.

The causes of differences in frequency of divorce in the various states are complex. The fact that the states with the highest rates are with the exception of Texas and Oklahoma in the Pacific and mountain divisions is explained by the fact that the population is of native stock and Protestant religion and that its original individualism in political and social tradition has been accentuated by frontier experience. Low rates and slow increase are associated in New England and the middle Atlantic states with traditional conservatism and large foreign born Catholic populations and in the south Atlantic states with conservative Protestantism, rural isolation and retardation of economic development. The influence of the Negroes in the South on the divorce rate is difficult to determine; the returns are incomplete as to race, and many Negro marriages, as among the poor everywhere, are said to be terminated without the formality of divorce. The census office could reach no conclusion as to whether divorce was more prevalent among Negroes than among whites (United States, Buresu of

the Census: Marriage and Divorce, 1867-1006, Washington 1908-09, pt. 1, p. 22). The differences in the legal grounds for divorce seem to be relatively unimportant factors although they seem to account for the low rate in New York and the high one in Nevada-rates largely due to interstate migration. The attitudes of the courts, the time, complexity and expense of procedure and rules for the disposition of children and property are much more important than the letter of the law. Numerous divorces are doubtless associated with facile procedures in times of social upheaval. Six years after 1792, when the French authorized divorce on many grounds, including incompatibility of temper, the number of divorces in Paris exceeded the number of marriages. Nevertheless, divorce by mutual consent has resulted in Sweden in a divorce rate lower than that of New York. The attitudes prevalent in the popular mores of sex and family are of overwhelming importance. Limiting the grounds for divorce increases resort to those that remain or increases desertion and subsequent bigamy or unlawful union without formality of divorce. For these reasons it does not seem probable that a federal law in the United States in harmony with public sentiment would measurably reduce the divorce rate. Marriage is a psychophysical relationship of such intimacy that law can only register its beginning and its end and is powerless to effect its satisfactory continuance. Law may, on the other hand, check hasty divorce and prevent injustice in marriage dissolution.

That urbanism and industrialism are factors in increase of divorce has long been accepted as a truism. Numerous studies in Europe and America have shown that divorce is largely a phenomenon of the city, that it increases in times of prosperity and declines during depressions. The progress of material culture, however, tends steadily to reduce differences between city and country. American data warrant the conclusion that divorce rates are higher in urban than in rural areas if comparisons are limited to urban and rural counties of the same state. When, however, comparisons are made by states, as between Massachusetts, Rhode Island, Connecticut, New York and Pennsylvania on the one hand and Texas, Oklahoma and Arkansas on the other, both urban and industrial factors are more than offset by differences in the nativity of the population and cultural, religious and other factors affecting the political and domestic status of women.

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The causes of the rapid rise in divorce rates throughout the world during the past century are to be found in the great social transformations attendant upon the progress of science and industrialism which have resulted in the emancipation of women. By placing economic independence within the reach of women they have with the aid of ideals of democracy and liberty hastened the decline of patriarchal institutions and enabled women successfully to assert their claim to equal political, civic and marital rights. At the same time the spread of rationalism has undermined the social control formerly exerted by religious beliefs and institutions which had been strongly imbued with doctrines of feminine inferiority. The decrease in the size of the family and the increased activities of the state as a superparent have also reduced the bonds of marital stability. There has been an increase of leisure and of opportunities for sex stimulation and experimentation, and at the same time discord and lack of authority in the sex mores have released the deep seated desire for sex variety with its attendant suspicion and jealousy. Economic and parental bonds within the family have been weakened, leaving the permanency of marital unions increasingly dependent on the attractions of sex and personality. The individualism of the age, accentuated by universal education, has so expanded the latitude of egoistic desires that the subordination of personality and accommodation of attitudes essential for marital happiness have become increasingly difficult.

Divorce, a symptom of the liberalizing tendencies of modern culture, seems likely to increase as long as underlying conditions continue their present trends. Western nations are moving rapidly toward divorce by mutual consent or at the will of either party with simple procedure, in the belief that marital happiness is possible only when marriage bonds harmonize with the bonds of affectionate esteem. It is recognized that legislation must take full account of changes in the mores unless it is to cause unhappiness and encourage irregular unions, that marriage laws can be improved to reduce haste, coercion and fraud in marriage and that education can reduce ill considered unions and prepare both husband and wife for the ordeal of mutual adjustment. Conservative thought, however, still favors either prohibition of divorce or its limitation to cases of adultery. Radical opinions vary. Some, recognizing the difficulties of marital adjustment in a complex

society, favor marriage under trial conditions with provision for easy dissolution. Amidst the conflicts of opinion it seems possible to assert that the rising divorce rate has been attended by refinement of marital relations and that increased divorce has not brought marriage into disrepute.

Frank H. Hankins

See: Marriage; Family; Marital Property; Alimony; Family Desertion and Non-Support; Woman, Position in Society; Feminism.

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DIX, DOROTHEA LYNDE (1802-87), American social reformer. Her lifelong interest in social reform began in 1841, when she undertook Sunday instruction for the women in the East Cambridge House of Correction and found some insane persons confined in an unheated room. In order to learn whether the evil conditions in East Cambridge were typical she visited every jail and almshouse in Massachusetts and then prepared a memorial to the legislature (Boston 1843; reprinted in *Old South Leaflets*, vol. vi, Boston 1904, no. 148), in which

she presented the results of her investigation. This was the first of her long series of investigations in more than twenty states and her moving appeals to the various legislatures setting forth the urgent necessity for state hospitals for the insane. Between 1842 and 1845, when railroad service was still very limited, she traveled 10,000 miles, visited 18 state prisons, 300 local jails and houses of correction and more than 500 almshouses and other institutions. Her Remarks on Prisons and Prison Discipline in the United States (Boston 1845) is an exposition of the conditions she found.

In 1848, at a time when numerous private and local influences were asking for congressional grants of federal public lands, she presented a memorial to Congress asking for a grant of 5,000,000 acres of which the sale proceeds were to be used for the relief and support of the indigent insane. Later she raised her request to 12,225,000 acres and added provision for the blind and the deaf and dumb. She finally secured the passage of her bill in 1854, but to the intense disappointment of the friends of social welfare it was vetoed by President Pierce. Meanwhile, in 1852 Congress passed without subsequent veto her District Hospital Bill for the relief of the insane of the army and navy and those of the District of Columbia. From 1854 to 1856 she was abroad and was instrumental in the creation of a royal commission to investigate conditions in Scotland and in the building of a hospital in Rome. In April, 1861, she reported "for free service" in the War Department and became the superintendent of women nurses during the Civil War. The remainder of her long life was spent in supervising the results of her work. In spite of tremendous difficulties, not the least of which were the prevailing ideas as to the propriety of women in public life, Dorothea Dix accomplished her purpose and launched the movement of humanitarian reform in state institutions.

Едітн Аввотт

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DŁUGOSZ, JAN (Longinus) (1415–80), Polish historian. Długosz was born in Brzeznica. He entered the church, studied at the University of Cracow and was engaged in many diplomatic missions in the service of Cardinal Oleśnicki. His historical work stands with that of Com-

mines and of Machiavelli as one of the great landmarks of modern historiography. Dlugosz' many writings on the history and institutions of Poland represent the first important attempt at a scientific study of Polish geography, ethnography and history, for which he utilized the various Polish and non-Polish chronicles of the preceding age, collected documents from Polish, Lithuanian and German state and ecclesiastical archives and drew on his own personal recollections for the later periods. Although he aims to be critical and objective he is a strong partisan of the claims of the church and of the privileges of the nobility. His chief purpose was to effect a national education of the Polish people to great political ends. He was an admirer of the politics of Oleśnicki and wished to make Poland the most important power in eastern Europe and the Cracovian region of Poland with her aristocracy the prime influence in the kingdom.

Marceli Handelsman

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DMITRIEV, VLADIMIR KARPOVICH (1868–1913), Russian economist. Upon the completion of his studies in the law faculty of Moscow University Dmitriev was appointed to a provincial office in the Bureau of Excises. In 1896 he fell ill and resigned his position; the rest of his life was spent in a bitter struggle against tuberculosis and poverty.

Dmitriev's Ekonomicheskie ocherki (Moscow 1904) is a collection of essays on economic theory. The first of them is an algebraic version of the Ricardian theory of value which helps among other things to clarify the frequently misinterpreted proposition that wages and profits are related inversely; here Dmitriev follows Ricardo in assuming that the total expenses of production can in the last resort be reduced to wage payments. Another essay treats in the spirit of Cournot of the relation between monopolistic and competitive prices. A novel feature of the discussion is the attempt to con-

sider among competitive costs "realization costs" and the cost of unsalable inventories in addition to the ordinary expenses of production. The last essay, a study of the marginal utility theory, is replete with acute and original observation. Dmitriev traces the doctrinal development of marginalism beginning with Galiani and attempts to prove that marginal utility allows of an "organic synthesis" with labor value but rejects Tugan-Baranovsky's method of reconciling the two theories.

The only other book by Dmitriev, Kriticheskiya izsledovaniya o potreblenii alkogolia v Rossii (Critical studies of alcohol consumption in Russia, Moscow 1911), combines an expert knowledge of the subject and careful manipulation of statistical data. It attracted immediate attention and was made the basis of a collective study by A. A. Chuprov's statistical seminar at the St. Petersburg Polytechnic.

L. von Bortkiewicz

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DOBROGEANU-GHEREA, CONSTANTIN (Solomon Katz) (1855–1920), Rumanian sociologist and socialist leader. Dobrogeanu-Gherea was born in Russia but in 1875 came as a Russian refugee to Rumania, where he lived most of his life. The influence of his sociopolitical and literary works makes him a significant figure in Rumanian intellectual history. He edited *Contemporanul* and *Literatura și stiința*, two Rumanian reviews, and contributed to the *Revue internationale de sociologie*.

He was the founder and outstanding theorist of the Rumanian socialist movement. He established socialist clubs in Jassy, Bucharest and Ploiesti which were the bases of the Socialist party organized under his direction in 1802. He was a strict Marxian and was instrumental in turning the early anarchistic revolutionary elements toward orthodox socialism. Throughout his life he continued to take an active interest in the socialist movement, mainly through his writings. A number of his works deal with the application of socialism to industrially undeveloped countries and are an important contribution to socialist theory. In the last years of his life he energetically opposed the anti-Bolshevist movement among socialists.

Dobrogeanu-Gherca's best known sociological work was *Neoiobagia* (Bucharest 1910, reprinted 1921), a penetrating analysis of the Rumanian agrarian problem. In it he condemned the inadequate reform of 1864 which abolished serfdom but introduced what he termed "neoserfdom." He also maintained that the cooperative movement would neither ameliorate nor solve the agrarian problem. The book aroused great interest and exerted considerable influence upon Rumanian agrarian theory.

Dobrogeanu-Gherea also achieved distinction as the chief Rumanian literary critic of his period, the leading opponent of the romanticism of contemporary Rumanian literature.

N. GHIULEA

DOBROLUBOV, NIKOLAY ALEXAN-DROVICH (1836-61), Russian critic. The son of a Nizhni Novgorod priest, Dobrolubov was educated at a local theological seminary and at the Institute for Teachers (Glavny Pedagogichesky Institut) in St. Petersburg. In 1856 while still an undergraduate he published his first article in one of the outstanding periodicals of the time, Chernyshevsky's *Sovremennik* (the Contemporary), and on his graduation in 1857 he took charge of its literary department.

True to the spirit of the time in which Russia was then living—the transition from serfdom to new forms of life—Dobrolubov imbued his literary work with moral and social ideas. He combined a profound idealism with a rigidly realistic attitude toward the problems of life. He vigorously denounced the servility, arbitrariness and ignorance of the Russian people and untiringly called for the building of a new life on the basis of freedom and tolerance. A democrat and radical with decided leanings toward socialism, he viewed with suspicion the upper classes, ridiculed their idleness and impotence and was skeptical of liberalism, especially of his Russian liberal contemporaries and their admiration for the reforms then initiated, which he deemed insufficient. But he had deep confidence in the working classes, especially in the peasants, and he urged the educated groups to work for their welfare. Although he never formed a complete theory Dobrolubov arrived at a clear conception of the essence of art, which he undertood to be the faithful reflection of the realities of life. By applying this standard in his literary criticism he ruined many literary reputations. Dobrolubov gave much attention to problems of education, the object of which he considered to be the free and full development of human personality. He strongly opposed the use of coercion in any form. Dobrolubov's work had great influence. Russian literary criticism long followed the path he had traced and he left a strong mark on the revolutionary movement of the period.

V. Miakotin

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DOBROVSKÝ, JOSEF (1753–1829), Czech philologist. Dobrovský was born in Hungary of Czech parents and was educated in German schools in Bohemia. He studied philosophy and theology in Prague and in 1772 joined the Jesuit order. After the order was dissolved in 1773, he devoted himself exclusively to a life of scholarship and research.

Dobrovský's work, while almost exclusively philological, represents the first important stage in the development of the Czech national movement. He was the initiator of the cultural renaissance that laid the basis for the subsequent political movement. Under the influence of the historical ideas of Herder and Schlözer and the philological works of Fulda and Adelung he became the first philologist and historian of Czech and other Slavonic languages. Although he himself wrote most of his books in German and Latin, his work was nevertheless influential in reviving the use of the Czech language and in fixing its standards. In 1791 there appeared his epoch making book, the Geschichte der böhmischen Sprache und älteren Literatur (Prague 1792, new ed. 1818), which was the first attempt to present a true, scientific picture of the history of the Czech language, literature and culture from earliest times. Its influence on the awakening was tremendous and was the starting point for the later work of Hanka, Čelakovský, Kollaŕ, Palacký and Safařík.

Dobrovský's influence extended also to the other Slavonic nationalities and he is one of the first exponents of pan-Slavism. His journeys to Sweden and Russia from 1792 to 1799 were the beginning of the contact between Czechs and Russians. Through correspondence, personal contact and above all through his journals, Litterarisches Magazin (1786), Slavin (1806) and Slovanka (1814–15), he established a cultural cooperation between the various Slavic national-

ities which had as its basis not only a common linguistic interest but a strong belief in the unity of Slavic cultural traditions and national psychology and even a vague hope for a political union of all the Slav peoples.

IOSEPH HANUŠ

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DOCKS. See Ports and Harbors; Longshoremen.

DOCTRINAIRE. The epithet doctrinaire has a specific historical as well as an ill defined general meaning. Written with a capital it refers to a parliamentary group in Restoration France which under the leadership of Guizot and Royer-Collard aimed at a constitutional monarchy with a strong, governing king, a conscientious nobility and a liberty loving but not rebellious people. Their political philosophy, although designed primarily to justify their immediate program and the particular system of government which they championed, was based on rather abstract concepts and appealed to generalized laws of history and reason. Their doctrines were rather rigidly held and pompously defended in parliament, but the epithet doctrinaire was the lucky stroke of a hostile journalist. Originally a neutral word applied to a teaching order of monks, doctrinaire was filled by the enemies of Guizot with its familiar connotation of pedantry and impracticality. It came soon to apply to a certain temperament in politics and as such was taken bodily into English.

In this general sense a doctrinaire is one who holds fast to a theory or theories which to competent critics may seem inconsistent with facts. He adapts his theory, regardless of the limited field in which it may have originated, to everything he touches; and as he usually wishes to mold the conduct of his fellows to his theory he appears in politics as a reformer. The word thus carries with it some of the connotations of dogmatist, fanatic and crank, with which popular usage often confounds it. But it is a useful term and deserves to be isolated as far as possible from words of abuse. The ideas of the doctrinaire are, superficially at least, arrived at by systematic thinking; they are concerned with the social sciences and the arts rather than with theology; and they are not wildly unreal. Belief

in the Virgin Birth, for instance, or in the flatness of the earth is not doctrinaire belief; belief in the single tax commonly is.

Such radical reform groups as the single taxers, Marxian socialists, anticlericals and free traders at all costs are rich in doctrinaires. But the temperament is by no means confined to such groups. Modern monarchists like the Action Française group, for instance, are clearly doctrinaires. The psychological origins of the temperament are revealed most clearly by a consideration of its opposite. The true opposite of the doctrinaire is not, as might at first appear, the opportunist but the scientist. The opportunist follows a planless, rule of thumb procedure and bears no relation whatsoever to the doctrinaire; but the scientist, like the doctrinaire, guides himself in relation to men and things by theories. The true scientist, however, regards his best theories as hypotheses and is always willing to attempt to change his theories to fit inconvenient facts; he is fully aware that certain of his judgments—his moral preferences, his aesthetic tastes—cannot be completely equated to his scientific theories; and he is constantly on the alert to analyze his own mental processes and to keep his emotions from coloring his theories. The doctrinaire, on the other hand, holds his theories as articles of faith; he cannot admit the possibility of changing them; and he habitually confuses his affects and his thoughts. His is the theological temperament applied to politics. That he uses part of the methods and much of the phraseology of science cannot conceal his true nature. One of the most doctrinaire assertions of laissez faire is to be found in Social Statics and in The Man versus the State, the work of a man who prided himself on having achieved a synthesis of contemporary scientific thought.

The deficiencies of the doctrinaire temperament are apparent. In authority the doctrinaire can maintain himself only in exceptional circumstances and for the briefest time, as did Robespierre. His world is sometimes too good and always too simple to be realized. He may make disciples, but time and change will alienate them. He certainly will make many and bitter enemies, perhaps acerbate political quarrels. For, as Hazlitt observed, men hate abstract principles more than persons; and the doctrinaire sets up the contentious idea and neglects the compromises of the flesh. Nor is the doctrinaire often a great initiator; he is more likely to be the follower who exaggerates a master's

teachings. Not Voltaire nor Rousseau but Robespierre, not Adam Smith but Nassau Senior, is the doctrinaire. On the other hand, the doctrinaire has social value as a fighter. He has put energy into many a cause that without him had insufficient roots in human desires. He is no materialist and never less so than when as an orthodox Marxian he is defending that highly intellectualized and unworldly doctrine, the economic interpretation of history.

Yet the interest of the word doctrinaire lies less perhaps in its use than in its abuse. Ever since its original application to Guizot and his followers it has carried with it a reproach that has put an unnecessary and often tragic fear into those so designated. Men who from interest or principle or inertia have disliked any political change have not hesitated to apply it quite unjustly to all who sought specific reforms. Even before Guizot so great a man as Burke abusively applied the title metaphysician with just this derogatory meaning to the makers of the French Revolution. In our own time Woodrow Wilson fell victim to his fear of the reproach contained in the word doctrinaire. The origins of this fear are interesting. In the nineteenth century the failure of the French Revolution, which seemed, especially in the pages of Taine, to have originated in eighteenth century speculation, together with the great success of England, which seemed, especially in the pages of English publicists, to have sprung from a hearty contempt for mere thought, combined to discredit clear cut and carefully constructed plans of reform. The anti-intellectual emphasis of modern social psychology, in such writers as Le Bon and Tarde, for instance, has doubtless added to this discredit. Thought appeared to be in politics a useless and therefore a dangerous guide. Yet there are signs of change. Mr. Graham Wallas, who cannot be accused of undervaluing the part played by unreason in politics, has written: "Thought may be late in evolution, it may be deplorably weak in driving power, but without its guidance no man or organization can find a safe port amid the vast impersonal complexities of the universe as we have learned to see it." To employ thought—and therefore theories—on the stuff of politics is not the mark of a doctrinaire; that word ought not today to frighten any honest thinker—or doer.

CRANE BRINTON

See: REFORMISM; INTRANSIGENCE; COMPROMISE; OP-PORTUNISM; METHOD, SCIENTIFIC.

Consult: FOR DOCTRINAIRE PARTY: Nesmes-Desma-

rets, R. de, Les doctrines politiques de Royer-Collard (Montpellier 1908); Michel, Henry, L'idée de l'état (Paris 1895) p. 291-99; Merriam, C. E., History of the Theory of Sovereignty since Rousseau, Columbia University, Studies in History, Economics and Public Law, vol. xii, no. iv (New York 1900) p. 73-80; Laski, H. J., Authority in the Modern State (New Haven 1919) p. 287-320.

FOR THE DOCTRINAIRE TEMPERAMENT: Edgeworth, Francis Ysidro, "Doctrinaire" and "Facts," and Keynes, J. M., "Abstract Political Economy" in Palgrave's Dictionary of Political Economy, ed. by Henry Higgs, 3 vols. (new cd. London 1923-26) vol. i, p. 5, 623 24, and vol. ii, p. 11-12; Munro, W. B., Personality in Politics (New York 1924) chs. i, iii; Croce, Benedetto, "Il senso politico" and "La scienza empirica della politica" in his Elementi di politica (Bari 1925) p. 7-26, 47-58; Lippmann, Walter, "Routineer and Inventor" and "The Making of Creeds" in his A Preface to Politics (New York 1913) chs. i, vii, and "Fact and Fancy" in his Drift and Mastery (New York 1914) ch. xvi; Michels, Roberto, Zur Soziologie des Parteiwesens in der modernen Demokratie (2nd ed. Leipsic 1925), tr. from 1st Italian ed. by Eden and Cedar Paul as Political Parties (New York 1915) pt. iv, chs. ii, v-vi; Le Bon, Gustave, Les opinions et les croyances (Paris 1911), and La révolution française et la psychologie des révolutions (Paris 1912), tr. by B. Miall as The Psychology of Revolution (London 1913) p. 86-96; Peirce, C. S., "The Fixation of Belief" in Popular Science Monthly, vol. xii (1877-78) 1-15; Morley, J., On Compromise (London 1874); Hobhouse, L. T., The Rational Good: a Study in the Logic of Practice (London 1921), especially ch. vii; Lasswell, H. D., Psychopathology and Politics (Chicago 1930) chs. ii-iii and bibliography; Man, Henri de, Zur Psychologie des Sozialismus (new ed. Jena 1927), tr. from the 2nd German ed. by Eden and Cedar Paul (London 1928); Kornilov, K. N., "Psychology in the Light of Dialectic Materialism" in Psychologies of 1930 (Worcester, Mass. 1930) ch. xiii; Herzberg, Alexander, Zur Psychologie der Philosophie und der Philosophen (Leipsic 1926), tr. by E. B. F. Wareing (London 1929).

DODGE, DAVID LOW (1774-1852), American pacifist and philanthropist. Dodge, a New York merchant, was the author of The Mediator's Kingdom Not of This World: but Spiritual (New York 1809) and War Inconsistent with the Religion of Jesus Christ (New York 1812; republished Boston 1905, containing a reprint of The Mediator's Kingdom and an introduction by E. D. Mead). He founded the first peace society in the world in New York in 1815. On the basis of Christian and humanitarian arguments and a deep faith in the efficacy of returning good for evil he argued with consistent logic that war was inhuman, unwise and criminal. Although his standard was too thoroughgoing for the American peace movement as a whole, since it altogether repudiated the doctrine that the end justifies the means, his influence stimulated and

helped clarify early antimilitarist arguments. He was the first influential non-Quaker pacifist writer in America. Dodge was also a pioneer in opposing capital punishment. Believing that governments were based on force, he refused to compromise his allegiance to Christ's laws by obeying the state when conflict arose.

MERLE E. CURTI

Consult: Memorial of Mr. David L. Dodge, ed. by M. M. Smith (Boston 1854); Curti, M. E., The American Peace Crusade, 1815–1860 (Durham, N. C. 1929) p. 6-9, 11-12.

DOGMA. In ancient philosophy dogma meant axiom or maxim, that which claims ultimate, not merely relative, truth. In theology the term designates doctrines authoritatively defined and enforced by a church or sect. Sometimes it is incorrectly used as synonymous with theology. The distinguishing characteristic of dogma is its support by explicit or implicit social authority: explicit authority appears in the case of tenets embodied in official creeds, requiring assent; implicit authority is present in the case of dogmas, religious or otherwise, which are regarded as self-evident but actually rest on social acceptance.

The origin of dogma may be sought in what Durkheim has called "collective representations"—those primitive, psychical attitudes in which representational, emotional and motor elements are blended and which are common to the members of a group, transmitted from generation to generation and impressed upon the individuals, awakening in them sentiments of awe and adoration. Participation in the group life is one, but not the only or primary, root of these representations; religious experience in particular involves other factors besides the experience of social unity. Collective representations are embedded in ritual, of which they are the presupposition but which also tends to define and elaborate them. With the growth of social differentiation and criticism myth arises as the explanation and defense of ritual and of the collective representations embedded in it. In dogma the essential content of myth is abstracted, defined and promulgated by social authority. Hence ritual and myth are antecedent to dogma, although germs of the latter are contained in their earliest forms. Explicit dogma arises as the counterpart of heresy, against which it is directed in order to exclude disintegrative forces, to preserve tradition and its knowledge values and to establish social unity.

The basis of Christian dogma was the primitive Christian community, centering in common loyalty to Jesus and His teaching, the expectation of His return and the ecstatic experiences of the "Spirit." The community shared with the groups surrounding it Jewish monotheism, cult and religious tradition. Authority attached to those who had had immediate experience of Jesus and who could report His teaching and eventually to their immediate successors and to the written reports of the teaching of Jesus and the apostles. The Old Testament was received as divine revelation, but no abstract and definite formulation of the content of this tradition was made or enforced. The next stage in the development of dogma arose out of the need for instruction of new Christians and their introduction into the churches. The baptismal formula represents the first somewhat vague formulation of the faith. Further definition and authoritative promulgation proceeded through the processes of conflict and accommodation and through the influence of church organization. Conflict developed first with Judaism and with Judaistic Christians who sought to maintain primary contact with the old faith. The result was the exclusion of Jewish elements from the cult and emphasis on the distinctively new doctrine, the Messiahship of Jesus. The conflict was partly occasioned by and partly resulted in Christianity's approach to kindred Hellenistic groups (Hellenized Jews, Gnostics), with whom it entered into a new process of accommodation and conflict. The resultant amalgamation of Christian religious convictions with Greek metaphysics was gradually set forth in expanded baptismal symbols and in theologies. But the final and authoritative promulgation of doctrine waited upon the organization of the church and its association with the state. Through the development of the episcopacy, the organization of synods, the increased authority of metropolitan bishops, the institutionalization of the church and its imitation of the governmental system of the empire, finally through Constantine's assumption of overlordship over the church, the conditions were created for an authoritative definition and proclamation of doctrine. This had the dual purpose of excluding elements disturbing to the unity of the church and the empire and of establishing a religious bond to guarantee the integrity of the state. The process came to its conclusion through the formulation of orthodox doctrine on the Trinity and the nature of Christ at imperially sanctioned church councils, especially those at Nicaea in 325 and Chalcedon in 451.

While the eastern Orthodox church maintained the dogma as formulated in the first five centuries, the western church continued a doctrinal development which was influenced by the Latin character of the population, Roman legal conceptions and the pedagogical and governmental needs of the Germanic races as well as by the religious experiences and theologies of its leaders. The conflict with Protestantism led to the formulation at the Council of Trent of the Catholic dogma thus prepared. In general, however, Roman Catholicism subordinates the authority of dogma to that of the church, its fundamental dogma being the infallibility of the latter in its teaching function -a doctrine which was finally formulated in the dogma of papal infallibility. Dogma in the Catholic definition consists of revealed truths in so far as these are defined and proposed by the church; the limits of revelation, however, are not clearly defined since tradition as well as Scripture is regarded as its vehicle and the ecclesiastical formulation of dogma need never be closed.

The basic Protestant dogma is the definition of the Scriptures as divine revelation, the infallible guide of faith and practise. In so far as the interpretation of Scripture is not prescribed it may be maintained that Protestantism is essentially undogmatic. But in addition to the fundamental dogma many Protestant churches accepted the dogmas of the early church as authoritative, promulgated them in official creeds and interpreted the doctrine of justification by faith with correlated doctrines as the essential teaching of Scripture. The result has been a Protestant dogmatism which, in distinction from the Catholic, is closed and allows no further development. Dogmatic Protestantism has upon the whole been represented by the state churches and their offshoots, while the sects have in theory adopted the freer attitude, contenting themselves with the dogma of Scriptures. Yet dogma in the form of tradition and of accepted but not creedally promulgated doctrine has also flourished among the latter.

While dogma actually reflects the particular historical conditions under which it originated it claims immutability, universality and eternal validity. This claim rests partly on the immediacy and sufficiency of those religious experiences which, it is believed, dogma defines, but its sources will also be found in the desire for religious certainty, in the historical relation-

ship of dogma to political absolutism and in the need of every philosophy for some axiomatic basis. Nevertheless, dogma as the report of religious experience or as the theological definition of religious axioms admits the relativity of all formulations and is quite distinct from dogma as the officially promulgated but historically conditioned doctrine of ecclesiastical institutions. Yet dogma in the latter form derives its psychological and popular support from being confused with dogma as faith.

Dogma has an important educational function, since it serves to define and transmit the content of religion; it has a governmental function within the church, since it seeks to preserve the unity of the group by excluding heresy and fostering uniformity; and it has a political function in the secular sphere, since it has often been used as an agency of political unification and control. With the growth of religious freedom and the disestablishment of the churches it has been practically restricted to the educational function. Its efficacy in this respect appears in the continuation of attitudes of obedience and acceptance among members of those churches which continue the dogmatic tradition and in the particular characteristics of their piety.

The conflict of dogma and science has been due in part to the clash of an individualistic, freely inquiring attitude with authoritarianism and the attitude of obedience, so that the conflict is part of the whole modern and democratic movement. The reappearance of dogma in connection with political dictatorship and the Marxian theory is interesting in this respect. The conflict of dogma and science, however, is also the result of the inertia of tradition, since religious tradition sanctions traditional belief and custom in general; overt conflict with science has been occasioned far more frequently, for instance, by merely traditional, unofficial dogma (such as the literal interpretation of the Scriptures) than by the creedally formulated doctrines. Further, some conflict has been due to the unavoidable clash between the axioms of religious belief and dogmatic philosophies, such as materialism, claiming scientific character.

Dogma as authoritatively promulgated doctrine is peculiar to authoritarian institutions, but as an axiom it also appears in science, where it is indispensable. Furthermore, scientific hypotheses which in popular or academic philosophy are exalted into metaphysical principles and accepted uncritically have the efficacy of dogmas in the social life. In this sense one

may speak of the dogma of evolution, the dogma of the economic interpretation of history or the dogma of the location of the mind in the brain.

H. RICHARD NIEBUHR

See: Belief; Religion; Ritual; Mythology; Apostasy and Heresy; Sacred Books; Authority.

Consult: Harnack, Adolf, Lehrbuch der Dogmengeschichte, Grundriss der theologischen Wissenschaften, vol. iv, pt. iii (6th ed. Tubingen 1922), tt. from 3rd German ed. by N. Buchanan and others as History of Dogma, 7 vols. (London 1895-99); Troeltsch, Ernst, Die Bedeutung des Protestantismus fur die Entstehung der modernen Welt (3rd ed. Munich 1924), tr. by William Montgomery as Protestantism and Progress (London 1912); Sleigh, R. S., The Sufficiency of Christianty . . . with Special Reference to the Religious Philosophy of Dr. Ernst Troeltsch (London 1923); Dorner, A. J., Grundriss der Dogmengeschichte (Berlin 1899); Loofs, Friedrich, Leitfaden zum Studium der Dogmengeschichte (4th ed. Halle 1906); Fisher, G. P., History of Christian Doctrine (New York 1896); Workman, H. B., Christian Thought to the Reformation (London 1911); McGiffert, A. C., Protestant Thought before Kant (New York 1911); Coghlan, Daniel, "Dogma" and "Dogmatic Facts" in Catholic Encyclopedia, vol. v (New York 1909) p. 89-93; Guignebert, Charles, L'évolution des dogmes (Paris 1910); McTaggart, J. M. E., Some Dogmas of Religion (London 1906).

DOHERTY, JOHN (1797-1854), British trade union leader. Doherty was an Irishman who migrated to Manchester about 1814 and found employment as an operative cotton spinner. In 1825 he allied himself with Francis Place in the movement against the threatened reenactment of the combination laws. Later he became prominent as secretary of the Friendly Associated Cotton Spinners, a post which also involved duties in connection with the Time Bill Committee and the Society for the Protection of Children Employed in Cotton Factories. In 1829 he led the association through a six months' strike. His letters to employers and weekly addresses to strikers and sympathizers during this period show marked ability. Before the strike reached its unsuccessful conclusion he began to advocate the formation of a Grand General Union of Cotton Spinners throughout the United Kingdom and of a General Trades Union for Manchester, whose main object, that of resisting reductions of wages, was accepted in 1830 as the chief aim of the National Association for the Protection of Labour which, he asserted, came to comprehend cotton spinners and workers in many other trades in several counties in England. Press support for the association was found in the Voice of the People (first issue January, 1831) which he edited, but both the

association and the periodical had short lives. By 1832 he had commenced business as a bookseller and printer and became responsible for the Poor Man's Advocate, which quickly involved him in more than one prosecution for libel and consequent imprisonment. In 1833 his resistance to the payment of church rates led to the seizure of a portion of his furniture, and in this and the following year he took a prominent part in Manchester meetings concerned with the troubles in Ireland. In connection with his shop he conducted the Manchester Coffee News Room, where for an admission charge of one penny "ninety-six newspapers and periodicals may be seen every week." In 1838 he appeared before the Select Committee on Combinations of Workmen and gave an account of the spinners' organizations and strikes when he was secretary, an account which is verified in detail in contemporary records. Throughout his active career he continued a strenuous advocate of factory reform.

G. W. Daniels

Consult: Cole, G. D. H., A Short History of the British Working Class Movement, 3 vols. (new ed. London 1927) vol. i, ch. vi.

DOHM, HEDWIG (1833-1919), German feminist and novelist. Hedwig Dohm was the first woman in Germany to raise her voice for the right of women to vote. She stepped into the arena of the women's movement at a time when clergymen and physicians were opposing it with theoretical arguments as to woman's capabilities and her role in life. By her adroit and witty exposure of the absurdities of some of their statements in her pamphlets, Was die Pastoren von den Frauen denken (Berlin 1872), Die wissenschaftliche Emancipation der Frau (Berlin 1874), Der Frauen Natur und Recht (Berlin 1876), and in her novels she reinforced the organized movement, in which she herself took no active part. She began with the admission of a psychic difference between the sexes, much of which she considered due to faulty education and therefore not fundamental or implying a necessary division of labor and the closing of intellectual callings to women. She based her demands upon natural right rather than upon social justice or social welfare: "Women should study because they will to study, because the unrestricted choice of a calling is one of the main elements in individual liberty, which is the basis of individual happiness." The franchise seemed to her the key to all the other rights and liberties.

In spite of the vogue of English thought, especially the writings of John Stuart Mill, in liberal German circles Hedwig Dohm's ideas were not drawn from his *The Subjection of Women* (1869), which she stated she had not read until after the publication of her pamphlets. Her significance lies not in any profound intellectual development of feminism but in the influence radiating from her wit and her courageous independence.

ALICE SALOMON

Consult: Plothow, A. S., Die Begründerinnen der deutschen Frauenbewegung (Leipsic 1907) p. 137-41; Puckett, II. W., Germany's Women Go Forward (New York 1930) p. 150-52, 225.

DOLLFUS, JEAN (1800-87), Alsatian philanthropist. At the age of twenty Dollfus became one of the heads of a Mulhouse cotton factory which belonged to members of his family and in which he was to be actively interested for many years. As a progressive industrialist he believed that the Alsatian cotton factories must be adapted to the export trade. With this end in view he constantly introduced into his factory new machinery and other timely improvements. He was one of the first to campaign for a reduction of import duties, a policy which subsequently triumphed in the Anglo-French commercial treaty of 1860. He remained loyal to France after 1870 and was elected to the Reichstag four times as a protest member. He was active in the movement for international arbitration and general disarmament.

Dollfus is known for his welfare work, particularly in connection with workers' housing. In 1853 he founded the Société Mulhousienne des Cités Ouvrières for the purpose of building houses for workers. It began with a capital of 300,000 francs, which was later raised to 355,000 francs. The French government added a subsidy of 300,000 francs, the society built sanitary houses with gardens, which were sold to the workers at prices ranging (in 1865) from 2650 to 3400 francs. The purchaser made a small initial payment and thereafter a monthly payment of from 18 to 30 francs, which was only a little more than he would have paid as a tenant; he became sole owner of the house in from fourteen to sixteen years. By 1886 the society, which received only a 4 percent return on its investments, had built and sold 1072 houses. At Dollfus' suggestion a popular library and various cooperative stores were founded in connection with the workers' cities. On his own initiative he established public baths and washhouses and improved the conditions of the laborers in his factory.

GEORGES WEILL

Consult: Zuber, Ivan, in Société Industrielle de Mulhouse, Bulletin, vol. lviii (1888) 37-53; Société Industrielle de Mulhouse, Centenaire de la société, 2 vols. (Mulhouse 1926) vol. i, p. 160-63.

DÖLLINGER, IGNAZ VON (1799–1890), German Catholic historian and theologian. From 1826 until 1871 Döllinger lived at Munich as professor and priest. Surrounded by the eminent Catholic leaders, like Görres and Möhler, who composed the Munich center of the Catholic movement, he undertook the vindication of his faith on historical rather than merely speculative grounds. The conviction that Catholicism was less a body of doctrine than a force comprehensible only in the light of its continuous development led him to write his well documented survey of the early church, Kirchengeschichte, and then to invade in the first of his momentous works, Die Reformation, that vital field of church history which had hitherto been largely preempted by Protestants. Although he consistently attributed evil social and spiritual consequences to the Reformation he discovered that the only essential difference between its authors and Catholicism centered about the doctrine of justification. His further discovery that contemporary spokesmen of the Protestant churches were far from united in upholding this doctrine and his trust in the healing properties of common origin and traditions laid the foundations for his growing faith in the possible reintegration of all Christians into the Catholic church. Such an event seemed to him of paramount importance, since he regarded Christianity as the basis of all true civilization, the consecrator of state power, of marriage, of education, of labor and of the individual personality. While the mission of Christianity could be accomplished only by the one church, the Catholic, which was internationally united, Döllinger believed that Rome should moderate her claims in the interests of reconciliation to allow greater freedom to the national episcopal churches. This liberal Catholicism, which shows the influence of Görres and which except for its moderation resembles the doctrines developed in France by the founders of the Avenir, Döllinger carried into the Frankfort assembly of 1848, where he both fought for the freedom of the church from

political interference and deprecated any exemption of church members from civil obligations. At the Catholic assembly in Linz in 1850 he even proposed the establishment of a German national church.

Thus far and throughout the next decade Döllinger was at least ostensibly an ultramontane. But during the sixties his utilization of new historical documents, coinciding with the pontifical responses to the threat of Italian unification, led to a rupture with Rome. His famous lectures at the Odéon in Munich, augmented and published the same year under the title Kirche und Kirchen, were intended as an assurance to the Catholic world that the temporary loss of the papal states would not be fatal to the spiritual power. But Döllinger's admission that the church deserved and needed this calamity as a lustration for its gross misgovernment and a perceptible sympathy in his treatment of the Reformation indicated the trend of his thought. His exposure of spurious claims in Die Papstfabeln des Mittelalters dispelled all doubt. Then came his criticism of the Syllabus of 1864 and, after the summoning of the Vatican council, the overwhelming attack upon the papal institution itself contained in his Der Papst und das Konzil and the progressively fervid castigation of the council's activity in Römische Briefe, based on information sent to Döllinger from Rome by Lord Acton and others. When in 1870 the council proclaimed papal infallibility and the universality of the episcopate, Döllinger saw his life work destroyed. His denunciation of the council as untrue to the tradition of the church and as inimical to the rights of the state was followed in 1871 by his excommunication and gave rise to Old Catholicism. With this movement Döllinger never identified himself, but he lent it his advice until his death, reasserting the principle of ecclesiastical independence which Old Catholicism rejected as it joined forces with Bismarck in the Kulturkampf. Döllinger was one of the greatest historians of the Roman church. His passion for scientific candor and method in historiography communicated itself to a large group of disciples in Germany-Reusch, Friedrich and Cornelius—and chiefly through his pupil, Lord Acton, its influence was keenly felt among Anglican Catholics.

Wolfram von den Steinen

Works: Lehrbuch der Kirchengeschichte, 2 vols. (Regensburg 1836-38, 2nd ed. 1843); Die Reformation, 3 vols. (Regensburg 1846-48; vol. i, 2nd ed. 1851);

Heidenthum und Judenthum; Vorhalle zur Geschichte des Christenthums (Regensburg 1857); Kirche und Kirchen, Papstthum und Kirchenstaat (Munich 1861), tr. by W. B. MacCabe (London 1862); Die Papstfabeln des Mittelalters (Munich 1863, 2nd ed. Stuttgart 1890), tr. by A. Plummer (London 1871); Der Papst und das Konzil, published under pseudonym of "Janus" (Leipsic 1869; new ed. by J. Friedrich with title Das Papsttlum, Munich 1892), English translation (London 1869); Römische Briefe vom Conil, published under pseudonym "Quirinus" (Munich 1870), English translation (London 1870); Lectures on Reunion of the Churches, tr. by H. N. Oxenham from ms. (London 1872), published as Über die Wiedervereinigung der Ahristlichen Kirchen (Munich 1888); Geschichte der Moralstreitigkeiten in der römischkatholischen Kirche seit dem 16ten Jahrhundert, 2 vols. (Munich 1889), in collaboration with F. H. Reusch; Beiträge zur Sektengeschichte des Mittelalters, 2 vols. (Munich 1890); Akademische Vorträge, 3 vols. (Munich 1888 91); Kleinere Schriften, ed. by F. H. Reusch (Stuttgart 1890).

Consult: Friedrich, J., Ignaz von Döllinger, 3 vols. (Munich 1899–1901); Vigener, F., Drei Gestalten aus dem modernen Katholizismus, Historische Zeitschrift, supplement no. vii (Munich 1926) p. 108–88; Goyau, G., L'Allemagne religieuse, le catholicisme, 4 vols. (Paris 1905–09); Acton, J. E. E., "Dollinger on the Temporal Power" and "Dollinger's Historical Work" in History of Freedom and Other Essays (London 1907) p. 301–435.

DOMAIN, PUBLIC. See Public Domain.

DOMAT, JEAN (1625-96), French philosopher and jurist. For many years Domat was a lawyer at the presidial court in Clermont. He was an intimate friend of Pascal, and although he was scarcely a Jansenist he at least shared the Jansenist hostility toward the Jesuits. His great work, Les loix civiles dans leur ordre naturel (3 vols. Paris 1689-94, new ed. 2 vols. 1735; tr. by W. Strahan, 2 vols. 2nd ed. London 1737), was issued anonymously and little note was at first taken of it, but the enthusiasm of Boileau and of Daguesseau gave it a vogue that spread beyond France. It was frequently cited in England but in Germany it exercised no appreciable influence. In this work Domat performed the bold and extraordinary feat of recasting the entire mass of the existing Roman law and restating it concisely in what he believed to be a rational system—a system profoundly influenced by the logical propensities of his Port-Royal friends and perhaps still more affected by their conception of life as a set of immediate relations between God and man. Without any special charm of style his work had a clearness and brevity that recommended it to the French lawyers of the eighteenth century, already predisposed in favor

of an anti-Jesuit. His method is to derive the doctrines of the French Roman law from some general principle of ethics or natural theology and to show the application of the doctrine so interpreted in other rules of law. No one before him had ventured to depart from the order of subjects found in the *Corpus juris* of Justinian or had so freely rejected obsolete doctrines or irrelevant and conflicting rules. It was the first step in that movement to cut through traditional categories which culminated in the French Revolution and the civil code.

Domat was in a sense the founder of the science of public law in France, since his little treatise *Le droit public* (2 vols., Paris 1697), published after his death, was the first French work on this subject. His manual for students, entitled *Legum delectus*, was printed in 1700 (Paris). His collected works were edited by N. E. Carré under the title of *Oeuvres de J. Domat* (9 vols., Paris 1821–25).

MAX RADIN

Consult: Loubers, H. G. J., Jean Domat (Paris 1873), and "Domat criminaliste" in his Cour decassation (Paris 1887); Feitu, Émile, "Domat et sa conception philosophique du droit" in Revue evituque de législation et de jurisprudence, vol. xxxiv (1869) 48-75, 263-82, 365-91; Cauchy, Eugène, "Études sur Domat" in Académie des Sciences Morales et Politiques, Séances et travaux, vol. xx (1851) 181-202, 369-83, and vol. xxi (1852) 83-95, 135-62.

DOMESTIC RELATIONS COURTS. Because of their great variety in jurisdiction, organization, origin and inspiration it is practically impossible to give a general definition of domestic relations courts. Indeed, difference of opinion exists as to the very name which would best express the idea behind such courts. Domestic relations court was favored in the early days of the movement. Family court now seems preferable to social workers, while the name which is often used in the statutes themselves is juvenile and domestic relations court.

In its most general sense the idea of the domestic relations courts is bound up with the progress of the juvenile court movement and represents an extension of the idea underlying it. The juvenile courts, the first of which was established in 1899 and which are now practically universal in the United States, were devised to deal with juvenile delinquents by a special procedure of which the chief feature was the absence of the ordinary criminal forms; the child was regarded rather as a ward of the court and as a subject of clinical and proba-

tionary treatment. But as the juvenile court movement spread it was not long before it came to be urged that it was unscientific to attempt to solve the problem of juvenile delinquency without extending the jurisdiction of the juvenile court to deal also with the abnormal domestic relations which had contributed to it. A delinquent or dependent child was an indication of a disrupted or discordant home, and only a court having power also to eliminate the causes leading to delinquency or dependency could adequately cope with the situation. The family had to be dealt with as a unit according to a technique of social adjustment, and this could never be done when the various phases of domestic relations were entrusted to a whole series of independent courts. Desertion, abandonment, non-support, contributing to delinquency or dependency and offenses against children were usually cognizable in many criminal courts, while such matters as the establishment of paternity and the support of children born out of wedlock, adoption and guardianship, annulment of marriage, divorce and separation were vested in a great variety of civil courts-probate courts, chancery courts, district courts, circuit courts and superior courts--which often, moreover, had concurrent and overlapping jurisdiction. What was needed was a unified and independent court to deal with all these aspects of domestic relations. But still more important than the consolidation of jurisdiction there was to be effected a relaxation of the ordinary criminal and civil procedure in family cases, and particularly there were to be inaugurated in connection with the domestic relations or family courts family clinics and probationary and investigatory services to inquire into and control the causes of family discord and thus make it possible for a court, once it had taken jurisdiction of a case, to exercise continuing oversight. In short, the family court was to appear logically as the evolutionary product of the juvenile court movement.

The early domestic relations courts, however, had little connection with this program. They were based upon legislative motives that were actuated rather by a desire to provide more efficient forums for the administration of the laws against family desertion and non-support, which were generally being strengthened after 1900, and were thus attempts primarily to solve the problem of poverty and civil litigation—a fact that has been insufficiently recognized in

tracing the history of the domestic relations courts. The first domestic relations courts of this type were established in the state of New York in 1910, when the City Court of Buffalo created a domestic relations division. In the same year New York City was authorized by the state legislature to establish domestic relations courts as part of the system of magistrate's courts, and such courts are now to be found in the boroughs of Manhattan, Brooklyn and the Bronx. They have no juvenile jurisdiction and are distinct from the New York children's courts, dealing primarily with desertion, nonsupport and contributory delinquency cases. Separate domestic relations courts or divisions without juvenile jurisdiction now exist also in such large cities as Philadelphia, Boston, Chicago, Kansas City and Newark and thus may be said to represent an arrangement that is popular particularly in the megalopolitan centers.

Types of courts which come closer to the objectives of the family court movement, combining in various degrees both juvenile and domestic relations functions, have also been developing. The Cincinnati Court of Domestic Relations may be regarded as the progenitor of these. In the Court of Common Pleas there was created in 1913 a division of domestic relations, which was given not only juvenile, desertion, non-support and contributory delinquency jurisdiction but also exclusive jurisdiction in divorce and the establishment of paternity; it was not, however, vested with control of guardianship and adoption, and the court has no adequate investigatory or supervisory system. In 1913 also the Michigan legislature attempted to create a domestic relations division in the Circuit Court sitting in Detroit and to give it a comprehensive jurisdiction including divorce, but the project was declared unconstitutional [Attorney General v. Lacy, 180 Mich. Rep. 329 (1914)]. The St. Louis Domestic Relations Court, created in 1921 as part of the Circuit Court, had been given not only juvenile but divorce jurisdiction, yet strangely enough has been left without desertion or nonsupport jurisdiction. The Huntington Court in West Virginia has in addition to juvenile, desertion and non-support jurisdiction also concurrent jurisdiction with the Circuit Court in divorce cases. In 1925 courts of comprehensive jurisdiction including divorce were authorized in Oklahoma for Oklahoma and Tulsa counties, but they have not yet been established; the district judges in Tulsa refused to assume jurisdiction on the ground that the law was unconstitutional. In 1929 a combined juvenile and domestic relations court was established in Hamilton county in Tennessee with exclusive divorce jurisdiction in cases which involved the custody of children, and the independent family court of Multnomah county in Tennessee was made part of the Circuit Court and its jurisdiction enlarged to include uncontested divorce cases or those involving children under eighteen.

It would be impossible to describe in any accurate detail the domestic relations courts of all the states or even classify them very exactly. As in the case of the juvenile courts they may exist as independent courts or simply as divisions or parts of courts of more general jurisdiction. Their organization may not be uniform even within the bounds of a single state. Independent family courts with both juvenile and domestic relations jurisdiction have been established in only six states: Alabama (in counties of certain size), New Jersey (state wide), North Carolina (one county), Tennessee (one county), Virginia (state wide) and West Virginia (state wide). The courts of Missouri, Ohio and Oregon, as indicated, are distinct divisions of courts of more general jurisdiction, and the New York City and Newark courts already mentioned may be included as types of independent courts with domestic relations jurisdiction only. The Alabama, North Carolina and Virginia courts represent a type of court with fairly complete domestic relations jurisdiction exclusive of divorce, which would seem to indicate that this type of organization is characteristic of the southern states as a region. Sometimes the juvenile court has had its jurisdiction enlarged to include contributory delinquency or descrtion or non-support without having its title changed to domestic relations court, or conversely the accretion of the title has not always meant very wide domestic relations jurisdiction. The famous family court of Denver, long presided over by Judge Lindsey, may be taken essentially as a type of juvenile court with some domestic relations powers.

A great impetus has been given to the movement for domestic relations courts by a committee of the National Probation Association which has functioned since 1916. The United States Children's Bureau has also shown great interest and in 1930 completed a survey of the growth of jurisdiction in children's cases and cases of domestic relations. The analysis shows that, while compromises have often been made

all along the line in most states, the court that sits in juvenile session or has a juvenile or family branch now has at least concurrent jurisdiction in cases of contributory delinquency or dependency, desertion and non-support, so that close coordination of juvenile and family case work is possible. Jurisdiction, exclusive or concurrent, in cases of offenses against children, commitment of mentally defective children, legitimation, guardianship or adoption is far less generally granted. Powers of guardianship or adoption even where included are often limited to cases where a delinquent or dependent child is before the court. Jurisdiction in divorce is most rare.

Thus many of the features of family court programs have gradually been incorporated into law in many jurisdictions. It is not difficult to discover the reasons why the unified clinical family court has not been completely realized. Constitutional obstacles have been the least formidable. The questions that have been raised have been based rather on grounds of expediency. There have been some suggestions recently in the direction of extending the jurisdiction of the family courts still further; for instance, to include control over the granting of marriage licenses, particularly where minors are involved. But on the whole a growing caution is to be discerned in the extension and consolidation of domestic relations jurisdiction. It is feared in the first place that some of the good now done by existing juvenile courts may actually be undermined, particularly in the large cities where these courts are already overburdened. A large addition of divorce cases, for instance, might make it difficult to specialize in children's cases, and the criminal or at least quasi-criminal procedure in desertion and nonsupport cases might invest the courts with an atmosphere detrimental to the consideration of children's cases. This can be avoided to some extent by the creation of separate divisions within the domestic relations court, but except in the larger cities there would not be enough cases to occupy each branch.

Far more fundamental is the question whether unified courts of domestic relations are based upon a correct analysis of present social conditions and possibilities in general and the situation of the modern family in particular. It is obvious that the latter does not have the unity which characterized the Roman family at one period of its history. The concept of the family rather than the individual before the

law is not quite in accord with the realities of modern family relations, which are subject to an extremely wide variety of disruptive influences of so complex a character that they are often quite beyond the remedial possibilities of even the most pliable legal technique. In order to make the latter effective it would be necessary to recognize as penal or at least quasipenal a wide range of rather vague and relative offenses, which would certainly be dangerous in the absence of a complete system of scientific criminology. For instance, when domestic relations courts were created in Virginia, the rather vague crime of contributing to the disruption of a home was written into the statute.

Moreover, it is to be remembered that it is far less important that the family court be unified than that it possess adequate inquisitorial, supervisory and probationary powers, but it is quite generally admitted that this is beyond the possibilities of the courts as at present constituted. The working of present systems of probation is not encouraging, and the resources of really scientific social work would be severely strained. In other words, great care must be taken that the family court be not established prematurely before adequate social techniques are available to transform present judicial organization. The establishment of family courts must gradually involve an interstitial relaxation of the guaranties of criminal procedure in cases of injury to family relations, which can only be justified if a highly efficient and well developed social technique is available. At present it would seem to make little difference whether some crimes which may injuriously affect the family, such as selling cigarettes to minors, are tried in a court of domestic relations or the ordinary criminal courts. Where an offense against a child is a felony, it may be especially important that the safeguards of the ordinary criminal law be maintained in the interests of individual liberty.

The storm center of the movement for domestic relations courts has lain in the granting of divorce jurisdiction. It is here that the conflict between the regnant individualism and encroaching socialization has been most manifest. The reasons that have been found for accepting enlargements of jurisdiction in the interest of children have appeared less persuasive where the interests of adults are paramount or of equal importance. The extreme individualist sees in the transfer of divorce jurisdiction the first step toward treating adults like chil-

dren, and behind the demand for inquisitorial powers for domestic relations courts he perceives hardly more than a meddlesome passion for collecting better and more reliable statistics on the causes of family discord. His mind reacts violently against the idea that a court may act in a divorce case not upon the evidence the parties choose to present to it but upon knowledge secured for it by its own agents. Indeed, it cannot be doubted that the family court means an interstitial procedural attack not only upon the criminal law but also upon the freedom of divorce which has seemed to be gaining ground in the present century. The welcome which comprehensive courts of domestic relations have been granted in the southern states may perhaps be interpreted from this point of view.

The individualist attitude toward divorce jurisdiction is naturally closely bound up with group or class standards. Where the upper classes are concerned, a proceeding for divorce usually involves an adjudication of complicated or extensive property rights as much as the solution of personal relations, and for this the courts of general jurisdiction are better fitted. The divorces of the middle classes can doubtless be more easily handled by a court of domestic relations. But as far as the very poor are concerned desertion has been aptly termed the poor man's divorce; or, as Mowrer puts it in his Family Discord (p. 88), "Desertion characterizes the poverty group. Divorce on the other hand is confined to the middle and upper classes." These class cleavages are particularly prominent in the large urban centers, and they present the dilemma of erecting a domestic relations court with a judicial personnel which could economically deal with all classes of cases. A superior judge might be wasted on the lower class cases, while an inferior one would not be capable of coping with the upper class ones. But beyond this dilemma is the fact that by long association the domestic relations court in the large cities has practically come to signify a desertions court for the poor (and often the alien poor), with the result that a stigma has attached to it in the minds of the strongly individualist middle and upper classes. Such considerations are naturally less applicable where the divorce jurisdiction in the family court is only concurrent and where the court itself is not an independent one but simply a part of a court of general jurisdiction. It is interesting that the actual grant of divorce juris-

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diction has tended in this direction and has been conferred on the whole in regions that are fairly homogeneous in population and in economic status and that while urban are not megalopolitan. The movement for domestic relations courts is significant in connection with those urban conditions which have led to the creation of many types of special courts in the United States in the last few decades. But it is to be doubted whether courts of domestic relations can be completely realized as long as the prevailing individualism remains dominant and techniques of social adjustment are at their present levels.

WILLIAM SEAGLE

See: Courts; Juvenile Courts; Family; Marriage; Divorce; Family Desertion and Non-Support; Family Law.

Consult: Eliot, T. D., The Juvenile Court and the Community (New York 1914) ch. xiii; Lou, H. H., Juvenile Courts in the United States (Chapel Hill, N. C. 1927) p. 203-12, and literature there cited; Smith, Reginald Heber, Justice and the Poor, Carnegie Foundation for the Advancement of Teaching, Bulletin no. 13 (New York 1919) ch. xi; Patterson, S. II., Family Desertion and Non-Support: a Study of Court Cases in Philadelphia (Whittier, Cal. 1922); Mowrer, Ernest R., Domestic Discord (Chicago 1928), particularly ch. ix, and Family Disorganization (Chicago 1927); Willoughby, W. F., Principles of Judicial Administration (Washington 1929) ch. xxiv; Pound, Roscoe, "Individual Interests in the Domestic Relations" in Michigan Law Review, vol. xiv (1915-16) 177-96; Hoffman, C. W., "Social Aspects of the Family Court" in American Institute of Criminal Law and Criminology, Journal, vol. x (1919-20) 409-22; Perkins, W. B., "Family Courts" in Michigan Law Review, vol. xvii (1918-19) 378-81; Waite, E. F., "How Far Can Court Procedure Be Socialized without Impairing Individual Rights?" in American Institute of Criminal Law and Criminology, Journal, vol. xii (1921-22) 339-47, and "Courts of Domestic Relations" in Minnesota Law Review, vol. v (1921) 161-71, and "The Outlook for the Juvenile Court" in American Academy of Political and Social Science, Annals, vol. cv (1923) 229-42; Zunser, Charles, "Domestic Relations Courts," and Day, L. B., "Development of the Family Court" in American Academy of Political and Social Science, Annals, vol. exxiv (1926) 114-25, and vol. exxxvi (1928) 105-11 respectively; Flexner, Bernard, and others, The Child, the Family and the Court: a Study of the Administration of Justice in the Field of Domestic Relations, United States, Children's Bureau, Publication no. 193 (Washington 1929); Lyman, F. R., Analysis and Tabular Summary of State Laws Relating to Jurisdiction in Children's Cases and Cases of Domestic Relations, United States, Children's Bureau, Chart no. 17 (Washington 1930).

DOMESTIC RELATIONS, LAW OF. See Family Law.

DOMESTIC SCIENCE. See Home Eco-NOMICS.

DOMESTIC SERVICE, like other forms of labor, evolved in Europe through the various forms of labor relations-slavery, feudalism, indenture and free wage labor. Its peculiarity lies in its distinction from the other forms of labor, which have become less personalized rather than more so and have been removed from the home and consolidated into marketable commodities or services. The modern problem of domestic service is concerned with the shortage of labor which has resulted from the increasing failure of its status to attract and keep workers, despite undoubted improvements in wages and working and living conditions, rather than with the incidental problems of quality of work which arise in most labor relations. This problem becomes increasingly acute as certain branches of domestic service become commercialized and industrialized and as the lure of the comparative freedom of factory or commercial employment becomes stronger. These alternate occupations in domestic and personal service and in factory occupations were not available to women workers prior to the last quarter of the eighteenth century and were present for many of the men workers to a lesser extent than at present. This is perhaps more striking in the United States than elsewhere, although the "servant problem" is practically universal throughout Europe.

Up to the time of the American Revolution domestic service in colonial America, like most labor, was performed by transported convicts, indentured white servants or "redemptioners," "free willers," Negroes and Indians. Redemptioners, who sold themselves into service to pay for the cost of their passage, outnumbered Negro slaves in Virginia and Maryland until the latter part of the seventeenth century. From the revolutionary period until about 1850 the indentured workers were gradually supplanted in the north by free native born laborers. The social chasm that had existed between employer and employee diminished; the term "help" was almost universally used; there was an absence of liveries and all the distinguishing marks of service and an intolerance on the part of both employer and employee of servility and subservience of manner. In the south, on the other hand, as Negro labor entirely displaced white labor. the status of the servant became more servile.

Nevertheless, a downward trend in the status

of the occupation in the north was introduced by the immigration resulting from the Irish famine of 1846 and the German revolution of 1848. The faintly drawn class line changed into a caste line; native born Americans feared to lose social position by entering into competition with foreign labor and the native born women workers flocked instead into the new factory work, the prestige of which at the time was sufficient to attract the daughters of New England farmers, tradesmen and workers of the professional class. In the south the abolition of slavery meant merely that Negroes who had previously performed all domestic service for their personal expenses began to receive a small remuneration in money, but the occupation remained one scorned by native born white southern workers. In the far west after the discovery of gold in California Chinese coolie labor, made possible by the resumption of treaty relations with China in 1844, placed an equally strong social stigma on domestic service. Probably the only places in which the dignity of the occupation was maintained were in the mid-western pioneering communities where the housewife still actively participated in the work of the household, where native "hired help" competed only with immigrants to whom also domestic service was an occupation rather than a state of necessary servitude. It is in such communities that a servant group such as that portrayed in Willa Cather's My Antonia existed, if only for a short period.

The explanation of the stigma of domestic service in the recruiting of immigrants and the so-called inferior races might suffice for American communities whose democratic and classless distinctions held only for the native born. But it is challenged by the fact that in Europe, undisturbed by mass immigration, native born domestic servants had a status as low as that of the Negro, Asiatic or European in the United States. Domestic service grew directly out of feudalism, and after its abolition service became the chief occupation of the poorest elements among free laborers, an occupation from which men withdrew in increased numbers and for which women and children from the poverty stricken rural countryside were recruited. In a society in which class lines were unchallenged it was accepted by the domestic worker herself as the lowest type of occupation. It was an occupation untouched by such benefits as might result from organization through guilds. It remained for the faint social consciousness dimly awakened by industrialism to discover that in

London in the eighteen forties a large proportion of the most destitute women and prostitutes were domestic servants.

These caste lines defining the rank of the domestic servant were reenforced by the results of the industrial revolution, especially in the United States, Industrialism transformed the economic and social functions of the home. Before this revolution the middle class home had been a unit of production for exchange of recognized economic and social importance. With the advent of industrialism the economic functions of the home shifted largely from the making of goods to the rendering of services which were too often looked upon as menial, disagreeable and degrading. The persons who performed these services were accordingly looked down upon and considered of inferior social status. And so long as successive streams of cheap immigrant labor were available at wages which in the nineties averaged about \$2.50 to \$3.00 a week, there was little incentive to introduce the labor saving machinery devices and organization of household tasks which are now so widely advocated. Factory labor remained the more desirable occupation to the native born American woman until it too began to attract immigrant workers. The latter, imbued with the attitude transmitted to them by the community, were anxious to exchange the certain disadvantages of domestic service for the uncertain benefits of insecurity resulting from the "freedom" of industrialism, and as the demand for general houseworkers increased it became increasingly difficult, even in the face of successive waves of immigration, to secure sufficient labor for this occupation. The private employment agencies were unhampered in their activities among foreign born workers because of the omission of domestic service from the operation of the contract labor law, and they also sent recruiting agents throughout the South to encourage a northward trend of Negro labor.

So acute had the problem of domestic service become at the outset of the twentieth century that there began to be heard numerous faint stirrings of interest in the status of the servant. Prior to that time it had remained an unchartered field for economists and social historians, who although they might have questioned Adam Smith's dictum as to the valuelessness of domestic service did not consider it of great social or economic significance. Governmental bodies which had concerned themselves only with the gathering of data regarding industrial and com-

mercial occupations still remained comparatively untouched by the trend. The latest figures available in 1931 on the wages spent for domestic labor are those given by a report of the Industrial Commission in 1901, which stated: "There is no other branch of labor which directly affects so many people as does household labor, yet there is no branch of labor which has received so little scientific attention from either economists or people generally. In the wages paid to domestic employees alone, without reckoning the value of the board and lodging supplied to them, fully \$200,000,000 is expended annually. Any other industry which involved the expenditure of so large an amount of money in wages would not be left out of the field of economic discussion and investigation." Only recently have government figures begun to distinguish between those in household employment, those in public domestic service and those engaged in personal services outside the home. Both abroad and in the United States public or unofficial investigations as to the status of the worker were completely lacking; it was not until after Charles Booth's study of the occupation in his famous London survey that the English governmental authorities undertook a survey in 1899. In the United States Lucy M. Salmon of Vassar College in 1897 undertook her pioneer social history of domestic service, which included the gathering of data from 2000 employers and 700 workers. This study was the first to brush aside such perennial remedies for the situation as dependence on the golden rule and advocated the lessening rather than the increase of personal relations. In the same year the Domestic Reform League of the Women's Educational and Industrial Union of Boston made surveys of local conditions, opened a school for domestic workers, conducted an employment bureau which used a standard form of contract,

stimulated statistical surveys by the Massachusetts Burcau of Statistics of Labor and published for a time a quarterly bulletin.

Then there began a series of experiments, especially in the north Atlantic states, consisting of attempts to train skilled household workers who would then be hired by the hour. But, as I. M. Rubinow pointed out in a series of papers written between 1906 and 1910, it was a vain task to train for an occupation in which skill was constantly decreasing, since more and more of the skilled branches-such as the care of children-were leaving the home, and which, unlike nursing, to which it had been compared, could expect no increase of professional knowledge or standards on the part of the supervising agent or employer. In these papers, the first to make a study of the economic tendencies involved, Rubinow attempted to correlate the number in household employment with the increase in population, and the number of families with the increase in public domestic and personal service and in other types of occupations. He estimated that the demand for servants had doubled between 1870 and 1900 and that the supply had increased by only one half. According to his estimates population had increased 95 percent, the number of families 14 percent, the working population 132 percent, the number of working women 300 percent and the number in public domestic service as exemplified in the occupation of waiters by 357 percent; whereas those employed in domestic household service had increased by only 49 percent. A census estimate of the proportion of servants to the total population shows a decrease from 25.9 in 1870 to 17.3 in 1920; and if waiters, housekeepers and stewards are omitted, the figures show a decrease in the number of servants from 19.1 in 1900 to 13.0 for 1920. He predicted the declining importance of household employment with

TABLE I

Number of Persons 10 Years and Over Engaged in Jomestic and Personal Service in the United States, 1880–1920

Census	TOTAL NUMBER IN GAINFUL OCCUPATIONS	In Domestic and Personal Service		In Domestic Service		
YEAR		Number	PERCENT OF TOTAL GAINFULLY EMPLOYED	Number	PERCENT OF TOTAL GAINFULLY EMPLOYED	
1880	17,392,099	3,418,793	19.7	1,075,655	6.1	
1890	23,318,183	4,220,812	18.1	1,454,791	6.2	
1900	29,073,233	5,580,657	19.2	1,560,721	5-3	
1910	38,167,336	3,772,559	9.9	1,572,225	4.1	
1020	41,614,248	3,404,892	8.2	1,270,946	3.0	

Source: Compiled from the United States Census Reports for the respective years.

TABLE II

RACE AND NATIVITY OF WOMEN 16 YEARS OF AGE AND OVER EMPLOYED AS SERVANTS IN THE UNITED STATES, 1910 AND 1920

		TOTAL NUMBER		CENT BUTION	PERCENTAGE CHANGE FROM
	1910	1920	1010	1920	1910 TO 1920
Native white of native white parentage	310,474	238,357	25.1	24.3	- 23.2
Native white of foreign or mixed parentage	200,042	143,208	16.2	14.6	- 28.4
Foreign born white	333,011	207,811	27.0	21.2	- 37.6
Negro	388,659	389,276	31.5	39.6	+ 0.2
All other	2,572	2,905	0.2	0.3	+ 12.9
Total	1,234,758	981,557	100.0	100.0	- 20.5

Source: Ilill, J. A., Women in Gainful Occupations . . . , p. 38.

the introduction of labor saving machinery and techniques for the organization of household tasks, most of which were at that time comparatively unknown, as well as the increase in the amount of commercialized domestic service because of urbanization, apartment and hotel dwelling, the hiring of special services and the like.

It was not until the period during and after the World War, when the shortage of domestic service became unusually acute and even the colored worker began to be recruited into factory labor or was able to enforce her preference for day work, that many of these reforms began to be initiated on a large scale. In this period household workers began to join the ranks of the hotel and restaurant workers unions, not only as individuals but to form locals of their own. Ten such locals were formed in 1920 and affiliated with the American Federation of Labor. The formation of unions in southern cities and the existence of a Negro local of 200 members in New Orleans were particularly noteworthy. These organizations, however, did not survive the post-war depression, and the period from 1920 on has witnessed a revival of training schools, mostly of brief duration, as well as of such organizations as the Scientific Housekeeping, Inc., of New York City, the Bureau of Household Occupations in Providence formed by the Housewives' League and similar bureaus in Boston, Hartford and elsewhere.

The Young Women's Christian Association was one of the first to begin a survey on a national scale of conditions in domestic service, which it is continuing at the present time. In 1924 the Woman's Bureau of the United States Department of Labor made an analysis of the records of the Domestic Efficiency Association in Baltimore, and in 1927 cooperated with a group of Quaker women in Philadelphia in a survey and helped to found a permanent organi-

zation. More recently, as a result of the Conference on Employer-Employee Relationships in the Home held in Washington in October, 1928, a permanent Committee on Employer-Employee Relationships in the Home was established for research and experimentation upon such questions as the nature of the jobs to be performed, information as to varying types of employers and employees, the possibility of establishing adequate public or semipublic employment agencies and if possible a national clearing house, vocational training and agencies for the education of the public concerning the problem. Also, since the number of Negro workers in the field has been increasing, special studies have been made of their role in the industry.

As a result of these studies and endeavors information has been secured on the number of persons employed in the various branches of domestic service, the proportion of men and women so employed, and the changing proportion which women in domestic service form of the total number of employed women. Scattered individual community surveys have been made of hours and wages, of work preferences, of living and housing conditions. As yet, however, no real national survey has been attempted. Table I based on census data shows the decreasing importance of domestic and personal service in relation to the total gainful employments, but allowance must be made for the fact that the scope of the domestic service classification was somewhat changed during the period covered. Nor do the census data allow of separating with any degree of certainty household domestic service from that in commercialized enterprises, but there is no doubt that if such figures were available they would show a far greater decrease in the amount of household employment.

While Table II covers only women employed in domestic and "kindred occupations" in 1910

and 1920 it offers a clue to the racial and national composition of the whole group of domestic workers. The proportion of Negro workers, the largest racial group in this occupation, varies over the country. In Baltimore of 2800 household employees studied 68.9 percent were Negroes; in the Philadelphia study of the women 43.3 percent were colored, 16.14 percent native born white and 42 percent foreign born, and for the men the figures were respectively 44, 24 and 32 percent.

The distribution according to sex of the persons employed in domestic and personal service shows a decided increase in the percentage of women employed—from 34.6 in 1880 to 64.2 in 1920. The proportion of women is no doubt still greater in domestic service only, and highest probably in household domestic service. As compared with other industries, however, domestic service is of declining importance as an occupation for women; the number employed in domestic service and "kindred occupations" dropped from 60.7 percent in 1870 to 18.2 percent in 1920 of all the women employed in non-agricultural pursuits.

This decline in importance of the occupation is illustrated also by the startling changes shown by figures as to labor turnover, available, however, only for scattered communities and for groups not always comparable. As early as 1800 the average tenure of service of a domestic worker in the United States was less than eighteen months; in the city of New York the modal period of employment for 24 percent in a period from 1906 to 1908 was estimated at from six to eleven months, 17 percent served from one to two years and 14 percent three years and over. In 1922 in the city of Washington, of 1000 houseworkers placed almost 60 percent remained in positions from one to three months only, 10 percent about four months and over and about 30 percent one week and less. The modal period for colored workers was from three to six months, whereas in a study of colored domestic workers in a selected section of Philadelphia in 1900 the average period was slightly less than five years. From a perusal of the literature on the subject one would reach the conclusion that the bulk of this turnover is to be attributed more to the wish of the worker than to dismissal.

Equally scattered is the material on wages, hours and housing accommodations which might explain the failure of domestic service to hold its own as an occupation. Nevertheless, from such material as exists it would seem that wages

rose in the north and the middle west from a weekly average of about \$2.50 or \$3.00 for general workers at the outset of the century to about \$10 or \$15 for general houseworkers and \$15 or \$18 for skilled workers at the present time. exclusive of room and board, with a somewhat higher wage level in New York and Boston and lower levels in southern and rural sections. In general, moreover, the foreign born receive higher wages than the natives, due partly to the fact that there is such a large proportion of Negroes among the native born. The wages of men engaged in domestic service are higher than the wages of women. While there is a tendency toward an increase of wages with length of service, there are no generally accepted standards. If allowance is made for room and board, the actual money wages probably compare favorably with those paid to unskilled factory labor. A study of wages in Chicago based on 3500 advertisements of "experienced white females to do general housework" showed that real earnings increased from 1900 to 1914-they were 25 percent more than they had been in the nineties; but from 1914 to 1918 real earnings fell 20 percent. When hours of labor, however, are taken into consideration the actual hourly earnings are low. According to W. I. King, during the twenty years preceding 1914 very little advance occurred in the wages of domestic servants, but during the war of 1914-18 their wages increased about 150 percent. Since the war the decline in the wages of public domestic servants has not been as great as that in many other fields, but they are still below those in the majority of industries.

Both the actual hours and the overall hours in domestic service are long. In 1890, 38 percent of women domestic workers actually worked ten hours a day, 6 percent eleven hours, 31 percent twelve or more, with only 25 percent working less than ten hours a day. In the city of Washington in 1922, 750 out of 1000 domestics (exclusive of day and part time employees) worked more than ten hours a day. The overall hours for men are shorter than for women. In Philadelphia they averaged eight hours and over for the men but under ten hours for 32.6 percent; and for the women an overall of twelve hours and over but under fourteen hours for 51.7 percent. The actual hours of the men coincided more nearly with their overall hours than did those of the women. A large percentage of the women employed as cooks, general houseworkers, chambermaids, waitresses and children's nurses are reported by their employers to have worked ten hours or over daily. A few of both the men and women were reported to have been on duty twenty-four hours in the day.

These conditions are, of course, far truer for those who "live in" than for those who work by the day or hour. Small wonder then that the general custom of "living in" is unpopular. Curiously enough, in the Baltimore study mentioned, of 1358 women both Negro and white 49.7 percent expressed a willingness to live in, 37.6 percent preferred to live out, 8.5 percent were willing to live in part of the time and 4.3 percent had no preference. In Philadelphia 60 percent of the women and 21 percent of the men lived in their place of work. In recent years the aversion to "living in" has not been caused by bad housing and food, as it formerly was in America and doubtless still is in Europe. It is probably truer of the colored worker, however, that her living conditions in the house are less desirable than those of the white worker. Out of 500 Negro domestics interviewed in Washington, 64.1 percent of whom were requested to sleep in, 83 percent were offered basement rooms 10 percent third or first floor rooms, and 7 percent were offered attics or received no definite statement.

On the other hand, domestic service for the colored worker, whether "living in" or working by the hour, does not carry with it the same degree of social isolation which it does for the white worker except in rural or suburban communities. In the first place, a greater percent are married. The age and marital status of the workers differs widely for several groups. A study of 975 colored servants showed 54.2 married and 10 percent widowed, separated or divorced, whereas for 450 white women the figures were 30 percent married and 17 percent widowed, making comparative totals of 55 percent as against 46.5 percent. According to a study in Philadelphia of both colored and white domestic workers, the majority of women so employed were under thirty-one and 51 percent of them unmarried, and the majority of men were over thirty and only 28.3 percent were unmarried. By comparison, 1921 figures for Greater London showed that of 276,446 women in domestic service only 8.2 percent were married, whereas in the other personal service groups, with the exception of waitresses and barmaids, charwomen and office cleaners and laundry workers, married persons predominated.

The white domestic worker is shut out from the ordinary social groupings. According to a study made in 1910 of 2300 white domestic workers under thirty in the state of Michigan, only 51 belonged to fraternal societies. Among the colored workers this isolation is not so complete; 7 out of every 11 Negroes are listed as church members and the large majority of those in domestic service are so affiliated, but even here, according to a survey of the Negro in domestic service, the dictum that the "more intelligent" do not enter the service casts a shadow over their status.

There seems to be little hope for improvement through unionization of domestic workers in the United States, although such organization might follow the formation of employers' groups. On the permanent committee on employer relations, for instance, there is but one trade union member, a representative of the National Women's Trade Union League. Such improvements as have come have been in wages, and working conditions have largely been enforced by shortages in this field. This failure to organize and the general disrepute of domestic service may explain the almost complete exemption of this branch of women's work from social legislation. With the exception of the interest taken in the problem by the Women's Bureau of the United States Department of Labor, government bodies have scarcely taken cognizance of the problems of domestic labor. Although the number of child laborers has decreased considerably, both absolutely and proportionately to the total—the decrease in the number of children in domestic service between 1910 and 1920 was 51.9 percent-it cannot be claimed that this has been due to child labor legislation, for child labor laws completely omit mention of domestic service. Regulation of the hours of those women workers over sixteen occurs in only one state, Wisconsin.

According to the survey made in 1924, in no states do accident compensation laws compel employers and employees to operate under the law; in one state, New Jersey, employers and workers in all occupations, including household labor, were given option of registering under the law if both parties agreed; some states provide for optional insurance. The exemption from accidents and health insurance is not justified by the conditions prevailing in domestic service: in 1913 of 180 domestic workers carrying insurance of their own there was an excess of 5c percent over the expectancy of death.

The European situation represents a decided contrast in the matter of social control. Especially in the Germanic countries social legislation fixed the status of both employer and employee. For a time the only organizations of workers were the institutions of a semiphilanthropic nature which were provided for their aged and sick. After 1906, however, trade unions, both of "free," or social democratic, and of Christian labor affiliations, began to develop. The membership of the free unions was over 30,-000 in 1919. The Christian unions were especially effective in Bavaria, where in 1919 their federation had 126 branches with about 15,000 members. It is in Bayaria, incidentally, that the high standard of a ten-hour day is fixed by legislation. The legislation on domestic service since the beginning of the German Republic is based on a scheme of collective bargaining. For instance, in Berlin the national board which determines all vital points in the employer-employee relationship is composed of representatives of the domestic servants' unions, of housewives and of the public through the public employment exchanges. In 1928 there was published in the Reichsarbeitsblatt the result of a thoroughgoing study of the effects of the new law on wages and working conditions.

Similarly, in Sweden organizations of houseworkers are reported to have fifty branches, and are represented on all bodies determining social legislation and providing training for domestic service. Sweden is named in a survey made by the world Y. W. C. A. in 1930 as the one country in which no social stigma attaches to the occupation. In Russia in 1926 the number of organized workers in domestic service included about 133,000 who were governed by the same labor code as other workers, but these were mostly workers in hotels, restaurants and institutions. The private domestic servant still exists in the homes of nepmen, professional and official classes, intelligentsia and members of the aristocracy. In Switzerland also it is the day workers who are organized and who enjoy high wages and legislative protection. In Holland a general housewives' league of seventy branches has over 27,000 members including 2000 domestic workers.

In Great Britain the Domestic Workers' Union, organized as early as 1911, has had a large share in such improvements as have come about in the status of the domestic worker. This union is represented on all official and semi-official inquiries into the problem as well as on

the bodies which administer unemployment insurance to those workers in domestic and personal service who are not employed by private households. It played a part in the extension of health insurance to cover the domestic servant and is now agitating for the extension of unemployment insurance to those in private households. It is true that its membership is largely recruited from those outside of private households. But with the granting of the franchise to younger women, making eligible a large number of those in private households, increased attention is being paid to their problems by the Labour party as well as by the union of domestic servants. Domestic workers still remain untouched by hour legislation for women and children. The 1923 Governmental Committee of Inquiry added to the recommendations of the 1919 body (the Women's Advisory Committee of the Ministry of Reconstruction of Great Britain) provision for specific regulation.

The actual conditions of work and wages as stipulated by European legislation do not on the surface seem superior to those of the American worker. They include such revelatory provisions as that the room of the domestic worker is to have a lock on the inside, that she is to have the privilege of at least one bath a week or to be given an allowance which will permit her to go to the public baths, and the like. The overall work period provided for in both German and Austrian legislation of 1920 is usually thirteen hours, with two hours for meals and restrictions that only light work is to be done after 7 P.M. and overtime compensation to be given after 8 P.M. Child labor under sixteen is usually restricted to ten hours with three hours for meals. The provisions for one to three weeks' vacation with pay depending on the length of service, free medical care, two weeks' notice of dismissal or leave or pay for full period of notice if discharged without reason, a bonus of three months' pay for those over ten years in service with increasing amounts for each additional year, are, however, superior to the American regulations. Yet these conditions must be compared with general labor conditions in each of these countries; they mark the beginning of a program of conscious social control instead of a reliance on the uncertainties of the labor market or the whim of the individual housewife.

Nevertheless, in practically every European country, as in the United States, there is a shortage of domestic labor of such proportions as to constitute a problem, especially in view of

the fact that in Europe it is even less compensated for by changes in the nature of the household organization and by apartment and hotel living among the middle and upper classes. In Germany it is estimated that the number employed in domestic service dropped from 40 percent of all occupied persons in 1882 to about 12 percent in 1919; in this instance, however, middle class poverty as well as increasing industrialization was a factor to be considered. The exact trends are difficult to estimate because of differences in classification of domestic and personal service. An attempt to analyze these trends has been made by Wl. Woytinsky in Die Welt in Zahlen (vol. ii, p. 72-75, with explanatory notes as contained in chapter i, Berlin 1926). Wide discrepancies in trends are due partially to these different methods of compilation, but the failure of household employment to hold its own is undeniable.

To meet this shortage there is needed widespread public recognition of the necessity for training both houseworkers and their employers, and such training is part of the scheme of European public and vocational education in continuation schools and elsewhere. On the governing boards of the bodies responsible for the supervision of educational plans there are usually representatives of employers' and employees' organizations, and the well ordered scheme contrasts sharply with the haphazard training provision under the supervision of commercial and semiphilanthropic bodies in the United States.

A survey of these general developments shows far greater acceleration in the United States in the introduction of labor saving machinery, devices and home organization and the use of personal services and commodities outside the home. In European countries the tendency is rather more toward the control of working conditions.

The healthiest sign everywhere is the almost universal expression of displeasure at the unnecessarily feudal nature of domestic household employment. In America it has been individualistic and unorganized, gaining recognition only as increasing shortages have brought about studies of actual conditions prevailing. In Europe the organization of domestic workers and the expression of their point of view have led to a change, although very gradual, in the general social attitude. That change can perhaps best be traced in popular periodical literature and in the novels and plays of the time. There is a great difference between the attitude of Daniel Defoe

as it is expressed in his essay The Great Law of Subordination Considered, or the Insolence and Insufferable Behavior of Servants in England Duly Inquired Into (London 1724) and the recent conclusion of an English employer, Ernestine Mills, in The Servant Problem (London 1925), that the problem can by no means be approached on the basis of the personal kindness of the individual employer.

A survey of these conditions makes it quite clear that in order to draw to itself skilled and reliable workers domestic service must be so changed that it becomes a self-respecting occupation. Whereas in Europe the impetus for such a change seems to be given largely by workers' organizations, the mobility of the American worker makes it necessary to look at the moment to other agencies. One of the first essentials for such a change is that those who are in charge of the occupation must understand the principles of sound personnel procedure, including wise administration and management, the selection of the worker on the basis of the type of the job and the careful supervision of the workers when placed. Increased skill and ability must be recognized, wages and hours must be standardized (even in middle class households with younger children, where an eight-hour schedule seems impossible) and the workers must be advanced as they are able to master new and more difficult tasks. Adequately staffed employment agencies will also be of great influence in building up this occupation. Organizations of employers for the necessary group study and action will be formed. Such study may also raise interesting questions as to whether the adult members of the family, men and women alike, who require service for themselves or their children produce enough either in the home or outside of it to justify the employment of workers to serve them. Such inquiries are closely bound up with social attitudes, which involve revaluations of current classifications of productive and useful labor.

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See: Labor; Occupations; Woman, Position in Society; Family; Home Economics; Hotels; Restaurants; Child Labor; Women in Industry; Hours of Labor; Labor Legislation; Social Insurance.

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DOMESTIC SYSTEM. See PUTTING OUT SYSTEM.

DOMESTICATION is a term generally conceived as applicable to the plants and animals which man has adapted to his use. A group of German anthropologists and comparative anatomists have, however, approached the problem of domestication from the point of view of the

physical characteristics of domesticated animals and the conditions under which they live rather than from that of their association with and usefulness to man. This approach has resulted in a series of criteria which have materially broadened the usefulness of the concept of domestication and have clarified the analysis of the phenomenon.

The criteria drawn from the conditions of domestication are four in number. When contrasted with wild forms the domesticated animal lives in a restricted habitat, is accorded protection from the weather and from predatory beasts, has a food supply assured in quantity and different in kind from that of animals of similar genus who live in the wild form, and breeds under controlled conditions. The traits of the domesticated animal which differentiate him physically from the related wild forms are found in the color of the skin and eye; in the color, form, thickness and length of hair; in the configuration of parts of the face such as the nose, mouth and eyes; and in bodily size and proportions. An outstanding characteristic of domesticated animals is the increased variability they manifest in the traits mentioned, when they are compared with corresponding wild forms.

The two hypotheses most often advanced to account for the domestication of animals, which may be termed the pet and totem theories, are in the nature of pure speculation and must be viewed as interesting attempts made by the early anthropologists to excogitate "origins." Granting the validity of these two hypotheses in certain cases, it is also quite possible that certain animals, such as the dog or ox, in early times found association with human beings to be congenial and as a result a condition of domestication grew up. In certain instances, as Laufer has shown, animals seem to have been domesticated purely for religious purposes as well as because of their totemic significance, as is the case with the pig and chicken in southeastern Asia, where these animals are used in accordance with a deep lying pattern of divination. In the case of certain animals man may at once have recognized their economic importance and because of this tamed and later domesticated them. Thus the search for the original causes for the domestication of animals is checked by lack of historical evidence and by the great differences found the world over in the uses to which domesticated animals are put. This observation holds true even when reasons are sought for the domestication of a single animal, such as the cow, which most

writers assume was domesticated for her flesh and her milk. Laufer shows that among the Chinese the use of milk is looked upon with abhorrence in spite of the numerous animals these people possess that are capable of being milked, while in east Africa cattle are bred for reasons of social prestige rather than for the meat or milk they give, although these are utilized on occasion.

As far as is known palaeolithic man never achieved the taming of either plants or animals. Some authorities hold that the dog was domesticated in late mesolithic times, while early in the neolithic period European man domesticated the dog, the horse, the sheep, the ox, the goat and the pig; and his domesticated plants included wheat, barley, millet, peas, lentils, flax and poppies. In America the llama and turkey were added to the list of domesticated animals, while the Indians domesticated many plants, such as maize, tobacco, squash, numerous varieties of beans, the pincapple, the pumpkin and many others. Western Europe has bred the mule, Asia the water buffalo, Africa and Asia the camel, and the reindeer has been domesticated in the circumpolar region. All of these animals are of major importance to the people who possess them.

The command of the techniques of domestication and breeding has always a far reaching effect on a culture, although the degree of domestication in which animals and plants are held varies widely from culture to culture. There are vast differences in plant raising between the mechanized, highly specialized and intensive agriculture of the great wheat farms of the United States and Russia and the primitive Australian's attempt to scratch the ground with a digging stick and, in the instance of animals, between the extremely close domestication to which breeders of race horses or pedigreed dogs subject their animals and the casual type of loose domestication under which the reindeer herds of the Chukchee of northern Siberia are kept. Yet even the loosest kind of domestication of food animals and the crudest type of plant culture assure a food supply that culminates in a social surplus. The acquisition of the dog must have greatly assisted primitive hunters, as it extended their powers and gave them an important ally against the wild beasts they were attempting to kill. The horse as an aid in the rounding up of large herds of gregarious wild animals was readily seized upon by the hunting tribes of Plains Indians in North America when

introduced by the Spaniards. Fast horses also made for more efficient warfare on the part of warrior tribes of the plains, of Mongolia and of the Sahara. A herding people is less sedentary than a people which subsists by means of agriculture and is less able to acquire social surplus than the latter. In certain cultures, such as those of east Africa, both domesticated plants and animals are of great importance, but ordinarily one is subsidiary to the other if both are found in one culture. The outstanding result of the predominance of agriculture among a people is the potential ability of a given area to support a larger population than if it were utilized for herding, and concentration of peoples has been and is found in regions where agriculture holds

One result of the introduction of domesticated animals in a culture is a characteristic division of labor between the sexes whereby the care and working of the larger animals devolves upon the men. On the other hand, women usually tend the domesticated plants in cultures where agriculture is practised. The seeming contradiction to this principle which contemporary culture presents is only an exemplification of it, for where through the introduction of the plow an animal is associated with agriculture, the man takes over the care of the plants. Likewise, although pottery is the work of women, the men become the potters when the wheel associated with the draft animal is employed.

When the criteria of domestication arising from the conditions under which domesticated animals live and those arising from the physical characteristics which distinguish domesticated animals from wild ones are applied to man, the evidence leads to the conclusion that man is to be regarded as a domesticated form. Culture may be said to have been the domesticating factor for man, for with the development of culture, especially the knowledge of the use of fire, the requirements set by the criteria of domestication are fulfilled. With these came a restricted habitat, for with fire came the hearthstone, the concept of home as a place to which man might return and feel at ease both with the human habitants and the supernatural forces lodged there. Before the time of Neandertal man, who was probably the first to use fire, the deep deposits in the European caves that bespeak a long continued occupancy are not found, while at the center of the Mousterian deposits ashes are found that indicate the presence of a communal fire. With the use of fire and the development of

culture man became able not only to withstand predatory animals but to maintain himself against hostile human groups. Likewise the cultural patterns of a people have from a very early period fixed the kinds of food utilized for consumption in a manner quite analogous to that in which the breeder determines the food of the animals under his care. Tabus against eating certain foods and positive traditions as to the most desirable kinds of food are found everywhere. With fire man had in addition the means with which to preserve food, which made his supply of comestibles as certain as is that of the domesticated lower forms. Society through its traditions also breeds man in a manner analogous to that in which the breeder breeds the lower forms. Cultural ideals of beauty or traditions regarding the spiritual advantage or danger associated with such physical characteristics as red hair, albinism or other traits make for selection in mating and thus help to preserve or stamp out certain types.

Further evidence which points to man as a domesticated form lies in his physical characteristics. Man is much more variable than any of the related anthropoid wild forms, as the dog is more variable than any species of wolf. Further, the outstanding traits by means of which races are differentiated are the very ones which characterize the domesticated animal. Variations in the color of eyes and skin, in the color and form of the hair, in the amount of body hair in the male, in the shape of the nose, lips, mouth and eyes, in bodily size and proportions, that occur from one human group to another parallel variations found in the various kinds of other domesticated animals.

The implications of the conclusion that man is a domesticated animal are not inconsiderable. Granting that great variability and instability in physical traits are characteristic of animals under domestication, it follows that the character of all but perhaps the current major racial divisions is precarious. Also, if culture has domesticated man and has thus aided in bringing about and maintaining the physical characteristics used in differentiating various groups of human beings, then in considering the relationship between race and culture not only the extent to which race plays a part in the determination of the culture of human groups must be investigated but also the extent to which culture has played a role in the determination of physical types.

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See: Animal Societies; Food Grains; Man; Cul-

TURE; AGRICULTURE, PRIMITIVE; LIVESTOCK INDUSTRY; NOMADISM; TOTEMISM; EVOLUTION.

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DOMICILE may be defined as the place with which a person has a settled connection for legal purposes either because his home is there or because the place is assigned to him by the law. The word and the idea are derived from the Roman law; the word might be accurately translated homestead. Every one must have a domicile, but no one may have more than one. At birth a child takes if legitimate the domicile of his father, otherwise that of his mother, as his domicile of origin; during the child's minority his domicile changes with that of his parent. The normal adult may at any time acquire a new domicile of choice by acquiring a residence in fact with the intention of making it a home. Residence is not a "word of art"; it means a factual dwelling place of more than mere temporary occupancy. The word is often used in statutes and is usually there interpreted as meaning domicile. When a woman marries she takes the domicile of her husband and keeps it until she may legally live apart from her husband, in which case she may legally acquire a separate domicile. A domicile once acquired continues until another is acquired.

Many countries whose law is derived from Rome have followed the lead of France in the Code Napoléon and have substituted nationality for domicile. The latter, however, retains practically all of its importance and governs many legal situations and transactions in England, the dominions and the United States. Political rights and obligations, such as the right to vote and hold office, the obligations of military and jury duty, the obligation to pay certain taxes and the jurisdiction of a court over a person are

all fixed at the domicile (see Public Office; Suffrage; Taxation). Attempts to evade the law by claiming a false domicile for the purpose of voting, holding office or paying taxes may be successful if they are not challenged by litigation. A man may thus successfully claim domicile where he is politically established, although he has moved his home elsewhere, or in the country, where taxes are low. If the claim is ever legally disputed, however, the court will enforce the legal principle and declare the domicile to be where the real home is.

In many states in the United States a candidate must be domiciled in the very district which he desires to represent; in others he need only be domiciled within the state; but the custom of electing a person from within the district is so strong that there are few exceptions and those short lived. The result of these restrictions is a lowering in the character of the elected representatives, since many districts do not contain men of sufficiently high ability and public spirit.

The law of the domicile is applicable to the inheritance of movables and to marriage, divorce and other questions of domestic status (see Family Law). Attempts are frequently made to evade the law by claiming a domicile in a state which grants easy divorce. This is illustrated by the divorces sought in Reno, Nevada, and formerly in Paris. The question of domicile is, however, a jurisdictional fact which may always and anywhere be reopened; hence divorces so obtained may be held invalid. Such a divorce has only a social effect, but this is all that the claimant desires. Furthermore, it is unlikely that the validity of the divorce will be questioned.

The domicile of a corporation is in the state where it is formed. Since associates desirous of incorporation are likely to form their corporation in the state whose laws are most liberal to corporations, irrespective of the state where business is to be done, the domicile may have no connection with the real seat of the corporation's activities. While the problem of foreign corporations would inevitably arise in the United States as a result of state incorporation for business on a national scale, the tendency of corporations to incorporate and so acquire domicile in certain states has served to complicate the problem.

Under the laws of some states domicile is an important factor in determining citizenship. A citizen of the United States automatically acquires citizenship in a particular state by establishing a domicile there and loses citizenship in

that state by relinquishing this domicile. In many Latin American countries children born abroad of native born citizens acquire citizenship automatically by establishing a domicile in the country of which their parents were citizens. Women who have lost their citizenship through marriage may, as in Bolivia and Peru, automatically reacquire their original citizenship after the termination of the marriage by establishing a domicile in the country of which they were originally nationals. Uninterrupted domicile for a definite period of time is generally required as a condition of naturalization, although this may be dispensed with if other conditions are met, such as owning real property or having children born in the country, as in Mexico and Brazil. A naturalized citizen of the United States is presumed to have lost his citizenship (except in time of war) by establishing a domicile for two years in the country of which he was a national before he became naturalized or for five years in any other foreign country.

There is nothing in the theory or practical operation of the law of exterritoriality repugnant to or irreconcilable with the acquisition of domicile by an individual in a country in which his own country has been granted privileges of exterritoriality. Thus an American citizen may acquire a domicile in China and still remain subject to the law of the United States as applied by the United States to its citizens residing in countries with which it has treaties of exterritoriality.

In war time according to British and American practise domicile determines the status of the individual and his goods. Not only does personal domicile in enemy territory confer enemy character upon the individual and his goods, but under the doctrine of hostile commercial domicile possession of a house of trade or branch in enemy territory even without personal residence there lends enemy character to the property so employed. The governing principle is that all individuals and property located in enemy territory contribute to the resources of the enemy. France and most European countries determine enemy character for both the individual and his goods on the basis of nationality. The conflict of the two theories became acute during the World War and has not yet been solved.

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See: Conflict of Laws; Citizenship; Nationality; Enemy Alien; Exterritoriality.

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DOMINICAN FRIARS. The Dominicans were an order founded by St. Dominic in southern France in 1206 and officially authorized by Pope Honorius III in 1216. In point of evolution the friars, or *fratres*, represented by the Dominicans, or Black Friars, and the Franciscans, or Grey Friars, were a new type of order standing midway between the older monastic orders, whether of monks or of canons, and the subsequently developed bodies of clerks regular, of which the best known example is the Society of Jesus. While the friars continued the monastic tradition of choral psalmody, which the clerks regular later discarded, they were separated from monasticism by important differences arising largely from a fundamental difference in purpose. The monks and canons sought isolation and therefore retreated into rural districts; they took a vow of stability and therefore remained on principle in one place. The friars, on the other hand, were established to deal with the swiftly developing town life and to facilitate their work were allowed to move freely from house to house, from city to city and from country to country. Thus Aquinas taught in Paris, Bologna, Naples; Vincent Ferrer preached in France, Spain, Italy and the Germanies; Jordan of Saxony visited Oxford and died in Palestine. The constant contact of the friars with the lay world was also a necessary consequence of their vow of mendicancy. This vow, imposed by the founders as a means of avoiding the worldliness which had victimized the richly endowed monasteries, gave to the Dominicans and Franciscans the well known name of mendicant orders. It was the friars who perfected the highly unified system of control which was later adopted by the clerks regular and which represented a complete contrast to the long prevalent Benedictine tradition of autonomous monasteries. With a master general at the head each order was divided on national and linguistic bases into provinces, subject to the power of visitation from the center and able to control the

center by means of general chapters and meetings of representatives of the local groups. There had been some foreshadowing of this wide unity by the Cluniacs, who did not, however, combine their machinery of centralization with the same measure of provincial organization and autonomy, and by the military orders through their system of provincial groups called *langues*; but the real beginning of a modern religious order was with the friars.

While in its broad aspect the work of the two orders of friars tended toward the same result, it was St. Dominic and the Dominicans who left the most powerful impress upon institutional development. With the insight of a gifted legislator St. Dominic himself gave no definite constitutions to the order: he merely accepted the rule of St. Augustine as a framework to comply with the wishes of the pope and waited for time and experience to prove what should be necessary to the establishment and unfolding of his ideals. It was he who developed as a new and liberating force in religious life the idea of representation and election, which again had been foreshadowed less democratically by the Cistercians and the Cluniacs. Each house was to elect its own conventual prior; each group of houses within a kingdom or considerable province was to gather in a provincial chapter, consisting of the prior and a representative of each house, and elect its own prior provincial; on the death or resignation of the master general the prior provincial and two other electors representing each province met in a general chapter to elect a new master general. In addition each of these chapters met annually as the supreme legislative authority within its respective sphere. Thus the inevitable effect of Dominican influence has been in favor of constitutional authority. It is arguable that the English Parliament, beginning its new career under the auspices first of Simon de Montfort, St. Dominic's godchild, and then of Edward 1, whose confessor and friends were Dominicans, owed some of its features to this Dominican influence. So too the theory of representative government in ecclesiastical matters evident in convocation can be traced to a Dominican parentage. Not merely through the indirect influence of its constitution but through the direct participation of its members in the problems of secular social and political life, the Dominican order has frequently stimulated the growth of constitutional freedom; Antoninus of Florence, Savonarola, Las Casas, Lacordaire, were from amongst its ranks.

The purpose which the constitutional organization of the Dominicans was intended to serve was "preaching and the salvation of souls"; preaching being interpreted not in its moral sense but in the sense of the dogmatic exposition of the creed. This purpose was to be achieved by preachers trained by a combination of scientific university education and rigorous monastic life. Going to the university to study the friars remained there to teach, gathering to their ranks recruits among the students and professors. The result was an immediate awakening of the religious spirit in the great intellectual centers of Europe. The constitutions of the order also provided that a professor must reside in each of the priories established outside the university towns. During the scholar crisis of the thirteenth century occasioned by the drift of all scholars to Paris the Dominican priories located in cathedral cities were accepted even by the bishops as the authorized theological schools. Soon all the theological teaching of Christendom was in the hands of the friars. Since on its fringes Christendom touched the Arab countries and included the dispersed Jews, Dominican centers were established in Spain and north Africa, where Hebrew and Arabic were taught by Islamic or Jewish professors. Moreover, the preachers carried the life of the Dominican order as well as its message to the Near East, to Persia and Palestine, to Arabia and China and westward to Iceland and Greenland. Later South America, South Africa and Japan were the scenes of their labors. Because the Dominicans were theologians they were brought in as experts to examine those denounced to the Inquisition for heresy and despite their protests were eventually compelled to take over the organization of the Inquisition in many lands. Thus they touched public life at many points. But it was the apostolic purpose conceived by St. Dominic which pervaded all their activity; which inspired Aquinas in philosophy, Albertus Magnus in natural science, Antoninus in social science and Fra Angelico in art; which led Savonarola to struggle for the independence of Florence, Las Casas to protect the oppressed and Giovanni Dominici to undertake projects of educational reform. Friars Preachers is their official title and describes them best.

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See: Religious Orders; Monasticism; Cluniac Movement; Franciscans; Jesuits; Missions; Religious Institutions.

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DOMINION STATUS. The term dominion status has become current in British political circles since 1921, when the territory now known as the Irish Free State was conceded a status corresponding to that of Canada and the other self-governing dominions. This status was officially defined by the imperial conferences of 1926 and 1930. Under the definition of 1926 the United Kingdom and the dominions are "autonomous Communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations." But it was added that "the principles of equality and similarity, appropriate to status, do not universally extend to function." The sovereignty of the dominions is thus limited by allegiance to the crown of the United Kingdom and voluntary association with the other members of the British Commonwealth. As a result of the historical evolution of the conception dominion sovereignty is still subject to certain legal limitations which are in process of dissolution but of which some may persist for some time.

The conception of dominion status was in fact arrived at by American political thought in the last years of the conflict with the United Kingdom over the measure of authority possessed by the king in Parliament as regards the colonial empire. Familiar with the virtual autonomy long enjoyed in the colonies and fortified by the precedent of the relations of the United Kingdom and Hanover, men like Adams in 1774 had no difficulty in maintaining that the colonies were united to Great Britain only in a personal union through the king. But legalism triumphed in the United Kingdom; and George III and his government, refusing to accept Burke's doctrine that the supremacy of the imperial Parliament was no justification for taxation of the colonies, declined to yield until in 1778 under pressure of

rebellion they tentatively and ineffectively suggested the conclusion of peace on the basis of the reorganization of the empire as an alliance of autonomous communities. The rejection of this offer and the loss of the American colonies resulted in the adoption of a new theory of colonial government and its application to the colonies acquired in Africa, Asia and Australasia during and after the Napoleonic wars. Representative government had led to revolt; henceforth the governor under imperial control was to have full authority executive, judicial and legislative. Concessions had indeed to be made. The assemblies of Nova Scotia and its offshoots, Prince Edward Island and New Brunswick, could not be suppressed, and the influx of loyalists and others from the United States compelled the reversal of the policy of 1774, which had made Quebec a crown colony. But while assemblies were conceded in 1791 to Upper and Lower Canada, precautions were taken to prevent their controlling the executive. The governments were supported by imperial garrisons and provided with funds from imperial taxation or crown revenues to render them independent of the legislatures, while the establishment and endowment of the Church of England in Upper Canada and the favor shown to the Roman Catholic church in Lower Canada were relied upon to counteract democratic tendencies in the former province and racial antagonism in the

It proved impossible to deny permanently to British subjects in the colonies the rights claimed by their fellow subjects in England. To William Baldwin and Joseph Howe in Upper Canada and Nova Scotia belongs the merit of first seeing clearly the solution of the constant struggles between executive and legislature. British political opinion was slower to accept their solution, largely because the situation was obscured by the racial strife in Lower Canada, which suggested that the demand for selfgovernment was prompted by disloyalty to the crown. It was therefore only the revolts in the two Canadas in 1837 which led to a vital reconsideration of the issues and to Lord Durham's famous mission. His report in 1839 (ed. by C. P. Lucas, 3 vols., Oxford 1912) led to the introduction of the system of responsible government into Canada (1841-48). The new system was based on a dichotomy which classified the functions of government as internal or imperial. Over the former full power was to be exercised by ministries on the British model responsible to elective

assemblies, while in matters of imperial interest the decision was to rest with the imperial government and Parliament. It was recognized that the system involved a delicate balance of authority and that in the long run ministers would not acquiesce in exclusion from the control of any aspect of colonial policy. But it was wisely felt that the system would solve the immediate difficulties and that the extension of the responsibility of ministers should be allowed to develop naturally.

The new system was first made operative in Canada, constituted by the reunion in 1840 of the two provinces of Upper and Lower Canada, in Nova Scotia, New Brunswick and Prince Edward Island. Newfoundland, considered merely as a convenient basis for the fisheries, had long been denied even an assembly; but the growth of settlement secured the grant of representative government in 1832, and in 1855 responsibility was conceded there also. The Canadian precedent was of decisive importance for Australia. Settlement in New South Wales had begun in 1788 with the establishment of a penal station. Its earliest form of government was wholly autocratic; not until 1823 was a more normal civil government of the crown colony type introduced. Further advance was hindered by the dread of giving political power to emancipated convicts, whose numbers long exceeded those of free settlers; but the decision to stop transportation to New South Wales in 1840 cleared the way for the concession of representative government in 1842. An energetic demand for responsible government followed, which was strengthened by the enormous increase in the population as a result of the gold discoveries. Representative government was conceded by an act of 1850 to Victoria (separated from New South Wales), Van Diemen's Land, which had become a distinct colony in 1825, and South Australia. Responsible government was promised in 1852 and became effective in New South Wales and the other colonies by 1855-56. It was extended at once to Queensland when separated from New South Wales in 1859. In Western Australia, occupied in 1829, representative government was delayed by the decision of the colonists in 1849 that convict labor was desirable, but the cessation of transportation in 1868 made possible the grant of representation in 1870. Responsibility was withheld until 1890, because of the scanty population, the considerable number of aborigines and the enormous expanse of territory. In New Zealand, which was annexed in 1840,

representative government was from the first contemplated but was delayed until 1852 because of friction with the Maori tribes; it was followed forthwith by agreement to grant responsibility, which became effective in 1856. In the Cape of Good Hope, formally ceded in 1814, crown colony government was rendered advisable by reason of both the numerical preponderance of the Dutch over the British population and the strength of the native tribes. Representative government was, however, granted in 1853 and responsibility in 1872. In Natal, despite the preponderance of the natives, partially representative government was accorded in 1856 and responsible government in 1893, although not without hesitation. A striking faith in responsible government as a solvent of racial animosity was shown by the decision, carried out in 1906-07, to confer it upon the newly conquered Transvaal and Orange River colonies.

At the same time that responsible government was thus being extended widely its scope was steadily expanded to include matters at first retained under imperial control. The colonies were from the first permitted full control of their waste lands; the navigation acts disappeared in the years 1846 to 1849 and full authority to determine tariffs was conceded; the postal and customs services ceased to be imperial in 1851-52. Moreover, in 1862 the imperial government began to apply systematically the principle of asking the colonies to accept responsibility for the preservation of order and of withdrawing imperial garrisons save where, as at Halifax, imperial defense required their retention. This policy fostered the nationalism of the Canadian colonies, which was further stimulated by the spectacle of the emergence of the United States as a great military power and by the necessity of breaking down tariff barriers between the colonies to compensate for the loss of reciprocity with the United States, enjoyed from 1854 to 1866. Hence it became possible to overcome particularism in the colonies and to secure the federation of Canada, Nova Scotia and New Brunswick in 1867. The vast areas under the control of the Hudson's Bay Company were then entrusted to the new dominion, which was joined by British Columbia in 1871 and Prince Edward Island in 1873. The dominion constitution embodied together with the principle of federation the doctrine of responsible government for both the federation and the provinces. The formation of a single government to deal with the imperial government inevitably diminished greatly the possibility of imperial intervention, a fact symbolized by the abortive proposal to confer on the federation the style of "Kingdom of Canada."

In Australia federation was delayed by the absence of any foreign danger and by the divergent economic interests of the colonies. A sense of national character and necessity of organization for defense produced the movement which, beginning in 1890, resulted in the creation of the Commonwealth of Australia in 1900. It is significant of the lack of any dominant motive making for unity that the constitution follows much more closely the model of that of the United States and reserves wider powers to the states than does the Canadian constitution. But a sign of the growth of self-dependence is seen in the rule that the commonwealth constitution can be altered by a popular referendum on the initiative of Parliament. The new status of Australia was almost immediately marked by its assertion of complete autonomy in controlling immigration and the determination to create its own naval force.

Union in South Africa followed in 1909. Powerful economic forces hindered agreement among the four colonies on customs duties and railway rates, but the desire was strong to secure independence from that imperial intervention in native policy and intercolonial issues which was inevitable so long as the colonies had no point of unity save in the imperial government. It was hoped also to create an Afrikander nationality in which British and Boer would merge, and the fullest power to amend the constitution was obtained.

The creation of the federations and the union rendered more and more obsolete the conception of imperial control. This fact was frankly recognized by the Colonial Conference of 1907, which established the imperial conference as a permanent instrument of free consultation between the governments of the United Kingdom and of Canada, the Commonwealth of Australia, the Union of South Africa, New Zealand and Newfoundland, now formally given the style of dominions. So also in 1907 merchant shipping legislation and in 1911 the control of copyright were provided for by agreement in lieu of determination by imperial authority. Even more important was the invitation extended to the dominions in 1912 to take an interest in general issues of foreign policy. Hitherto, while the invariable rule had been to consult a colony on any foreign issue directly affecting it, matters such as

the Hague peace conferences, the Anglo-French Entente of 1904 and the Anglo-Russian Entente of 1907 had remained the concern of the British government alone. Had peace continued, dominion reluctance to take part in foreign affairs might not easily have been overcome; but the World War revealed to the dominions that their fate was being vitally determined by a policy which they had not aided in shaping. Accepting the war as essentially defensive and just, they placed their military and naval forces under British control, receiving in return membership in the Imperial War Cabinet (1917-18), which determined the principles of the conduct of the war. At its close, by reason of the great sacrifices which had enormously strengthened their feeling of nationality, they demanded and received not merely a share in determining the policy of the empire at the peace conference but separate representation on an equality with the minor powers. In the constitution of the League of Nations distinct membership was accorded to all the dominions except Newfoundland, and to India, while the empire as a whole obtained permanent membership on the council. Moreover, not only were the treaties of peace in 1919 signed separately for the king by dominion representatives, but they were not ratified until approval had been accorded by the dominion parliaments as well as that of the United King-

The new status served a fundamental purpose almost at once in helping to bring the Irish rebellion to a close in 1921. The Irish Free State secured admission to the League in 1923 and sought to assert its autonomy in every possible way. It found enthusiastic support in the Union of South Africa, where General Hertzog had achieved power in 1924 through the support of the Dutch population, many of whom were advocates of secession and sovereign independence. The Imperial Conference of 1926 was thus compelled to deal formally with the issue of dominion status. The practical application of the principle of equality there laid down was worked out by a conference of experts in 1929, and the results of the latter received substantial confirmation and extension at the hands of the Imperial Conference of 1930, which agreed that legal effect to the changes should be given by an imperial act of 1931. It must be remembered that while formally the extension of dominion authority thus effected is considerable, in practise the authority in question has long been enjoyed.

Under this system the dominions in internal matters possess complete autonomy and are exempt from imperial control. Their governors general are chosen by their governments with the king's approval. Their legislation is not subject to imperial disallowance. Appeals from their courts go to the Judicial Committee of the Privy Council only with their assent, and on that tribunal they are represented by their own judges. Their legislatures can alter any imperial act previously applied to the dominions, and no imperial act now applies to a dominion without its assent. When so desired dominion acts may be given exterritorial application as in the case of British acts. All those who owe allegiance to the king are British subjects, but each dominion can treat all classes of British subjects as it pleases; and within the wider British nationality Canada, the Irish Free State and the Union of South Africa have created nationalities of their own. Commercial policy is absolutely under dominion control, although the several parts of the commonwealth voluntarily refrain from giving preferences to foreign nations as against other parts of the empire. Disputes between governments can be decided only by negotiation or by agreement to refer the issue to an interimperial tribunal, without coercive jurisdiction. The only exceptions to autonomy are the fact that at present the Canadian constitution is still alterable only by the British Parliament, since the provinces have been unable to agree on any system of alteration by Canada alone; and that, while the constitution of the Commonwealth of Australia is alterable by referendum, some sections of the imperial act enacting the constitution are exempt from change save by the imperial Parliament.

In external affairs there are still certain limitations on dominion authority, due to the desire to preserve imperial unity. In matters falling within the sphere of operation of the League of Nations dominion autonomy is complete. Canada in 1927 and the Irish Free State in 1930 were elected as non-permanent members of the League Council in addition to the permanent membership of the empire; delegates to League meetings act under authority conferred by their governments, not by the king and the British government. Except in instances where they have important interests the dominions do not set up legations of their own in foreign countries nor receive envoys from them but make use of the British diplomatic service. Even where with the aid of the British government exchange of

diplomatic representatives has been arranged, the formal authority to sign treaties and the ratification thereof require the intervention of the British foreign secretary. This is in accordance with the rule, accepted by the British as well as the dominion governments, that no part of the empire should enter into negotiations with a foreign power without giving the other parts of the empire the opportunity to join in the negotiations or to suggest objections. In the event of disagreement of a substantial character as to policy the issue would presumably be dealt with by the Imperial Conference and a compromise reached. Imperial unity is also attested by the fact that no governor general has yet been given authority to make war or peace or declare neutrality; and apparently a declaration of war by the king on the advice of the imperial government would bind the dominions, although it would remain with them to decide to what extent they would actively intervene. It is hoped, however, that as a result of the Locarno pact of 1925 and the Kellogg pact of 1928 as well as the League Covenant the issue of neutrality may never arise. It has so far been evaded by the Imperial Conference.

Although the Imperial Conference of 1926 seemed to contemplate dominion status as a final form of the organization of the commonwealth, this view is open to question. In the Irish Free State and the Union there is a tendency to seek the further assertion of equality by securing formal admission of the right of secession and the elimination of any British cooperation in the formal machinery of treaty making. This would reduce the commonwealth to a purely personal union, the relations between the parts being placed on the basis of international law, a doctrine hitherto repudiated by the British government. Australia and New Zealand, conscious of danger in the Pacific, prefer to maintain closer imperial unity; and Canadian feeling is influenced by the objections of the French Canadians to any tampering with the constitution of 1867, which is regarded as the best security for their religious and linguistic privileges. Real interest at present is centered mainly not on constitutional issues but on the possibility of creating an economic scheme of closer union by interimperial preferences and other trade agreements.

Dominion status demands a certain power to stand alone. Hence Newfoundland, although technically a dominion, does not possess dominion status in external affairs; and both Malta and Southern Rhodesia, which enjoy a con-

siderable measure of responsibility in internal matters, are too weak to be advanced to dominion rank. The new constitution of 1930-31 destined for Ceylon reserves external relations to the British government. India, on the other hand, has been assured of full dominion status as the ultimate object of her constitutional reforms. As the Round Table Conference of 1930-31 showed, internal autonomy can be achieved by the creation of machinery in the new constitution under which the rights of minorities shall be preserved by judicial safeguards. Full control over defense and foreign affairs must be of slower development, because for a considerable time to come defense would be impossible without the aid of British troops and of British officers serving with Indian troops. So long as this is the case, imperial control cannot wholly be relaxed. Moreover, the Indian states have treaty rights against the crown and cannot without their assent be made subject to the control of a responsible government in India. This difficulty, however, will be removed by the acceptance by these states of federation with British India, which the conference showed to be practicable as well as desirable. Such a federation would add greatly to the sense of Indian nationality and hasten the attainment of full dominion rank, which may successfully counter the movement for complete independence in India.

To no other part of the empire is dominion status likely to become appropriate. It was once suggested that Egypt and Irak might be offered this position, but the idea was impracticable, not merely because dominion status is based on a common allegiance but because it contemplates a measure of intimacy in framing policy between the dominions and the United Kingdom which could not easily be made applicable to either of these states. In Palestine rivalry of Jew and Arab makes even effective internal autonomy problematical, and external relations under the mandate remain in the hands of the mandatory power.

It may be doubted if the conception of dominion status can be applied outside the British Commonwealth. Its essential basis, autonomy and consultation, assumes the existence of units with distinctive national feelings; and the system is thus wholly out of harmony with the governing principle of French colonial policy, the subscrvience of the empire to the protection of France and the diffusion of French cultural ideals and national feeling. Similarly in the rela-

tions between the United States and the Philippines there is wholly absent that measure of potential equality which renders consultation the appropriate method for the conduct of the relations between the United Kingdom and the dominions.

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See: Government, sections on Great Britain and the Dominions; Colonies; Empire; Autonomy; Sovereignty; Nationalism; Colonial Economic Policy; Mercanfilism; Imperialism; Indian Question; Irisii Question.

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DONEAU, HUGUES (Donellus) (1527–91), French jurist. He studied law at Toulouse and later at Bourges, the main center of humanistic legal studies in the sixteenth century, where he was the pupil of Douaren. Doneau himself became professor at Bourges in 1551, teaching there until 1572, when after the Massacre of St. Bartholomew he was obliged, being a Calvinist, to seek refuge at Geneva. In 1573 he became professor at Heidelberg, in 1579 at Leyden and in 1588 at Altdorf in Germany, where he taught until his death in 1591.

Doneau was second only to Cujas among the illustrious sixteenth century French civilians. They were representative of the reaction of Renaissance humanism against the aims and methods of the Bartolists, or commentators. The mos italicus of the Bartolists, which was fundamentally an analytical-exegetical method with a fixed and complicated mechanism, gave expression to mediaeval scholasticism and mediaeval belief in tradition and authority. In opposition to the mos italicus the sixteenth century civilians in France evolved a method known as the mos gallicus. This new method represented, nevertheless, two distinct tendencies in the study and teaching of the pure Roman law on humanistic lines. Guillaume Budé and Andrea Alciati had applied to the texts of Roman law an exegesis based on philology and history; and this method found its leading exponent in Cujas, the most illustrious of all French civilians

in the epoch of the Renaissance. The second tendency in humanistic legal study, also included in the term *mos gallicus*, was fundamentally a method of synthesis as opposed to exegesis. It was applied to the Roman legal sources by Connanus (1508-51) and Douaren but it remained to be elaborated and in a sense perfected by Doneau.

Restricting his attention to the Roman private law Doneau sought throughout his entire career as teacher and writer to know and to expound that system in its entirety. Practically all his earlier writings were studies preparatory to his greatest work, the celebrated *Commentarii juris civilis*, composed of twenty-eight books. Much of this treatise, epoch making in the history of modern efforts to systematize the Roman law, had been completed by Doneau at Altdorf shortly before his death; the rest of it was put together by Scipio Gentili (1563–1616), Doneau's pupil and friend, out of the great jurist's own papers.

Doneau's systematization of the subject matter of Roman private law was influenced by the arrangement which he found in the Institutes, but in important particulars he departed from his model and introduced his own conceptions as to the order and treatment of topics. The legal system, according to Doneau, consists of two parts: the first part deals with rights (cognitio juris), while the second is concerned with their enforcement by judicial process (ratio juris obtinendi). It is divided accordingly into substantive and adjective law. While the division of law in the Institutes of Gaius and of Justinian is threefold (omne jus quod utimur vel ad personas pertinet vel ad res vel ad actiones), in keeping with the trichotomy of many Roman jurists, the division of Doneau, based on dichotomy, is fundamentally twofold (cognitio juris nostri et ejus juris obtinendi ratio). Moreover, while in general the Institutes constitute a system of legal rules Doncau's Commentarii juris civilis emphasize the subjective aspect of the law and form in fact a system of rights as distinguished from the rules on which they are based.

Holding that for the needs of his time the most important task of legal science was the exposition of the entire body of Roman private law and of the inner relationship of all its parts one to another, Doneau by means of synthesis first extracted from the Roman sources the general principles of law and then proceeded to deduce from them logically and rigorously all their consequences. Calisse has said that the Bartolists

in France were led by Doneau, while Tardif has considered him as "le plus éminent représentant de l'école dogmatique ou Bartoliste"; but as Esmein has pointed out, although Doneau was dogmatic like all scholars who synthesize, his method was far removed from that of the Bartolists. In the sixteenth century Doneau was in fact the foremost representative of those humanist civilians who applied the synthetic and dogmatic method, as opposed both to the analyticalexegetical method of the Bartolists and the philological-historical method of exegesis followed by Budé, Alciati and Cujas. Working within this field of Roman law Douaren and Doneau developed their own method of natural synthesis without being influenced by the similar process associated with the name of Pierre de la Ramée (Petrus Ramus, 1515-72).

Brissaud has classed Cujas and Doneau together as representative of the historical science of Roman law. But in fact they exemplified the two opposing tendencies of the mos gallicus. Cujas was fundamentally the historian, Doneau the theorist. Cujas was the great exegete, Doneau the great synthesist. Cujas was interested in the particular, Doneau in the general. Cujas looked at the texts as material to be used in a philological and analytical interpretation of all its individual parts; Doneau, on the other hand, regarded the details which he found in the texts only as materials from which a system of the whole law from the standpoint of rights could be constructed. Cujas viewed the Roman law books, like all other gifts from antiquity, as data for learned antiquarian investigation; Doneau, on the contrary, treated them as the embodiment of a living law that had validity in his own day. Since Cujas disregarded the Roman civil law of mediaeval times, concentrating his whole attention upon the pure Roman law as found in the law books of Justinian and earlier sources, his influence was largely in the realm of scholarship and education. But although Doneau too was concerned chiefly with the pure Roman law he was willing to make use of the adapted Roman law of mediaeval times, and his influence was thus felt also in practise.

The sixteenth century school of French civilians quickened and intensified the general progress of legal humanism particularly in Holland and Germany, which already had a contemporary leader in Ulrich Zasius, the chief representative of the exegetical method in the latter country. Apart from humanism there existed in Germany a craving for knowledge of

the Roman law as a system, for its rational treatment and synthetic exposition. German students at Bourges were fascinated by the lectures of Douaren and Doneau, and some of Doneau's pupils, notably Valentin Forster, carried the master's methods to Germany. Moreover, not only Doneau but also Baudouin, Hotman, Denis Godefroy and other leading French jurists, driven from their own country by the various religious conflicts of the sixteenth century, found homes in Germany and there, both as teachers and as writers, exerted a notable influence on the development of German legal science.

Largely because of the ever increasing attention that also came to be paid to the sources of French customary law in the sixteenth century by a great school of national jurists which included such names as Dumoulin, d'Argentré, Coquille and Loisel, the study of Roman law in France decreased in significance in the following centuries. In France Doneau's writings, and particularly his Commentarii juris civilis, helped to prepare the way for the shaping of the Code civil, which was founded on Romanic materials as well as French customary sources. As the primacy in Roman legal scholarship had passed in the sixteenth century from Italy to France, so in the eighteenth century it passed from France to Holland, while in the nineteenth century it passed from Holland to Germany. Despite these changes in leadership, however, the influence of the French sixteenth century school persisted and left its mark on the scholarship of later centuries in all countries where the Roman law was studied. The work of Doneau in particular was felt throughout Europe and proved to be one of the main factors in the long process of systematizing the Roman civil law both as the law of ancient times and the law of modern states.

H. D. HAZELTINE

Works: Opera Omnia, 12 vols. (Florence 1840-47).

Consult: Eyssel, Th., Doncau, sa vie et ses ouvrages (Dijon 1860); Stintzing, R. von, Hugo Donellus in Altdorf (Erlangen 1869); Buhl, H., "Hugo Donellus in Heidelberg" in Neue Heidelberger Jahrbuch, vol. ii (1892) 280-313; Esmein, A., Histoire du droit français (15th ed. Paris 1925) p. 723-35; Chénon, Émile, Histoire général du droit français, 2 vols. (Paris 1926-29) vol. ii, p. 329-31, 365-71; Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. i, p. 377-81; Continental Legal History series, vol. i (Boston 1912) p. 157-59; Rechtslexicon, ed. by Franz von Holtzendorff, 3 vols. (3rd ed. Leipsic 1880-81) vol. ii, p. 562, especially bibliography.

DONNELLY, IGNATIUS (1831-1901), American political reformer and agitator. He was born in Philadelphia of middle class immigrant parents, practised law for a short time and then went to Minnesota to speculate in land. The panic of 1857 ruined his town development project and he turned to farming. Having shifted from the Democratic to the Republican party on the slavery issue, he was elected lieutenant governor in 1859 and served as congressman from 1863 to 1869. He lost favor with the Republican leaders in Minnesota and was not renominated in 1868. Thereafter he drifted from one opposition camp to another and served several terms in the Minnesota legislature. He was a Liberal Republican in 1872, was active in the Granger movement and the Anti-monopoly party, published the Anti-monopolist (1874-78), joined the Greenbackers, became state president of the Farmers' Alliance in 1890 and rose to national leadership in the Populist party. He wrote most of the party platforms, published a Populist paper, the Representative (1894–1901), and supported Bryan on free silver in 1896 but thereafter opposed fusion with the Democrats. Donnelly wrote several pseudo-scientific books and also works of fiction dealing largely with social and economic problems. He opposed the protective tariff and hard money and called for reforms to prevent the concentration of wealth and the loss of freedom to the mass of Americans.

Solon J. Buck

Consult: Fish, E. W., Biography of Ignatius Donnelly (Chicago 1892); Hicks, John D., "The Political Career of Ignatius Donnelly" in Mississippi Valley Historical Review, vol. viii (1921) 80–132, and "The People's Party in Minnesota" in Minnesota History Bulletin, vol. v (1924) 531-60.

DONOSO CORTÉS, JUAN, MARQUÉS DE VALDEGAMAS (1809-53), Spanish political theorist and diplomat. Donoso Cortés studied at the universities of Salamanca and Seville and in 1832 attracted public attention by the *Memoria* which he addressed to King Ferdinand VII on the condition of the Spanish monarchy and in which he urged the abolition of the Salic law and an alliance between the monarchy and the progressive middle class. He soon achieved prominence in political circles, became secretary to Queen Maria Christina and later was put in charge of the studies of Queen Isabella II. He lectured on public law at the Ateneo in Madrid and was ambassador at Berlin and Paris.

Donoso's theories may be divided into two phases. In the first he followed the French doc-

trinaires in their attempt to reconcile rationalist principles with historical tradition and popular sovereignty with the divine right of kings. His chief emphasis during this period, however, was on "the sovereignty of the intelligence." Whenever he used the word intelligence he used it as synonymous with justice. About 1848 there was a marked change in his thinking. He experienced a reaction against rationalism and began to exalt the function of authority, government and finally of dictatorship. His elaborated theory of the dictatorship was so profound that his discourses were reproduced in France, Prussia and Austria. "When legality is enough, use legality; where it is not, use dictatorship," he said, and added that legality must be sacrificed whenever the welfare of society demanded it. At that time he already held that every revolution in the future would necessarily be a social revolution because it would obey acquisitive instincts rather than ideals.

Donoso may be considered the most eminent thinker of the Spanish ultramontane school. In his significant Ensayo sobre el catolicismo, el liberalismo y el socialismo (Madrid 1851; tr. by M. V. Dahlgren, New York 1925) he reverted to the church as the foundation of authority and as the only organization capable of insuring social and political salvation. The essay aroused considerable controversy. Not only was the fame of his works spread by Montalembert and the French school, but they found an echo in Metternich and were discussed by Schelling, Ranke, Bismarck and Frederick William IV of Prussia.

FERNANDO DE LOS RÍOS

Works: Obras, with biographical sketch by D. Gabino Tejado, 4 vols. (2nd ed. Madrid 1891–94). The French edition Occures de Donoso Cortés, 3 vols. (3rd ed. Lyons 1876–77) is limited to Donoso's works between 1839 and 1853.

Consult: Schmitt, Carl, Donoso Cortés (Madrid 1930); Pascal Georges de, "Donoso Cortés, un maître de la politique" in Revue critique des idées et des lavres, vol. xix (1912) 5-22, 310-23; Costa, J., Estudios jurídicos y políticos (Madrid 1884) p. 123-29.

DORADO MONTERO, PEDRO (Pedro Garcia Dorado y Montero) (1861–1919), Spanish jurist and penologist. After receiving the degree of doctor of laws at the completion of his legal studies in Spain Dorado attended the Spanish college of San Clemente in Bologna, Italy, where he studied sociology and the philosophy of law under Roberto Ardigó and Pietro Siciliani. His major interest during this period, however, was in the development of the positivist school of

penology, which at the time was attracting very wide attention. He was concerned particularly with the problem of how to reconcile this positivist spirit with the theory of correctionalism held by Francis Giner de los Ríos, the Spanish penologist by whom he had been so profoundly influenced during his earlier studies. In the years following his appointment to the chair of criminal law at the University of Salamanca, Dorado in addition to distinguishing himself as an original and profound teacher continued his intensive studies, finally reconciling the positivist and correctionalist positions. The conclusion at which he arrived, namely, that the function of criminal law is to protect the offender, is epitomized in the title of one of his last works, El derecho protector de los criminales (2 vols., Madrid 1916), which was an enlarged and revised edition of his Estudios de derecho penal preventivo (Madrid 1901). In the philosophy of law he was influential by reason of his profound and realistic consideration of law as the will of the strongest. Although indifferent during his earlier years to law and authority and therefore inclined to anarchism he came eventually to view the state as an organism essential to social progress—a view elaborated in his posthumous work Naturaleza v función del derecho (Madrid 1927). Dorado's work as penologist, jurist and sociologist was affected by his extreme pessimism and his sharp, perhaps overdeveloped, critical sense, which made him intolerant of all dogma.

C. BERNALDO DE QUIRÓS

Other important works: La antropología criminal en Italia (Madrid 1890); El positivismo en la ciencia jurídica y social italiana (Madrid 1891); Concepción Arenal (Madrid 1892); Problemas de derecho penal (Madrid 1895); El reformatorio de Elmira (Madrid 1898); El derecho penal en Iberia (contribución al estudio de la historia primitiva de España) (Madrid 1901); Bases para un nuevo derecho penal (Barcelona 1902); Valor social de leyes e autoridades (Barcelona 1903); Nuevos derroteros penales (Barcelona 1905); Los peritos médicos y la justicia criminal (Madrid 1906); De criminología y penología (Madrid 1906); El derecho y sus sacerdotes (Madrid 1909); La psicología criminal en nuestro derecho (Madrid 1910, 2nd ed. 1911).

Consult: Bernaldo de Quirós, C., prologue to Dorado's Naturaleza y función del derecho, and "Dorado Montero y sus libros" in Revista de derecho privado, vol. vi (1919) 97-102, and Las nuevas teorías de la criminalidad (Madrid 1898), tr. by Alfonso de Salvio (Boston 1911); Maldonado, Luis, in Nuestro tiempo, 19th yr., vol. iv (1919) 5-27; Posada, Adolfo, in Lectura, 19th yr., vol. i (1919) 345-51.

DORCHESTER, BARON. See CARLETON, GUY.

DORMER, DIEGO JOSÉ (d. 1705), Spanish economist and historian. Dormer held several ecclesiastical and state offices and was the official historian of the kingdom of Aragon.

In his Discursos históricos-políticos (Saragossa 1684), a memorial to the Cortes of Aragon, he presented economic doctrines surprisingly in advance of his time. He virtually advocated international free trade in its modern connotation, demonstrating clearly that international trade is an exchange of goods, that restriction of imports is equally a limitation of exports and that the protection of inefficient industries is inimical to public welfare. He illustrated the shifting of import duties to the consumer and showed that an increase in tariff rates often results in decreased receipts. Although he ridiculed the idea that the introduction of foreign goods results in withdrawal of specie Dormer was not rigid in his analysis of international payments. He lamented the withdrawal of gold by the Moors and favored prohibiting the residence of foreign merchants in Spain since they took their accumulated money out of the country when they left. While he attributed Aragon's economic decline to excessive taxation and idleness, his purpose in advancing remedies for both evils was the increase in population.

The most important source of the state revenue was the customs duties. Dormer proposed that they be abolished and that a sum equivalent to these taxes be raised by the municipalities. While his proposal left to the option of the latter the method of raising their quotas, he indicated his preference for sales taxes. Despite the attacks of many of his contemporaries and a general lack of support Dormer's proposals influenced the Cortes of 1686 in reducing the customs duties of Aragon.

As a historian Dormer combined a critical use of the works of others with independent research. Using original sources he continued the historical research of Jerónimo Zurita, the first official historian of Aragon, and brought to light valuable material from the rich archives of that region.

ROBERT S. SMITH

Consult: Bona, Raymond, Essai sur le problème mercantiliste en Espagne au XVIII siècle (Bordeaux 1911) p. 184-93; Colmeiro, M., Historia de la economia política en España, 2 vols. (Madrid 1863) vol. ii, p. 339-40.

DÖRPFELD, FRIEDRICH WILHELM (1824-93), German educator. Dörpfeld attended the teachers' seminary at Mörs and was after-

wards a schoolmaster in various villages. In 1849 he became head master of the subsequently famous Wupperfelder Kirchschule at Barmen, where he taught for thirty years. He founded and was active in many teachers' societies and beginning in 1857 edited the widely read Evangelisches Schulblatt. His numerous works on the philosophical, psychological and practical aspects of education have been collected under the title of Gesammelte Schriften (12 vols., Gütersloh 1894–1901).

Dörpfeld was particularly interested in the elementary school curriculum. Its purpose was, he felt, to give pupils an understanding of the unity of the universe and to lay a solid foundation for character development by emphasizing the ethical point of view. The curriculum should be a living, well regulated organism providing for the study of all branches of knowledge, so correlated as to make their interrelationships evident and to improve the pupil's comprehension of each particular field. Sociology must be included, primarily as an aid to the pupil in his understanding of history and contemporary social life. Discipline should be educative and military ideas of discipline eliminated. Dörpfeld's ideas on school systems were discussed in several of his works, including Ein Beitrag zur Leidesgeschichte der Volksschule (Barmen 1881, and ed. 1882), an answer to the reactionary Prussian minister Puttkamer, who wished to make the schools the instruments of the state and had bitterly attacked the teaching profession in a speech in the Landtag in 1880. The best school system, Dörpfeld believed, was one of self-governing school communities controlled neither by the church nor by the state but representing their interests as well as those of the community, the teachers and above all the family. There must be no restrictions upon freedom of conscience in teaching.

Dörpfeld is a significant figure in the development of the Herbartian system, which he applied to the theory and practise of elementary school pedagogy. He went beyond Herbart, however, in his emphasis upon the social point of view in education. For many years he campaigned actively for his proposed school system and enjoyed a wide influence in educational circles, especially in Prussia. His most valuable contribution to educational psychology is his Denken und Gedächtnis (3rd ed. Gütersloh 1886, 12th ed. 1911; first published with title Zur pädagogischen Psychologie, 1866), in which he stressed understanding rather than memory as

the basis of learning and pointed out that understanding greatly increased the power of memory.

N. ROUBAKINE

Consult: Hindrichs, E., Friedrich Wilhelm Dörpfeld (2nd ed. Gütersloh 1906); Schmidt, Ernst, Friedrich Wilhelm Dörpfelds Schulverfassung (Langensalza 1920); Hemming, Christian, Dörpfeld als Sozialpädagoge (Langensalza 1923); Lukens, H. T., Connection between Thought and Memory (Boston 1895), based on Dörpfeld's Denken und Gedächtnis.

DOSTOEVSKY, FIODOR MIKHAILO-VICII (1821-81), Russian novelist and publicist. Dostoevsky was the son of a doctor attached to a hospital for the poor in Moscow. He suffered all his life from poverty and epilepsy. In 1849, already noted as an author, he was arrested in St. Petersburg for a minor political offense and condemned to death. He was reprieved and exiled to Siberia, where he spent ten years as a convict and a soldier. On returning to St. Petersburg he resumed his pen and devoted the rest of his life to his major novels: Crime and Punishment (1866), The Idiot (1868), The Possessed (1871-72), Raw Youth (1875), the Brothers Karamazov (1879-80). His prison reminiscences, The House of the Dead (1862), form an important social document. He was also a magazine editor and in his last years published An Author's Diary, a one-man journal of opinion.

Dostoevsky was an intellectual proletarian. His earliest work, Poor Folk (1846), with its Dickensian pathos was acclaimed as the first attempt at a social novel in Russia, yet his other early writings show a concern for the weak and downtrodden rather as sufferers from inner maladjustment than as victims of an iniquitous system. His mature work is a vast contribution to our knowledge of the psyche but it also bristles with problems of the moral order. Among these recurs constantly the question of how the claims of the individual may be reconciled with those of society. Whether explicitly or implicitly his novels assert the worth, dignity and freedom of the personality as well as the danger it runs when it is a law unto itself. This violent inquisitor of wilful, warring souls looked for salvation to a churchlike brotherhood of men, each denying his ego not out of selfinterest but in a spirit of Christian humility and love. He felt that it was Russia's mission thus to solve the social problem and unite the peoples of the earth in the name of Christ. This "Russian socialism" he opposed to the ignoble capitalism and the mechanical socialism of the West, which

he abominated equally as inimical to spiritual values.

AVRAHM YARMOLINSKY

Works: Dostoevsky's works have been collected in 21 vols. (St. Petersburg 1911); 2 supplementary volumes of newly discovered material were edited by L. P. Grossmann (Petrograd 1918). English translations: Novels by Constance Garnett, 12 vols. (New York 1913-23), and Pages from the Journal of an Author, a brief selection of Dostoevsky's publicist writings tr. by S. S. Koteliansky and J. M. Murry (Boston 1916). Consult: Noetzel, Karl, Das Leben Dostojewskis (Leipsic 1925); Yarmolinsky, Avrahm, Dostoievsky: a Study in His Ideology (New York 1921); Berdyayev, N. A., Mirosozertsanie Dostoevskago (Prague 1923), translated into German as Die Weltanschauung Dostojewskis (Munich 1925); Prochovov, G., "Das soziale Problem bei Dostojewski" in Zeitschrift für slavische Philologie, vol. vi (1930) 375-410.

DOUAI, ADOLF (1819–88), American socialist. Douai was born in Altenburg, Germany, the son of a teacher. He studied philosophy and theology in Germany, received his doctor's degree at Dorpat, Russia, and then conducted a school in Altenburg. He participated in the Revolution of 1848, served a year in prison for violating the press laws and then emigrated to Texas. He established the San Antonio Zeitung, in which he expressed abolitionist views. Forced to leave Texas, he next taught school in Boston and then in Hoboken and he finally settled in New York.

From 1868 to 1870 he edited the Arbeiter Union, official organ of the German speaking radical and trade union movement. On the establishment of the Working Men's party in 1876 (Socialist Labor party, 1877) he became an editor of its three publications, Labor Standard, Arbeiterstimme and Vorbote. From 1878 to 1888 he was editor of the New Yorker Volkszeitung.

A middle class radical, Douai at first opposed communism. He was a member of the National Labor Union and later supported the currency reform program of the Greenback movement. He attended the Greenback convention at Chicago in 1880 as one of the Socialist Labor delegates. He was repeatedly attacked by the German General Workingmen's Union of New York, parent body of the North American Federation of the International. His leftward drift probably began in Hoboken, where F. A. Sorge was a member of his teaching staff, and when Das Kapital appeared in 1867 he became an ardent Marxist. Douai was among the first to popularize Marx' doctrines in America. In Socialist Labor intraparty fights he endeavored

to moderate between the trade union and political factions.

While in Boston Douai conducted one of the first Froebel kindergartens in America. As director of the Hoboken Free Academy, a German secondary school, he attempted to introduce radical notions and was forced to resign in 1866 because of his atheistic views. In a pamphlet on kindergartens and public schools he advocated free education for all, including proper subventions to enable the poorest parents to give their children complete educational opportunities, and the freeing of schools not only from church but also from political influences.

SELIG PERLMAN

Works: Better Times (Chicago 1877, 2nd ed. New York 1884); Kindergarten und Volkschule als sozialdemokratische Anstalten (Leipsic 1876); ABC des Wissens für die Denkenden (Leipsic 1875); Antwort an den Bekenner des Theismus (Leipsic 1875); Land und Leute in der Union (Berlin 1864); Heinzen, wie er ist (New York 1869).

Consult: Schlüter, Hermann, Die Internationale in Amerika (Chicago 1918), tr. as The First International in America (New York 1931); Hillquit, Morris, History of Socialism in the United States (5th ed. New York 1910) p. 191-92; Commons, J. R., and others, History of Labour in the United States, 2 vols. (New York 1918) vol. ii, p. 224-25, 275-76.

DOUAREN, FRANÇOIS LE (also Duaren; in Latin Duarenus) (1509-59), French jurist. He taught at Bourges, holding the professorship there twice with an interval of practise at the bar of Paris. He was first associated with Eguinaire Baron but later came into conflict with him as well as with Baudouin. Douaren was the most brilliant representative of the historical school prior to Cujas and was perhaps the latter's equal. He differed in his method from Cujas only by a more pronounced tendency toward rational, synthetic exposition and literary preoccupation. He gave a comprehensive course on the Pandects from 1535 to 1538 in which he attacked the Bartolists, who responded in kind. His De ratione docendi, discendique juris (1544), addressed in the form of a letter to André Guillard, is really the manifest of the historical school. Douaren showed the possible utilization of inscriptions in a rational exposition of the Roman law and illuminated many sections of the Digest, particularly Regulae juris. His In tractatus de pactis (1545) is a good example of his systematic method. In the first book of his Libri disputationum anniversariarum (1547-53) he anticipated the Observationes of Cujas. He collaborated with Louis Roussard in an unglossed edition of

the Corpus juris civilis (1561), in which his treatment of the Novels is especially important. It is this edition also which contains Douaren's remarkable Summaria ad pandectas. His celebrated polemical work De sacris ecclesiae ministeriis ac beneficiis (1551), marked by a spirit of religious liberty, should also be mentioned.

J. Declareuil

Works: The best edition of Douaren's works is the Opera omnia, 4 vols. (Lucques 1765-68).

Consult: Eyssell, A. P., Doncau, sa vic et ses ouvrages, tr. from the Latin by J. Simonnet (Dijon 1860); Jobbé-Duval, E., "François le Douaren" in Mélanges P. F. Girard, 2 vols. (Paris 1912) vol. i, p. 573-621; Stintzing, R von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. i, p. 368-73.

DOUBLE JEOPARDY. The double jeopardy clause of the Fifth Amendment to the American constitution "nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb"—reveals in the quaintness of its phraseology the antiquity of its common law origin. Similar prohibitions, although sometimes in modified form, are found in the constitutions of most of the American states; but whether found there or not the guaranty against double jeopardy under pleas of autrefois acquit or autrefois convict has been held by the federal Supreme Court to be included within the general due process prohibition of the Fourteenth Amendment [Shoener v. Pennsylvania, 207 U. S. 188 (1907)]. Embodied therefore in both state and federal bills of rights, this guaranty has been interpreted and applied in a large number of judicial decisions in both jurisdictions, not always with harmonious results.

Needless to say, the limbs of persons accused of crime are no longer put in jeopardy even once by civilized governments, and the reference to life has not been construed to limit the protection to offenses for which capital punishment may be inflicted. On the contrary, it applies to all offenses in the category of felonies and in most states even to indictable misdemeanors.

The most difficult question for interpretation by the court is the determination of the point in any criminal proceeding at which a first jeopardy can be said to have begun. Generally speaking, the rule in both the federal and most of the state courts is that where a trial has proceeded to a verdict of conviction or of acquittal, the accused has certainly been placed once in jeopardy. He cannot thereafter be retried at the

instance of the prosecution whether or not errors in his favor were allowed in the course of his trial. This rule is carried so far that a statute of Congress was held void which allowed an appeal by the government but expressly provided that upon such appeal "a verdict in favor of the defendant shall not be set aside." This, however, was based upon the ground that judgment upon an appeal of this kind would be merely an expression of opinion and therefore not a judicial act [United States v. Evans, 213 U. S. 297 (1909)]. But in Kepner v. United States [195 U. S. 100, 134 (1904)] Mr. Justice Holmes, with two other justices concurring, could be heard arguing eloquently against this general rule in favor of something more nearly approximating the doctrine of the civil law of the continent of Europe. It seemed to him that "logically and rationally a man cannot be said to be more than once in jeopardy in the same cause, however often he may be tried. The jeopardy is one continuing jeopardy from its beginning to the end of the cause. Everybody agrees that the principle in its origin was a rule forbidding a trial in a new and independent case where a man had already been tried once. But there is no rule that a man may not be tried twice in the same case." The same point is made in State v. Lee [65 Conn. 265 (1894)]: "The principle of finality is essential; but not more essential than the principle of justice. . . . The adjustment of these principles . . . is determined in each jurisdiction by considerations of public policy and not by fundamental principles of jurisprudence."

Such a view of the situation has not prevailed in the United States. Indeed, many of the states have stretched the protection against double jeopardy to the point of declaring that where the accused has been convicted of a lesser crime included in a greater offense for which he was indicted and where he himself procures a reversal of the judgment on appeal, he may not in the new trial be convicted of an offense greater than that of his previous erroneous conviction. But this doctrine is rejected by many states and also by the federal courts [Trono v. United States, 199 U. S. 521 (1905)]. In view of the long prevailing practise in America of reversing judgments of conviction upon hairsplitting technicalities and in view of the numerous instances of honest doubt concerning the laws of evidence, it would be a mockery of justice from the viewpoint of social protection if every judgment reversed at his own

instance operated to acquit the accused. There are those, however, who urge even this extreme.

While the protection against double jeopardy is probably most important as applied in cases that have been actually prosecuted to the point of a verdict and judgment in the trial court, the principle is not confined to such cases. In most jurisdictions a person is regarded as having been put in jeopardy by proceedings short of an actual verdict and judgment; but mere preliminary proceedings are not sufficient. Thus discharge by a committing magistrate or the refusal of a grand jury to indict or a nolle prosequi entered prior to the impaneling of a jury or the quashing of a defective indictment or the entering of a judgment for the defendant on his own demurrer is no bar to a subsequent valid indictment and prosecution. In fact, even though a person has been tried under an indictment so defective in its averments that any judgment upon it will be reversible for error, the accused may be reindicted and tried again. The general rule is: "One is in jeopardy when put upon trial before a court of competent jurisdiction, upon an indictment sufficient to sustain a conviction, and a jury has been impanelled and sworn to try him." Thereafter any unreasonable discharge of the jury is tantamount to acquittal. But this seldom happens. A jury may be discharged without giving rise to double jeopardy in case of the illness of the judge or a juror or the prisoner or the prosecuting attorney or the misconduct of a juror or jury tampering, and especially and more usually in the case of inability to agree. With respect of discharge upon disagreement large discretion must of necessity rest with the judge.

Many of the cases involving double jeopardy turn on technical points which are of primary interest only to criminal lawyers. It should be pointed out here, however, that in their results some American civil actions closely approximate criminal prosecutions; for example, proceedings for an injunction that operates to close for a definite period a place in which liquor has been sold or a theater in which an indecent play has been produced. Such civil actions may be had in addition to criminal prosecutions without colliding with the prohibition against double jeopardy. Another point to be noted is that penal laws frequently list as offenses a series of acts that may constitute essentially only one transaction. Double jeopardy, for example, is not involved when a person is prosecuted for each of the acts of possessing, exhibiting and selling obscene pictures, although it is difficult to see how he could exhibit or sell without possessing.

It is well settled law in the United States that a single act may be an offense against more than one of the units of government and that a separate prosecution by each of the offended units does not constitute double jeopardy. Thus an act may be made subject to punishment by both national and state laws and possibly also by municipal ordinance. Although this rule was long ago laid down, prohibition laws constitute the stock example of its application since the advent of the Eighteenth Amendment and the enactment of the National Prohibition Act. When asked to overturn the established rule as applied to prohibition laws the Supreme Court replied: "An act denounced as a crime by both national and state sovereignties is an offense against the peace and dignity of both and may be punished by each. The Fifth Amendment, like all other guaranties in the first eight amendments, applies only to proceedings by the federal government . . . and the double jeopardy therein forbidden is a second prosecution under authority of the Federal Government after a first trial for the same offense under the same authority" [United States v. Lanza, 260 U. S. 377 (1922)]. Probably no clearer instance of double jeopardy, in fact, could be found than that in which a person is prosecuted by two different governments for one and the same act. The courts have not attempted to deny that. They have gone no further than to say that the constitutional guaranty against double jeopardy does not operate to prevent such double prosecutions. This, however, squares more nicely with the principles of American federalism than with the principles of justice. Of course, either unit of government may of its own volition outlaw such possibilities, but it is under no constitutional obligation to do so.

While the independence which state and national governments in the United States enjoy within their respective spheres gives considerable justification for the rule of law just mentioned, there appears to be far less reason for the rule that a prosecution for violation of a municipal ordinance is no bar to a prosecution on the same set of facts under a state law covering the same offense. Such, however, is the general rule, supported as it is by one or another legal fiction concerning the nature of a municipal ordinance. Needless to say such double

prosecutions are in fact rare. Otherwise the rule would probably long since have been modified or abolished.

HOWARD LEE McBAIN

See: Bills of Rights; Prosecution; Criminal Law; Prohibition; Federalism; Due Process of Law.

Consult: Russell, W. O., A Treatise on Crimes and Misdemeanors, ed. by R. E. Ross and G. B. McClure, 2 vols. (8th ed. London 1923) vol. ii, p. 1816-32; Bishop, J. P., Bishop on Criminal Law, ed. by J. M. Zane and Carl Zollmann, 2 vols. (9th ed. Chicago 1923) vol. i, ch. lxiii; Clark, W. L., Handbook of Criminal Procedure, ed. by W. E. Mikell (2nd ed. St. Paul 1918) p. 439-71; McBain, H. L., Prohibition, Legal and Illegal (New York 1928) ch. viii; Hélie, Faustin, Traité de l'instruction criminelle, ed. by J. S. G. Nypels and Léopold Hanssens, 3 vols. (enlarged ed. Brussels 1863-69) vol. i, bk. ii, ch. vi; Sauer, Wilhelm, Grundlagen des Prozessrechts (2nd ed. Stuttgart 1929) p. 475-500; Beling, Ernst, Deutsches Reichsstrafprozessrecht mit Einschluss des Strafgerichtsverfassungsrechts, Lehrbücher und Grundrisse der Rechtswissenschaft, vol. xvii (Berlin 1928) p. 215-77, which cites further continental literature in German and Italian.

DOUBLE TAXATION.

International. Double or multiple taxation may be broadly defined as the levy of more than one tax upon the same tax base by one or more tax authorities; in its important aspects double taxation is at present limited, however, to cases in which more than one tax jurisdiction is involved. The modern problem of double taxation arises in a complex and industrialized world, because men can own sources of wealth or profit at a distance and also because profit is the combined result of a number of operations in different places. When these places are in different countries or tax jurisdictions, double taxation may arise. A, living in New York, owns shares in a mine in Mexico or B, living in London, owns a ranch in Argentina. If taxes are applied only to the sources of wealth at their situs then the Mexican and Argentinian governments will raise revenue from these sources, and if it is heavy taxation the income remitted to New York or London will be pro tanto reduced. But the American and British governments find that A and B respectively enjoy many rights and privileges within their jurisdiction; these residents are regarded as suitable subjects for taxation not to be foregone merely because they have no income arising in New York or London. The world today pays more and more regard to the whole ability of the individual to bear taxation where he resides,

and taxation becomes increasingly subjective. But at the same time objective taxation, where the sources of wealth are situated, has not been given up; and so whenever source and owner are apart double taxation may arise.

When taxation is imposed after an investment of this kind has been made, the anticipated yield is reduced and the owner cannot sell the investment to another person in his own jurisdiction without suffering the capitalized effect of the burden in the price he gets; although he may perhaps sell to a resident in the country of origin, who will not be subject to the disability of duplicate taxation, at a price not so reduced. But new investment will not take place in face of an established system involving the two taxes unless it yields as much to the investor as an investment subject to equivalent risk elsewhere. In that way the country imposing the tax at the site of the investment (the country of origin) really bears its own tax by having to pay a higher rate than would otherwise be necessary for foreign capital. When a state like Poland borrows on the London market it has always to contract to pay its bond interest free of Polish taxes, the London or New York recipient getting thus a net yield avowedly comparable with the yield from investments of similar risk in his own country. But when the money is invested in a business or in land, the government of Poland has no wish to get less taxes from that business or land than it would were it owned by a Polish resident; indeed the instinct is that the foreigner should pay even more. Double taxation therefore acts like a tariff to keep capital from flowing freely over international boundaries and to make it more natural for capital to remain within national borders.

The problem of double taxation was the object of international agreements on a minor scale in the nineteenth century, but neither these nor the special arrangements between Great Britain and her dominions offered any satisfactory solution. The acute situation created by the multiplication of the financial burdens of the World War brought the question to the forefront of discussion. The problem was considered especially by a Committee of Economic Experts appointed by the League of Nations in 1922 after preliminary discussion by the International Chamber of Commerce.

Although the most acute problems arise in connection with the income tax, the committee also considered problems involved in other kinds of taxes and advised that all corporeal wealth,

including realty and tangible personal property, with the exception of money, jewelry and the like, ought to be assigned predominantly or wholly to the place of origin or situs; all intangible wealth, except real estate mortgages, ought to be assigned predominantly or wholly to domicile or residence.

With regard to the income tax the committee concluded that as between the rival claims of the principles of residence and origin residence should prevail and that the best available basis of relief was "the reciprocal exemption of the non-resident." In other words, Poland should give up the tax on income arising within her borders and going to New York or London and the United States or Great Britain should give up the tax on income arising within their jurisdictions and going to residents in Poland. All subsequent discussions by experts have proceeded on this principle, but the practical difficulties in giving effect to it are very great. In the first place, it is a hard doctrine to countries which on balance are debtors, because their fiscs must give up more than their residents gain. Moreover, such countries are generally those in the less advanced stages of development, where income taxes do not often carry the predominant idea of progression based on the total income of the resident but are rudimentary, fully imbued with the principle of origin and assimilated to taxes in rem.

Again, the problem of origin in itself is not simple, because of the widely separated activities which only in combination can yield an economic profit at the point of sale. The idea of economic allegiance covers a wide field of possible interest—the situs, the place of control and management, the place in which enforceability of rights may rest and the place where a profit is finally made as well as the place of different stages of distribution and spending. Some of the economic issues involved are not strictly determinate.

Definite general progress in establishing bilateral double tax agreements is slow, but meetings of technical experts have elaborated standard forms of convention suited to different fiscal conditions, which are available for countries whose budgets will permit of the step. These arrangements allow of many variations from the simple principle of the exemption of the non-resident, in deference to established views in debtor states. Some of these variations embody the alternatives suggested by the Committee of Economic Experts as substitutes for

the method of reciprocal exemption. These alternatives are: the method of deduction, permitting residents to deduct from their taxes the amount paid in the other country on the same item of wealth; the method of division, allocating taxes between the country of domicile and the country of situs in certain agreed proportions; and the method of classification, according to which the items of wealth are treated separately, some being assigned to the country of situs and some to the country of domicile. It appears that the main lines of settlement are now well laid down in principle and disputed only in details.

J. C. STAMP

Domestic. Double taxation by competing jurisdictions is of even greater importance in federal than in international finance because of the closer economic relations between the states of a federal union. The attempt to obviate double taxation in such cases has assumed several forms. Sometimes, where the matter has been relegated to the independent action of the separate states, reliance has been placed on the growth of the sentiment of interstate comity. In other cases the central government has intervened either through positive legislation or through the action of the federal judiciary.

The chief example of independent action by the separate members of a larger union is found in the British Empire. As a result of the high income taxes during the World War, cases of double taxation became so numerous and so grievous as to lead to remedial legislation in 1920. This provides that when both the mother country and the dominion tax the same income, Great Britain shall remit to its taxpayers the amount of the dominion tax up to one half of the British tax. Most of the dominions adopted similar provisions for double taxation by dominions. In the case of death duties Great Britain has thus far acted in only one case, making the succession duty payable in any Canadian province deductible in full from the British estate duty; and some of the Canadian provinces, like Ontario, British Columbia and New Brunswick, have adopted similar interprovincial reciprocal succession duty laws.

The principal examples of direct federal control are Germany and Switzerland. In Germany the federal legislation goes back to 1870; it was amended in 1909 and again in 1923. According to these laws real estate and so-called fixed

industry (stehendes Gewerbe) can be taxed only in the state of location or operation. If the business is conducted in more than one state, the tax is apportioned among the states; final appeal lies with the federal court, which is empowered to settle the allocation in each case. In Switzerland the constitution of 1874 imposed on the federal diet the obligation to prevent intercantonal double taxation, but the legislature transferred the responsibility to the federal courts. The supreme court has laid down the general rules to be followed but in difficult cases makes the apportionment itself.

In the United States a third group of methods has been adopted to avoid double taxation. Inasmuch as the federal constitution grants no definite right to the federal government to intervene, the activity of the Supreme Court is negative rather than positive. The power to enforce a uniform system upon the states has been expressly disclaimed (Kidd v. Alabama 188 U. S. 730). But the application of the principle of equal protection of the law has led to decisions declaring certain state practises invalid and thus contributing to the beginnings of uniformity and the avoidance of double taxation.

In the case of the general property tax it had long been settled that real estate was taxable only in the state of location. The older rule that movables follow the owner and are taxed on the principle of domicile has recently been modified by adjudging taxable in the state of situs not only tangible personalty but in some cases intangible property like bonds, bank deposits and even open accounts or credits. But the decay of the general property tax and the infrequency of attempts to tax intangible personalty have minimized the practical importance of these decisions.

It is chiefly in the inheritance tax that the effort to avoid double taxation has of recent years become important. The decisions that a state may not tax a resident decedent's personalty if located in another state and that a state may not tax the devolution of a non-resident decedent's personalty even if the property is located in the state have led to a gradual decrease of double taxation, through the adoption by many states of reciprocal provisions based, so far as concerns the succession to personalty, on the acceptance of the theory of domicile. In the case of the now rapidly spreading income taxes the federal decisions are only just beginning. A few states, notably New York,

have already adopted reciprocal provisions for the avoidance of double income taxation. Much still remains to be done, for the situation in both inheritance and income taxes is complicated in the domestic almost as much as in the international field by the conflict of interests between debtor and creditor states. A recognition of these difficulties led to the suggestion of a possible solution of the problem, which takes account of both the economic allegiance of the taxpayer and the economic basis of the tax; it is more immediately applicable to the inheritance tax. It has been proposed that the tax be assessed by the federal authority and a part of its yield distributed among the states, the criterion of apportionment to be constructed in a manner comparable to the so-called prosperity index of the Dawes report for Germany. Two components of such an index obviously are population and real estate values; but as these would favor the creditor states they might well be supplemented by other measures such as relative railroad trackage, telegraph and telephone mileage, mineral deposits, water and kilowatt power and the like.

Most progress in the avoidance of double taxation in the United States has been achieved in the apportionment of corporation taxes, first of public utilities and more recently of ordinary business corporations. In the latter case there are three typical systems, represented respectively by New York, Massachusetts and Wisconsin. Among the criteria of allocation used in varying proportion by these states are the relative amounts of tangible property, of bills and accounts receivable, of gross receipts, of cost of goods, of wages, salaries and commissions, of gains from the sale of capital assets and the like.

Double taxation by the same jurisdiction in a unitary state is of less present significance than double taxation through a conflict of jurisdiction. The older problems connected with the general property tax-the simultaneous taxation of real estate and the mortgage thereon, of corporate assets and corporate stock, of the corporation and the stockholder, of personal property and the evidence of debt —have largely disappeared in the United States with the breakdown of the tax itself. Of more importance are the newer problems such as the simultaneous taxation of property and the income therefrom, the inclusion in the personal income tax of the yield of real estate already taxed, the imposition of both a corporate and a personal

income tax and the inclusion in a personal income tax of the dividends of corporations otherwise taxed. In the last two cases there is a bewildering confusion of legislation in various countries: the absence of a corporation tax and the inclusion of dividends in the personal income tax; the presence of a corporate income tax with total exemption of dividends from the personal income tax; a corporate income tax with exemption of dividends only from the normal personal income tax; and finally a corporate income tax with inclusion of dividends in both normal and supertax. No practical solution of these problems can be hoped for until more progress has been made with the theory of the subject.

EDWIN R. A. SELIGMAN

See: Taxation; Income Tax; Inheritance Taxation; Corporation Taxes; General Property Tax; Conflict of Laws.

Consult: League of Nations, Economic and Financial Committee, Report on Double Taxation (Geneva 1923); League of Nations, Committee of Technical Experts on Double Taxation and Tax Evasion, Double Taxation and Tax Evasion, 11. Economic and Financial, 1927. 11. 40 (Geneva 1927); Stamp, J. C., Studies in Current Problems in Finance and Government (London 1924) ch. ix; Seligman, E. R. A., Double Taxation and International Fiscal Cooperation (New York 1928), and Essays in Taxation (10th ed. New York 1925) ch. iv; Griziotti, Benvenuto, "L'imposition fiscale des étrangers" in The Hague, Academy of International Law, Recueil des cours, vol. xiii (1927) 1-169; Lippert, Gustav, Handbuch des internationalen Finanziechts (2nd ed. Vienna 1928) pt. viii; Dorn, Herbert, "Das Recht der internationalen Doppelbesteuerung" in Vierteljahrschrift für Steuer- und Finanzrecht, vol. i (1927) 189-249; Guggenheim, Paul, L'imposition des successions en droit international et le problème de la double imposition (Geneva 1928); Lavagne, P., La question des doubles impositions (Paris 1929); Léridon, P., Le problème des doubles impositions internationales (Paris 1929); Pugliese, M., L'imposizione delle imprese di carattere internazionali (Padua 1930); United States, Bureau of Foreign and Domestic Commerce, "Double Taxation Relief" by M. B. Carroll, Trade Information Bulletin, no. 523 (1928); Walker, Francis, Double Taxation in the United States, Columbia University, Studies in History, Economics and Public Law, vol. v (New York 1896); Shultz, W. J., The Taxation of Inheritance (New York 1926) ch. xv; Fischer, Julius, Die Doppelbesteuerung in Staat und Gemeinde (Berlin 1909).

DOUGLAS, STEPHEN ARNOLD (1813-61), American statesman. Douglas, who in post-humous fame suffers by being made a foil for Abraham Lincoln, was at the climax of his own career widely thought to be the most patriotic and sagacious of American statesmen. Born in Vermont and impoverished in childhood by his

father's death he went west as a youth in search of opportunity and found it in the practise of law and politics in Illinois. Entering public life as a Jacksonian Democrat he became in Congress the leading spokesman of western interests, with special concern for the prosperity of Chicago and the opening of fresh areas for settlement in that latitude. In the interests of Chicago he fostered most effectively the beginnings of the Illinois Central Railroad, which by joining the Great Lakes and the Gulf increased enormously the city's commercial advantages.

As early as 1848 Douglas contended that the determination as to Negro slavery in each new jurisdiction should be vested in the citizens thereof. The peculiar circumstances of the period gave this doctrine of popular or "squatter" sovereignty a special importance. Actually there were no remaining unorganized areas into which the plantation system of industry, with its adjunct of slave labor, was likely to spread. Alignment of the South against the North on the technical question, however, made it a paramount issue. At the same time New England's unwillingness to have her labor attracted westward caused a number of eastern congressmen to vote against proposals for organizing new territories. To break this alliance of South and East against his long cherished desire of organizing a Nebraska territory Douglas, as chairman of the Senate committee on territories, when reporting a new bill in the winter of 1853-54, sanctioned a repeal of the Missouri Compromise restriction on slavery and proposed the organization of Kansas and Nebraska by referring the slavery question therein to their future inhabitants. This proposal captured enough southern support to procure enactment, but instead of solving it intensified the territorial phase of the slavery question. The Republican party was launched to redress the "crime against Kansas," while southern chagrin at Douglas' impartiality in defending his "popular sovereignty" doctrine produced a rift in Democratic ranks. In their famous joint debates of 1858 Lincoln evoked from Douglas a reiteration of his abiding faith in "popular sovereignty" and an explicit denial of southern contentions based upon the Dred Scott decision, a denial which permanently alienated the proslavery elements in the Democratic party. Since 1852 the "Little Giant" had been a strong aspirant for the presidency, and in 1860 he was the one Democrat with a prospect of election if harmoniously nominated. But he procured nomination only by a rump convention and was

easily defeated at the polls. Upon Lincoln's election Douglas denounced all projects of secession and in the few remaining months of his life gave full support to the national cause.

ULRICH B. PHILLIPS

Consult: Johnson, Allen, Stephen A. Douglas (New York 1908); Beveridge, A. J., Abraham Lincoln, 1808–1858, 2 vols. (Boston 1928).

DOUGLASS, FREDERICK (1817-95), Negro antislavery agitator and orator. Cruelty, starvation and unrelenting toil in his early life as a slave in Maryland bred in Douglass the implacable hatred of human slavery which was to determine the course of his life. At twenty-one years of age he made his escape and eventually reached New Bedford, Massachusetts. In 1841 while attending an antislavery convention in Nantucket called by William Lloyd Garrison he was invited to speak. The earnestness, logic and brilliance of his unprepared address caused him to be engaged as an agent of the Massachusetts Anti-Slavery Society, as "a recent graduate from the institution of slavery with his diploma written on his back." Despite attempts to kidnap and return him to slavery and despite beatings, showers of rotten eggs and countless dangers and indignities Douglass spoke eloquently wherever he could against slavery. His eloquence gave extraordinary impetus to the slowly rising antislavery sentiment, and his mere presence forced realization of the potentialities of the Negroes.

The publication in 1845 of the first of his three autobiographies increased the dangers surrounding Douglass and obliged him to leave the United States. He went to England, Wales, Scotland and Ireland and through lectures and writing created a tremendous sentiment for abolition of American slavery. Returning to his own country in 1847 he established and edited at Rochester, New York, a newspaper, the North Star, with which he carried on the struggle. Frequently he conferred with John Brown, Garrison, Harriet Beecher Stowe and other abolitionists. Douglass flung himself wholeheartedly into the campaign to elect Abraham Lincoln president. He helped organize the famous Fiftyfourth Massachusetts, a Negro regiment which gained great distinction under Robert Gould Shaw in the assault on Fort Wagner. After the Civil War he labored incessantly for enactment of the thirteenth, fourteenth and fifteenth amendments to the federal constitution. He held a number of political offices; he was commissioner to Santo Domingo, minister to Haiti, counsel for the government and recorder of deeds for the District of Columbia and presidential elector-at-large for New York.

Douglass held that as long as any race, sex or other group was denied freedom no group was safe. He therefore became one of the pioneer advocates of woman suffrage and materially aided Lucretia Mott, Susan B. Anthony and other advocates of votes for women. Douglass can without doubt be ranked as the first Negro to combat the subjugation of his race with uncompromising, direct and logical action.

WALTER WHITE

Consult: Douglass, Frederick, Life and Times of Frederick Douglass (rev. ed. Boston 1892); Washington, Booker T., Frederick Douglass (Philadelphia 1907); Holland, F. M., Frederick Douglass, the Colored Orator (rev. ed. Philadelphia 1895).

DOUWES DEKKER, EDUARD (Multatuli) (1820–87), Dutch writer and publicist. His activities fell in a period of enormous importance for the development and regeneration of Dutch life. In a country astir with growing commercial and industrial interests and efforts Multatuli more than any other man became a power for reshaping the general spirit and outlook of the nation.

At the age of thirty-seven he returned to Holland from the Dutch East Indies, where he had been a government official. His literary career was begun with Max Havelaar (Amsterdam 1860; tr. by W. Siebenhaar with introduction by D. H. Lawrence, New York 1927), a polemic in the form of a novel. It was an attempt to expose the connivance of Dutch officialdom in Java with the tyranny and corruption of the native rulers. Uniting a penetrating sentiment to a powerful logic it fell like a thunderclap on the peaceful but rather slow and ruminating Dutch and was at once recognized as one of the classics of the national literature. The question of the Dutch East Indies occupied his mind until the end of his days, but his activities soon widened out to the greater and more general problems of life. In a series of books called *Ideën* (7 vols., Amsterdam 1862-77) he set himself to renovate the spiritual life of Holland in its various aspects: political, cultural, artistic, religious. Although he detested capitalism he was too much an individualist to join the socialist ranks. His uncompromising attacks on the orthodox forms of religion and on the conventional morality of his days drew to him the enmity and hate of the powers of tradition and conservatism. But there had never been a figure in Dutch history that gathered round him to the same extent all that was alive and generous in the youth of his country, and before the end of his life his work had resulted in that remarkable revival of Dutch intellectual and literary life which found its brilliant center in the monthly review *Nieuwe gids*.

J. DE GRUYTER

Works: Het leven en de werken van Eduard Douwes Dekker, ed. by J. de Gruyter, 2 vols. (Amsterdam 1920-21); E. D. Dekker, Auswahl aus seinen Werken, a German translation of selections, with a biography, ed. by Wilhelm Spohr (Minden 1899; 2nd ed. 1902); Brieven, ed. by Hamminck Schepel, 10 vols. (Amsterdam 1891-96).

Consult: Gerhard, A. H., "Multatuli als historische Figuur" in Socialistiche gids, vol. v (1920) 221-29; Leipoldt, C. Louis, "Multatuli and the 'Max Havelaar'" in Westminster Review, vol. clx (1903) 438-47.

DOVE, PATRICK EDWARD (1815-73), English philosopher of land reform. Of a seafaring family, active, learned and accomplished, Dove spent a number of years as a country squire at Ballantrae. He acted as agricultural adviser to the neighboring farmers, refused to have a gamekeeper and helped provide employment during the potato famine of 1846. He was the author of several works on politics and economics. His leading work, The Science of Politics, was published in two parts: first (anonymous), The Theory of Human Progression and Natural Probability of a Reign of Justice (London 1850); and, second, The Elements of Political Science (Edinburgh 1854). The manuscript for the third part was lost.

Dove regarded land as a God given source of livelihood and hence the property of all the people. The nation, he argued, should therefore be the sole landlord and rent the only tax. He was one of the first to advocate complete nationalization of the land and represented the same wave of feeling as Mill and as Spencer in the early version of the Social Statics (London 1851, revised and abridged 1892). His picture of unearned site rent and his specific arguments for the single tax anticipated Henry George. Thus he said that this tax would be simple and easy to collect; it would insure to the country all the benefits of free trade; "it would secure the greatest possible production of which the soil was capable"; and, finally and most important, "it would secure to every labourer his share of the previous labours of the community."

Dove developed his argument from a philo-

sophical basis. Dedicating his work to Victor Cousin he pointed out that a country's practical policies follow the "credence" of a previous generation. He devoted himself to showing the folly of adhering to an outworn system of property faiths. Our ancestors' notions of "property" and the law embodying them, he argued, have as little validity for us as their definitions of "crime." Historically, private property in land in England grew out of feudal benefices with military service attached. As the military service died out, taxation of the common people for state expenditures was substituted but the landlord remained. This double burden is unjust and crippling. Let the state resume its lost rights by buying and taxing out the landlords and letting its lands to the highest bidders. Beyond this Dove accepted individual enterprise.

DOROTHY W. DOUGLAS

DOW, NEAL (1804-97), American temperance reformer and publicist. Dow was born of Quaker parents and received his secondary education at the Friends' Academy of New Bedford. From the discipline of the Society of Friends he inherited a hostility to the liquor traffic, an attitude which was strengthened still further by his later experiences as an employer of labor in the tanning and lumber industries and as an overseer of the poor in Portland, Maine. His writings stressed the economic waste which resulted from intemperance, especially as this waste was manifested in the proportion of labor turnover due to excessive use of intoxicants by industrial workers.

Dow was an ardent advocate of prohibitory legislation. Withdrawing from the Maine State Temperance Society in 1837 he was instrumental in forming the Maine Temperance Union, which undertook a long campaign to gain control of the state legislature. With great political skill he finally secured the passage of the famous Maine law of 1851, which embodied his theory of a comprehensive prohibitory statute. As mayor of Portland he dramatized the enforcement of the law and in numerous speeches and pamphlets defended its underlying philosophy. In his campaigns he constantly resorted to a system of "pressure politics" within the Whig and Republican parties, and therefore looked with misgiving upon the organization of the National Prohibition Reform party in 1869. Eleven years later, however, he became its nominee for president. Few if any of his contemporaries were so influential in promoting the idea of state prohibitory legislation.

JOHN A. KROUT

Consult: Dow, Neal, Reminiscences of Neal Dow, Recollections of Eighty Years (Portland, Me. 1898); Organ, T. W., Biographical Sketch of General Neal Dow (New York 1880).

DOWER AND COURTESY. See Marital Property.

DOWRY. Ordinarily dowry is the property which a man receives when he marries, either from his wife or from her family. It is not common among primitive people, but it seems to have developed independently in several centers. It presupposes organized family units and a property basis of society. Dowry can hardly be imagined in societies in which any form of group marriage or communal marriage occurs; and it seems equally excluded in the rare instances we know of polyandry. But in both monogamous or polygamous (polygynous) societies it is likely to appear as a special development of what at first sight seems to be its opposite, the purchase of a wife and the payment of the bride price. Marriage by capture, which probably never occurred as a tribal custom, would not admit of the dowry system; but marriage by purchase, which certainly is to be found all over the world, frequently gives way to it.

It may be assumed that the system developed from the power often possessed by heads of families of selling their females either into slavery or into marriage. There may have been little to choose between the two situations as far as the power of the master or husband was concerned, but there must have been much choice from the point of view of buyer and seller. Daughters might be a source of income, as they are specifically said to be by Homer, but it is impossible to believe that in Homeric or in Biblical society the father manifested a complete indifference to the subsequent fortunes of his child.

In fact, purchase of a wife was regularly an affair between families who were likely to be associated as equals in other relationships. It implied a certain sense of family importance. The marriage even in the form of a purchase was an occasion for closer union. Again, erotic choice may from the beginning have played a part. Certainly such choice was not a negligible factor in Homeric or in Biblical marriages.

The price of a bride therefore would not be

calculated in the same manner as the price of a slave. It tended to become smaller and smaller, and finally in the Roman coemptio, as in the Frankish sale for a shilling and a penny (per soldum et denarium), it was purely nominal and was retained only as a ceremonial.

On the other side, gifts by the groom or his family to the wife, the Teutonic Morgengabe, or by the wife's family to the groom are encountered frequently. There is also found the institution of the trousscau, whereby the wife came to her husband with ample personal equipment. All these customs emphasized the idea that the daughter of one household entered another not as a chattel but as a person who did not altogether lose the support and affection of her kinsmen.

The idea that served for a long time as the underlying purpose of dowry was that the wife was to be protected in some fashion against ill treatment in her new home. This idea may be connected with the ancient and widespread doctrine that gifts are essentially conditional and that the implied condition is the maintenance of good relations between the donor and recipient. When a marriage was not merely a purchase but was accompanied by a sort of interchange of gifts, the good treatment of the wife seemed the necessarily implied condition. Indeed, such good treatment is specifically stipulated in several ancient marriage contracts.

The ill treatment contemplated was not physical abuse, which was very rare, but alienation or repudiation. The first was soon prohibited by legal sanctions, but the second was more difficult to guard against. In polygamous societies another form might be the degradation of the wife from a higher to a lower position in the harem. The device used to prevent this was sometimes an oath or a fine on the husband if he offended. But when economic conditions made the bridal price unimportant and developed the gifts to the husband into a real dowry, it became evident that the dowry itself, treated as a conditional gift voidable for the husband's misbehavior, would be an effective check on the kind of ill treatment apprehended. It became essential that no matter how complete the husband's control of a dowry during marriage he had to restore it if he divorced his wife or if she died childless, and as this restitution was to be made to her family it was almost sure to be claimed.

Although there was no lack of representatives to protect the wife's interests, legal restrictions were quickly found necessary to make the husband's duty of restitution effective. We can trace this bost at Athens and at Rome. In both communities when the dowry consisted of specific property—generally land—it was made inalienable by the husband, and in both communities specific or general mortgages might be placed on the husband's property to secure the return of the dowry.

We have a great deal of information about the general character of Athenian and Greek dowries both in literature and in inscriptions. As may be supposed, the amounts of dowries varied enormously, and in a number of cases they reached relatively high figures. Demosthenes' father gave his daughter a dowry of two talents, although his entire fortune was only fourteen talents. Portions like these make it possible to suppose that the dowry in such communities was originally the daughter's share in the inheritance paid to her at her marriage. There is a suggestion of a similar institution in the Bible, although ordinarily the term translated as dowry in the King James' version is the bridal price. But whether or not such a right of inheritance existed in ancient times, the historical dowry was not consciously connected with it.

The unmistakable effect of the dowry system as it showed itself in Greece and Rome was to strengthen the feeling of blood kinship as distinguished from the agnatic family. It also assisted the development of female independence in Rome and many Greek states, and even under the semi-harem conditions of Athens it gave the wife an increasing sense of importance. But it is obvious that its effect was limited to the propertied classes. The very poor, living from hand to mouth, had neither the means of endowing their daughters nor any reason for doing so. Among the wealthier classes not only was the amount of dowry a means of ostentation- a fact which called forth repressive and quite futile legislation—but an undowered marriage in these circles was a public scandal.

The legal problems connected with dowry interests became disproportionately prominent in the later Roman law even after the empire had become Christian. The church took the dowry system for granted. Perhaps it welcomed the aid, however slight, it gave in reducing divorces, which the secular law continued to permit despite the church's disapproval. It may also be that it was a distinct advantage to the church for women's control of family property to be increased, since women had always been generously disposed toward church foundations.

But the problem of dependence gave a new aspect to the dowry system which must have made it welcome to both church and state. The dowry was apparently intended to make the marriage of children of substantial families something like a union of equals despite the legal power of the husband in patriarchally constituted societies. Since marriages in ancient societies were regularly between very young people, the dowry was economically important in making it possible for the young husband to establish a new household, which alone he would have been unable to do. It is this which has seemed the principal justification of dowries in those communities, e.g. in continental Europe, where they are still formally maintained. Since a joint household is to be formed it has seemed only just that the two families involved should jointly contribute to its establishment. Yet the dowry must return to the wife -or to those who would use it for her-on her husband's death, just as it would in case of divorce; and to insure this the husband's estate was made responsible and the responsibility enforced by drastic legal remedies. The dowry thus served the purpose also of providing for the wife on her husband's death, taking the place of a compulsory share in the succession. It has tended to reduce the number of cases of widows left destitute—a matter of some importance in the absence of an insurance system.

This aspect of the dowry was the controlling one in an institution found in England and the United States. It is known as dower, which is merely a verbal variant of dowry and is translated by the same Latin word, dos. In its English form it was a life interest given to the widow in one third her husband's heritable land. In many states in the United States it was extended to all property and was frequently made absolute rather than merely for life. But in both England and America there is a growing tendency to make it conditional on the husband's dying intestate or to abolish it altogether.

From the very fact that the dower interest was in land, it is clear that it was merely an incident in the property relations of men and women of the upper classes. In England it was supplemented by marriage settlements, elaborate legal arrangements providing for the wife out of the husband's property in return for the enormous control the husband acquired over his wife's property. But more recent legislation has made settlements less important, and they have never gained a real foothold in the United States.

The dowry system has had a great many social repercussions both in the countries which officially recognize it and in those which do not. The most important of the latter are England and America. The open discussion of matters of dowry in continental Europe has always seemed to many classes of Englishmen and Americans a proof of gross indelicacy in personal relations and a negation of love as the basis of marriage. The result has been a romantic tendency in English imaginative literature to ignore economic realities.

The usefulness of the dowry system in accelerating the age at which men may marry—one of its chief justifications on the continent—has been overlooked. Indeed, the flexibility of the system is such that it can be made to serve almost any matrimonial purpose which is considered socially desirable. It may, for instance, occasionally serve as a means whereby an exceptionally endowed member of a lower or socially inferior class may be received into the upper class. The dowry must, however, necessarily remain chiefly an institution affecting only the propertied classes in any society.

Max Radin

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Consult: Pavlik, M., M. P. Drahomanov (Lemberg 1896); Hruševsky, M., Drahomanov et le groupe socialiste de Genève (Vienna 1922).

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The dowry system has had a great many social repercussions both in the countries which officially recognize it and in those which do not. The most important of the latter are England and America. The open discussion of matters of dowry in continental Europe has always seemed to many classes of Englishmen and Americans a proof of gross indelicacy in personal relations and a negation of love as the basis of marriage. The result has been a romantic tendency in English imaginative literature to ignore economic realities.

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Drawbacks differ from export bounties, as Adam Smith explained, in that drawbacks "can never occasion the exportation of a greater quantity of goods than what would have been exported had no duty been imposed.... They tend not to overturn that balance which naturally establishes itself among all the various employments of the society; but to hinder it from being overturned by the duty. They tend not to destroy, but to preserve, ... the natural division and distribution of labour in the society" (Wealth of Nations, bk. iv, ch. iv).

While the drawback since the time of Adam Smith has generally been regarded as a relief from protectionism it was originally a part of the mercantilist system and was used extensively in France under Colbert and in England during the eighteenth century. In England drawbacks were given especially for the encouragement of shipping; but their importance declined with the coming of free trade.

The United States has based its drawback system upon the purposes outlined by Adam Smith. Its tariff law of 1789 limited drawbacks to imported goods reexported in their original packages. The application of drawback was extended in 1861 to goods manufactured wholly from imported materials, but only 90 percent of the duties were refunded. The refund of duties on the export of goods made from a combination of domestic and imported materials was not authorized until 1890. At this time the refund was increased to 99 percent of the duties. Extreme protectionists regarded drawback with suspicion as an entering wedge which might disrupt their system and hence insisted upon all possible safeguards, both in legislation and in administrative regulations, against fraud and abuse. In 1919, however, the United States Tariff Commission reported that scores of American industries using foreign materials did not exercise the drawback privilege because the regulations designed to prevent fraud were so exacting and intricate that the amount of drawback received did not repay the cost of collecting it. So complicated was the procedure for making a claim and proving identity that only large scale industries, such as sugar and tin plate, which could afford to employ experts to look after these matters, could profitably take advantage of the drawback privilege. Although the procedure has since been simplified, still in 1929 only \$14,926,000 of duties were drawn back, principally on cane sugar, flaxseed, aluminum and sensitized films. There was a change of policy in the tariff of 1930 by the abandonment of the requirement of proof of identity in claims for

drawback on sugar, non-ferrous metals and ores containing non-ferrous metals.

In certain European countries drawbacks have become, whether by accident or design, bounties on exports. Difficulties arise in determining the amounts of drawback payable when the amount of imported raw material contained in a given lot of goods cannot be directly measured, as, for example, the amount of wheat in flour, and when certain materials, such as flaxseed, yield two products only one of which may be exported. In such cases arbitrary conversion ratios must be fixed to establish the amount of raw material, in a given quantity of manufactured product, on which drawback may be paid. But as manufacturing processes are improved the actual yields secured from raw materials exceed the official ratio, and exporters receive more in refunds than they have paid in duties. In this manner the drawbacks of internal revenue duties on sugar beets of various continental states became bounties. Farmers raised beets of higher sugar content and refiners increased the amount of sugar they could extract from beets. Corresponding changes were not made in the official ratios and substantial bounties on exports resulted. These concealed bounties were finally abolished by the Brussels Sugar Convention of 1902.

Export bounties may arise also from the payment of drawback on exports containing domestic material either in combination with imported material or alone. If proof of identity is required-proof that the exported goods actually contain a specific quantity of imported goods on which duty has been paid -the provisions may be so loosely drawn that domestic goods can be substituted for imports. Or the only proof demanded may be that duty has been paid on an amount of imported goods equivalent to that on which drawback is claimed. In this case a bounty to exporters may result from the failure of the import tariff to raise the price of domestic goods by the full amount of the duty or from the substitution in the process of manufacture of domestic goods of quality inferior to those imported. French drawbacks on woolen and cotton goods in the early nineteenth century illustrate this type of concealed bounty.

The improvement trade (Veredelungsverkehr, admission temporaire) permits, under bond for the amount of the duties to be paid if the goods are not reexported, the free entry into the customs area of a country of materials to be worked up and exported and permits the entry, duty

free, of foreign goods made from domestic materials. In Switzerland the improvement trade has attained considerable development, as, for example, in the importation of Irish linen to be made into handkerchiefs and reexported. The general purposes of drawback and the improvement trade may be accomplished by the establishment of free zones where foreign goods may enter without the payment of duty to be repacked, conditioned or manufactured, as, for example, in the port of Hamburg or in bonded warehouses in Germany, France, the United States and the United Kingdom. In the last named country the system of bonded warehouses has practically displaced drawbacks. As a rule manufacturing operations are not permitted in warehouses, but there are exceptions, such as the milling of wheat and smelting of ores in bond in the United States.

Negotiable export-import certificates (Einfuhrscheine, titres d'acquits à caution) represent a development of the drawback in a direction far removed from the original idea. These negotiable certificates are issued upon exportation and may be used in the payment of import duties either on commodities of the same kind as those exported or on a specified list of commodities. Both in France and in Germany the use of these certificates has brought about marked disturbances in that "natural division of labor" which drawbacks are supposed to maintain. In the United States the proposed export debenture, which it is claimed resembles drawback, represents an extreme use of the exportimport certificate plan amounting in effect to export bounties.

PERCY WELLS BIDWELL

See: Customs Duties; Free Ports and Free Zones; Bounties; Protection; Free Trade.

Consult: Esslen, J. B., Die Politik des auswärtigen Handels (Stuttgart 1925); Grunzel, Josef, Economic Protectionism (Oxford 1916) p. 200-20; Gregory, T. E. G., Tariffs: a Study in Method (London 1921); United States, Tariff Commission, Dictionary of Tariff Information (1924), and Free Zones in Ports of the United States (1918).

DRESS. For the history of dress there are roughly four fields of study: prehuman behavior, archaeology, primitive peoples and modern civilized conditions.

The study of animal behavior emphasizes two facts regarding the origin of clothing. In the first place, human dress, in so far as it is for protection against the elements, has no continuity with any prehuman behavior. Animals in frigid climates grow warm coats, which are transmitted to their offspring by heredity. The opposite technique of invention and traditionally transmitted processes does not occur except in man. In the second place, observation of the higher apes has emphasized the prehuman roots of clothing as self-decoration. Köhler describes the naïve delight of chimpanzees in hanging objects about their bodies and trotting about to display them.

Archaeology reveals nothing about the history of dress until the upper palaeolithic erawhich is far removed from earliest man. Clothing is necessarily of perishable materials, but even ornaments of animal teeth, ivory and shells begin to appear only in the Aurignacian period at the same level at which is found the characteristic palaeolithic development of mural drawing and engraving. From this period date also the characteristically distorted nude figurines of the female form, some of which are wearing bracelets although they are not represented with any other clothing. It is obvious, however, that the distortion of these female figurines is in the direction of fertility symbols, and their nudity furnishes no information as to women's daily wear in the Aurignacian period except that bracelets were worn at this period.

The reasons that have led man to clothe himself can therefore be studied chiefly from a comparison of the divergent behavior of now existing peoples. There is a strong association in western civilization between dress and the covering of the sex organs, but most of the literature concerning the origin of clothing has directed its array of facts to demolish the assumption of the primacy of this connection and to point out that dress did not have its origin in a specific instinct of modesty focused on the organs of reproduction.

It is obvious from any study of primitive clothing that this particular function of dress has very often been unknown in other cultures. The habit of complete nudity has a wide distribution in the tropical regions of South America, Melanesia and Africa. In some cases both men and women are habitually naked, in others only the men, in still others only the women. Even outside of tropical regions habitual nudity is widespread, although a skin may be thrown over the shoulders for protection. Such regions are the Great Basin in North America, California and Australia. Even in arctic regions, where well tailored clothing is universal, the

conventions are often such that both men and women are habituated to indoor nudity and like all people so habituated exhibit no shame in uncovering. Nansen describes the intercrural cord of the east coast of Greenland, the sole covering of the natives when indoors, as being "so extremely small as to make it practically invisible to the stranger's inexperienced eye" (Paaski over Grönland, Christiania 1890, tr. by H. M. Gepp as The First Crossing of Greenland, 2 vols., London 1890, vol. i, p. 338-39, vol. ii, p. 277-78).

In more extreme instances that may be brought to bear against this theory of the origin of clothing in an instinct of modesty the very nature of the coverings themselves is the point of the argument. The codpicce which was worn in Europe about 1450 and the custom of the men of certain Papuan tribes who squeeze their members into the opening of a gourd are indicative of the exhibitionist nature of certain forms of dress. Many observers in many parts of the world have commented on the fact that the most obvious function of the genital coverings was to attract attention rather than to divert it.

It is possible therefore to discard the notion that there is a human instinct of modesty that expresses itself in cothing. Modesty is a conditioned reflex and has its roots in the fashions of dress to which any group is accustomed. It is therefore to be expected that, given certain turns of fashion, other regions than the genital will be singled out and this emotion directed elsewhere-to the feet, as among Chinese women of past generations, or to the face, as with Mohammedan women. Native Brazilian women are extremely unwilling to remove their nose plugs and Alaskan women to remove their enormous labrets. Feelings of shame may also be associated with types of behavior not connected with clothing. Perfectly naked savages, for example, show acute feelings of shame at seeing anyone eat in public.

All the other theories of the origin of clothing contain varied amounts of truth. Their advocates have erred only in too generalized a support of their particular positions. It is not necessary to deny any of them, once one has granted that human custom has no unique root but in different parts of the world has been the result of quite different circumstances and habits of mind variously interacting.

Thus Frazer and Karsten argue for the origin of clothing in ideas of magic, as, for example,

the covering of the organs of reproduction in order to prevent the evil eye being cast upon them. Amulets hung about the neck or inserted in the lip or the nose are the full scope of clothing among some peoples, and in those and similar cases costume can be most pertinently studied in connection with local magical beliefs. In some regions these have had a profound influence upon the development of dress, but it is not necessary to generalize them as the origin of clothing.

The theory that clothing originated in protection against the rigors of climate is defended by Knight Dunlap. To doubt that weather has ever been a factor would be to cast a gratuitous slur on human intelligence and to ignore one of the great differentiations between human and animal behavior. If it were the primary factor, however, the primitive tribes living in the cold climates of the southern hemisphere would have provided for themselves as well as those living in similar climates of the northern hemisphere. But they have not done so. For the freezing weather to which they are seasonally exposed the Australians and the Fuegians do not make themselves clothing but barely protect their shoulders with a skin. Certainly many other motivations have been as potent in the history of clothing as protection against the weather.

Westermarck considers dress under the heading of "Primitive Means of Attraction." He believes that it is fundamentally rooted in the erotic impulses. Instances of this sort have been given above and he presents many others, both of habitual ornamentation of the pubic coverings and of ornamentation worn for particular occasions, such as dances, especially those of a licentious character. The history of clothing in our own civilization is ample evidence of the degree to which one sex dresses for the other, and certainly the often recurring differentiation of the dresses of the two sexes should be studied from this angle.

It does not seem necessary, however, to single out the one trait of display before the opposite sex when dress is so obviously and so often a self-display on all counts. Sex display in dress may hardly appear in a given area, but display of trophies or display of status may be fundamental. Thus on the plains of North America men's dress is a heraldic display of war counts, and on the northwest coast a man's hat will be built up in cumulative units to designate his rank. As an old explorer said of the Fuegians, "although they are content to

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be naked, they are very ambitious to be fine." This impulse toward decoration is the most constantly recurring motivation in the history of clothing and, as we saw above, the one which is found also among the higher apes.

Modern conditions have introduced only one important factor into human behavior in regard to clothing. In all that has been said above, modern dress like that of any other period is merely one of many possible varieties all illustrative of the general principles. But there is one fundamental difference. Whereas in simpler conditions, even in untouched rural districts of Europe today, dress is geographically differentiated, in modern civilization it is temporally differentiated. This rise of fashion in the field of dress had begun somewhat tentatively between the tenth and the fourteenth century, but it is with the Renaissance that its full and startling effect is first to be gauged. In rural districts dress remained and has remained to the present time a matter of local individuality perpetuated for centuries with great conservatism. The revolutionary rise of fashion had to do only with the urban population and even more specifically with the court. Its onset in the fifteenth century was marked by those peculiarities that have continued to characterize fashion in the modern world: first, the grotesque exaggeration of certain features, in this case notably the hennin (the fantastically elongated headdress that was held on by a chin band); and second, the personal arbitership of the great lady, which is said to have been already a well developed role of Isabelle of Bavaria, wife of Charles vi.

From this period fashion has been of unceasing importance in the field of dress. The latter part of the fifteenth century and the earlier part of the sixteenth show some of the most pleasing of all western European fashions, styles that are best known through the portraits of the Italian Renaissance. In the first half of the sixteenth century the woman's hoop skirt was elaborated, and this returned in extreme forms in the mid-eighteenth and mid-nineteenth centuries, in less extreme form in the mid-seventeenth. In the eighteenth century version in the reign of Louis xvI this was coupled with spectacular display of costly material in garments; clothes became a primary means for the ostentatious exhibition of wealth. The greatest excesses were cultivated in the matter of hairdressing; coiffures were a half yard high and prints show the hairdressers

seated on ladders in order to reach the upper tiers of their creations. Nor was there any marked improvement during the nineteenth century. Probably the fashions of the period from 1830 to 1900—the desperately constricted waist, the bustle and the heavy dragging skirt were the ugliest and most unhealthful in the history of women's dress in western civilization.

The usual view of fashion is, first, that it is an affair of violent contrasts, each few years' swing of the pendulum reversing that of the preceding; and second, that it is essentially dictated by individual Parisian costumers. Kroeber, however, taking as a test case woman's full dress toilette from 1844 to 1919, has shown that, at least in the measurements he has considered, fashion's vagaries follow definite long time trends. This is clearest in the measurement of the width of the skirt, which for fifty years before 1919 had in spite of incidental variations become progressively more constricted. For almost as long a period previously it had in the same way grown progressively fuller, and its cycle therefore would be about one hundred years. The length of the skirt showed a similar trend. Its cycle for this period was about a third the duration of the width cycle, but even this is too long to be due to the influence of a single gifted designer. Kroeber does not claim universal validity for his examples but draws from them two conclusions: first, in a broader view styles not merely oscillate between two points but work themselves out in cycles of considerable length; second, these cycles are obviously longer than the reign of influence of any one designer and are therefore independent of even the most powerful costumer.

The study of fashion along with a variety of other cultural traits of modern civilization, such as mass production, can derive no assistance from the history of the world before comparatively modern times. Fashion is new in human history and its future course is not known. At present it marks, as Santayana says, that margin of irresponsible variation in manners and thoughts which among a people artificially civilized may so easily be larger than the solid core. It may well be that this swift succession of styles will maintain itself as a fixed characteristic of dress as a culture trait in our civilization.

RUTH BENEDICT

See: Ornament; Magic; Symbolism; Fashion; Sumptuary Legislation.

Consult: Ellis, Havelock, The Evolution of Modesty,

Studies in the Psychology of Sex, vol. i (3rd ed. Philadelphia 1913) p. 1-84; Westermarck, E. A., The History of Human Marriage, 3 vols. (5th ed. London 1921) vol. i, p. 497-571; Frazer, J. G., Totemism and Exogamy, 4 vols. (London 1910) vol. iv, p. 194, 200-02, 207; Wissler, Clark, The American Indian (2nd ed. New York 1922) p. 60-65; Dunlap, Knight, "The Development and Function of Clothing" in Journal of General Psychology, vol. i (1928) 64-78; Parsons, F. A., The Psychology of Dress (New York 1920); Flugel, J. C., The Psychology of Clothes (London 1930); Kroeber, A. L., "On the Principle of Order in Civilization as Exemplified by Changes in Fashion" in American Anthropologist, n.s., vol. xxi (1910) 235-63; Lowie, R. H., Are We Civilized? (New York 1929) ch. x.

DRINOV, MARIN STEPANOVICH (1838–1906), Bulgarian historian and nationalist. After a short career as a teacher in his native land Drinov went to Russia, where he completed his studies in historical philology at the University of Moscow. In 1873 he became a professor of Slavonics at the University of Kharkov, where he remained except for brief interludes for the rest of his life. Drinov was one of the founders of the Bulgarian Literary Society, which was established in 1869 and was the most important center of Bulgarian culture and nationalism at that time. It continued, as the Bulgarian Academy of Sciences, to be influential after the liberation of the country.

Drinov was the first to establish Bulgarian history upon a sound scientific basis. His writings on ancient Bulgarian history laid a foundation upon which later scholars were able to build. In 1869 he published two important works: Pogled vrekh proiskhozhdeneto na Bolgarskiv narod i nachaloto na Bolgarskata istoriya (Vienna), a study of the formation of the Bulgarian people and the beginnings of Bulgarian history, which opposed the theory of the Hunnish origin of the Bulgarians, and Istorichesky pregled na Bolgarskata tserkva (Vienna), which dealt with the historical development of the Bulgarian church. In Zaselenie balkanskago poluostrova slavyanami (Moscow 1872), a pioneer work in Russian on the settlement of the Balkan peninsula by the Slavs, Drinov maintained that the Slavic settlement had begun as early as the second century. Yuzhnie slavyane i Vyzantiya v x veke (Moscow 1875), his work in Russian on the southern Slavs and Byzantium in the tenth century, was a clear picture of the oldest national organization of the Balkan Slavs and of the internal structure of Bulgaria after the fall of the first Bulgarian Empire. In addition to these principal works Drinov issued a number of studies on the ancient and

modern political, cultural and literary history of the Bulgarians. His collected works were edited by V. N. Zlatarski (3 vols., Sofia 1909–15).

In various Russian publications Drinov upheld Bulgarian national and eccleslastical interests; in this way and through his activity as adviser of the Russian commander-in-chief during the Russo-Turkish war he helped the national cause. After Bulgaria became an autonomous principality he became a member of the Constituent Assembly and aided considerably in the administrative and cultural reconstruction of his country, particularly as the organizer of its educational system.

Josef Matl

Consult: Zlatarski, V. N., in Letopis na Bolgarskoto Knizhovno Druzhestvo, Sofia, vol. vii (1907) 68-83; Kulakovski, P., in Zhurnal ministerstva narodnago prosveshcheniya, vol. viii (1906) 190-206; Ljapunov, Boris, in Archiv für slavische Philologie, vol. xxviii (1906) 637-39.

DRIVES, MONEY RAISING. The money raising drive is one of the doubtful contributions of American civilization. Although the drive was used elsewhere during the war, when one touch of propaganda made all men kin, and may still persist here and there, it is in the main restricted to the American scene. This may be due as much to the smaller role of the voluntary social agency abroad as to the acceptance there of the notion that philanthropy is the province of the upper classes, against whose comparatively small numbers no concerted drive is necessary. Essentially the drive is a phenomenon of mob psychology. In it can be seen in strange fellowship religious revivalism, the worship of Mammon, the adoration of success, the flair for efficiency, the shrewd sense for exploitation, the apotheosis of salesmanship, unconscious "justification by faith," grafted on a comfortable idealism.

In the brief history of its existence the money raising drive has been known chiefly in philanthropy, in institutional programs of building and endowment and in war financing. Its present primary importance is in the field of philanthropy, with educational institutions occupying the second place.

The component elements of the money raising drive made their appearance in somewhat the following sequence. Over a half century ago under the guidance of Charles S. Ward the Young Men's Christian Association used the drive method for raising funds. It was later adopted by other institutions, especially for

building funds and endowments. The next important factor was the financial federation of social work agencies which made a somewhat abortive appearance in Denver, Colorado, in 1887. It had appeared in Liverpool, England, fourteen years prior to that time. The first successful financial federation took place in the Jewish philanthropies of Cleveland in 1896 and was followed in 1905 by the non-denominational city wide charities in Elmira, New York, in 1907 by Washington, D. C., and in 1913 in Cleveland, Ohio, by one of the most important of city wide federations. A somewhat neglected precursor of money raising drives was the tag day, whose origin is probably unknown but which was recorded as early as 1908 in Chicago, where it occurred 137 times during the four years from 1919 to 1922. The final and most exuberant florescence of the money raising drive, its most extravagant, most successful and most vicious manifestations, appeared during the war of 1914-18.

Despite the basic setting of all money raising drives in mob psychology or its euphemistic representative, organized publicity, it would be misleading to identify the perennial drives with those characteristic of wartime fervor. The latter should be classed alone. They appeared in three fairly distinguishable forms: the nation wide drives for auxiliary war service undertaken by such organizations as the Young Men's Christian Association and the Red Cross, the local war chests and the Liberty Bond drives. It was only the last of these which in the excesses of war psychology developed into vicious mob coercion.

Unprecedented amounts were raised for war auxiliary purposes and later for refugee and foreign relief. The Red Cross, the denominational young men's associations, the Salvation Army and War Camp Community Service demanded millions of dollars and the refugee relief organizations followed suit. Each one of these drives would in peace times have been considered gigantic. In 1918 upon the initiative of the secretary of war seven of the largest agencies providing auxiliary services to the fighting forces or aid to their dependents combined their drives into one huge high powered drive, the United War Work Campaign, which raised over \$200,000,000. Between April, 1917, and May 1, 1918, the United War Work Campaign together with the independent drives by the American Red Cross and the Young Men's Christian Association netted the incredible total

of \$560,000,000, which would probably have constituted the record for the generation had it not been dwarfed into relative insignificance by the Liberty Loan drives for amounts running into the billions.

"War chests" were created in cities, counties and in at least one state, Michigan, as a reaction to the chaos resulting from the endless succession of special national drives, most of which assigned a quota to each community. The war chest was a two-edged measure designed on the one hand to raise the communal quota and on the other to protect the givers from assaults of countless special drives. The war chest brought with it almost automatically the financial federation of the local units of national agencies and the joint raising of funds for both local and national needs. Syracuse and Rome, New York, were the first cities to adopt the war chest and were soon followed by Columbus, Detroit, Cleveland, Rochester and Indianapolis.

The Liberty Loan drives called forth the total mob power of the population. At this point the United States probably differed little from European countries except that lacking the emotional power provided by their nationalistic traditions it substituted larger doses of selfhypnosis and hysteria. The presence of an enormous percentage of immigrants or descendants of immigrants from the enemy nationalities supplied a stimulus for fear and hatred that measurably abetted the hysteria. Appeal turned into intimidation, sabotage and physical assault, especially where the presence of enemy alien heritage proved a further incentive to ferocity or created a defensive superfervor on the part of the "tainted" members. Although the nature, momentum and methods of the Liberty Loan drive may not have been unique, the intensification brought about by the incomparably larger funds sought, coupled with the recrudescence of the worst forms of patriotism involving the disregard of all sanctity of person and property, made the experience sui generis, a full recording of which, beyond a few fractional bits of testimony in progressive periodicals, remains yet to be made.

The chief money raising drives of the present day are mild reflections of the wartime examples. The chief representative is the general philanthropic drive, such as the Red Cross annual roll call and special disaster fund drives, the Christmas seal sales for antituberculosis societies, the Salvation Army drives and the Poppy Day of the veterans' organization. A

second type includes building and endowment fund drives by agencies like the Young Men's Christian Association, colleges, universities, hospitals and churches. The annual community chest campaigns of financial federations of social agencies, although philanthropic in intent, constitute a class by themselves.

Money raising drives have had but one purpose, that of raising money. This truism is necessary in view of the confusing incidental and historical claims that have been made for them and in view of certain special phases attaching solely to community chest campaigns. Taking for granted a conviction on the part of the sponsors as to the social justification for their particular objective, the drive resolves itself into the following preliminary steps.

The desired amount and the community's contributing capacity are determined. Persons who command public confidence are selected for nominal or actual responsibility and leadership; "prospects" and amounts which as groups or individuals they are likely to contribute are listed. Then there is built up an organization of the individual participants in the drive, who must be community members in good standing —leaders if possible. The refinements worked out in this last phase of the work present remarkable achievements in organization, especially as represented in such "trade teams" as those in the Federation for the Support of Jewish Philanthropic Agencies in New York. A few of the well established drives, such as the annual Christmas seal sale for antituberculosis societies, do not depend on such community participation but use an employed staff for much of the work. A suitable time free from disturbing factors or rival drives and preferably with sentimental possibilities is selected, and the public through expert publicity, chiefly in the press, is prepared for the drive. There is then the task of building up and maintaining for the duration of the drive a high pitch of interest through the press and pulpit meetings, posters, visible indices of progress, badges and the like. The extent and nature of this psychological stimulation depend largely although not exclusively on the standing and relative acclimatization of the drive. Successive community chest and hospital fund drives find, as the public becomes informed of their purposes and accustomed to their yearly appearance, that they can dispense with much of the special paraphernalia. As the psychological staging recedes in importance, the efficiency of the organization

must increase and improve. Finally, in order to prepare the public for a favorable acceptance of the next drive a report is made giving an account of activities.

It is clear that in all these steps two elements are combined in a variety of ways and proportions: expert technique and participation of an interested group. The latter is often the crucial test of the former. Thus have arisen schemes such as the organization of canvassing teams and companies headed by captains and lieutenants, either to exploit the psychological values of competition or to secure the complete covering of prospects. These in turn may be arranged geographically or on other principles of classification, the most effective of which has probably been the division by trades, with a group of canvassers responsible for the mapping of prospects and the soliciting of all persons considered contributors within each trade. When the drive is repeated periodically for the same purpose and addressed to the same constituency and as technique becomes routinized and the public trained for solicitation and giving, the technical personnel usually becomes a permanent salaried body. Since, however, for the vast number of drives undertaken by colleges, churches, hospitals and the like the expert cannot be a permanent fixture, there has grown up a considerable number of professional money raising experts, organized along commercial lines, advertising in suitable periodicals and accepting commissions for the task of "delivering the goods." Usually these firms work on a percentage basis and some add other money raising devices to their stock of wares, such as lists of special prospects, the preparation of publicity copy, mailing, checking and other services. There are perhaps a score or more such firms carrying on business at this time in the United States in addition to individuals and some intermittent practitioners. The amounts raised by them for various purposes run into millions of dollars annually.

Of the many problems that have arisen in connection with drives some are of interest chiefly to the sponsors of drives, while others have wider social significance. For example, it was recognized soon after the advent of the wartime drives that the givers were developing a distrust based on an uncertainty as to the actual need for the drive or the justification of the particular amount sought. To meet this growing uneasiness the National Bureau of Information was organized as an endorsing

agency on the pattern of the endorsement committees of chambers of commerce. Another increasing source of embarrassment as the drives began to lose the protective coloring of war glamour was the question of the responsible budgeting of the large sums collected in the relatively uncontrolled manner characteristic of many large drives. This particular problem assumed considerable importance for national drives in view of the fact that some of these were conducted on the commission system for collectors, individual or organized, who occasionally retained for stipend as much as half or more of the amount raised. Another troublesome question has been that of coercion upon employees where plants or entire industries are "quota-ed" in a drive. Firms or corporations as such have made large contributions, but in addition and occasionally as substitute or supplement the employed personnel has been called upon to contribute. This may be done in the interest of actual results or only for the purpose of boosting the number of contributors with the resulting appearance of greater distribution and democracy. At times-and not only for the Liberty Loan—contributions have been deducted from the pay roll, and refusal spelled dismissal. The problem of employers' contributions and of implied or expressed coercion varies from community to community with local traditions and personnel and has not as yet provoked steady or widespread discussion.

A number of the criticisms directed against drives, especially community chest campaigns, pertain more directly to financing, developing or controlling social work than to the drive method as such. These may relate to amounts raised, number of contributors, democratization of social work, education in social problems, control by concentrated groups, position of capital and labor, conservatism and radicalism. These are matters that pertain more strictly to questions of social work theory than to money-raising technique, especially in view of the general tendency for community chests to raise all their funds by continuous intensive methods, leaving the drive for building funds, endowments, disaster and foreign relief, educational institutions and hospitals. Although even these may at the moment be confronted by a weary public, a new war would find the drive ready for its uses in all its pristine strength of potential mob rule.

PHILIP KLEIN

See: PROPAGANDA; PUBLICITY; WAR FINANCE; EN-

DOWMENTS AND FOUNDATIONS; COMMUNITY ORGANIZATION; CHARITY; SOCIAL WORK.

Consult: Chicago Council of Social Agencies, The Financing of Social Agencies (Chicago 1924); Norton, W. J., The Cooperative Movement in Social Work (New York 1927); Persons, W. F., Central Financing of Social Agencies (Columbus, Ohio 1922); Williams, Pierce, and Croxton, F. E., Corporation Contributions to Organized Community Welfare Services, National Bureau of Economic Research, Publication no. xvi (New York 1930); Hacker, Louis M., "Sweet Charity" in New Freeman, vol. ii (1930) 201-04; Welfare Council of New York City, Research Bureau, Bibliography with Notes, on Social Work Finance and Publicity (multigraphed, New York 1930).

DROYSEN, JOHANN GUSTAV (1808–84), German historian. Droysen, born in Pomerania, the son of an army chaplain, was educated at the University of Berlin, where he was strongly influenced by Hegel and Boeckh, and held professional positions at Kiel, Jena and Berlin. He was active politically in the defense of the rights of the duchies of Schleswig and Holstein and was a member of the national assembly at Frankfort in 1848, where he had a chief part in elaborating the German constitution.

Droysen's historical work is characterized throughout by a strong practical political aim. With his youthful impressions of the War of Liberation always vivid in his mind he became the passionate apostle of Prussian-German patriotism and as such the founder of the Prussian school of historians which propagated the idea that the unity of Germany could be realized only under the hegemony of Prussia. This patriotic trend is evident even in his earlier works on ancient history, such as Geschichte Alexander des Grossen (Hamburg 1833; 6th ed. by R. Kiepert, Stuttgart 1925) and Geschichte des Hellenismus (2 vols., Hamburg 1836-43; 2nd ed., 6 vols., Gotha 1877-78), in which he was the first to use the term Hellenism to denote a whole cultural epoch. In these works he sought to demonstrate that only the military Macedonian monarchy had been able to bring together the disunited republican states of Greece and to extend the Greek civilization over the Orient. While he did not directly refer to the situation in Germany, the analogy to the German national situation was perfectly obvious.

Droysen's patriotic ardor led him to abandon the field of ancient history and to devote himself exclusively to the study of Prussian history. His Vorlesungen über die Freiheitskriege (Kiel 1846; 2nd ed. Gotha 1886) was in reality a practical national program imbued with the liberal and

patriotic tendencies of Baron von Stein. In his pamphlet Preussen und das System der Grossmächte (1849) he gave the clearest expression of the need of Prussian leadership, and in his biographical masterpiece, Das Leben des Feldmarschalls Grafen York von Wartenburg (3 vols., Berlin 1851 52; 11th ed. 2 vols., Leipsic 1913), he presented the typical figure of heroism and energy. In his monumental Geschichte der preussischen Politik (14 vols., Leipsic 1855–86; vols. i iv, 2nd ed. 1868-72) he attempted to prove the unchanging character of the Prussian state from its remotest origins and its consistent striving to develop to a German power.

In his Grundriss der Historik (Leipsic 1868; 4th ed. by E. Rothacker, Halle 1925; tr. by E. B. Andrews, Boston 1893) Droysen combated Buckle's conception of general historical laws. He emphasized the free will of the individual and elaborated the Hegelian idea of the national Machistant. He attacked Ranke's supposed objectivity and maintained that the historian's purpose was to understand and to interpret historical events in the light of current needs and problems. His ideas on historiography have received a new vogue in recent times and have been a strong influence on writers like Simmel, Troeltsch, Dilthey and Rothacker.

ALFRED STERN

Consult: Hintze, O., in Allgemeine deutsche Biographie, vol. xlviii (1904) 82-114; Droysen, G., J. G. Droysen, vol. i- (Leipsic 1910-); J. G. Droysens Briefwechsel, ed. by R. Hubner, 2 vols. (Stuttgart 1929); Pflaum, C. D., J. G. Droysens Historik in ihrer Bedeutung fur die moderne Geschichtsveissenschaft, Geschichtliche Untersuchungen, ed. by Karl Lamprecht, vol. v, pt. ii (Gotha 1907); Hubner, Rudolf, "Johann Gustav Droysens Vorlesungen über Politik" in Zeitschrift für Politik, vol. x (1017) 325-76; Meinecke, F., "J. G. Droysen" in Historische Zeitschrift, vol. cxli (1929) 249-87; Heller, H., Hegel und der nationale Machtstaatsgedanke in Deutschland (Leipsic 1921) p. 176-82; Gilbert, Felix, J. G. Droysen und die preussischedeutsche Frage (Munich 1931).

DRUG ADDICTION is associated with the use of the products of the opium poppy and of coca leaves.

Opium (from the Greek opion, juice) was first used for therapeutic purposes. The earliest known reference to it is in Assyrian medical tablets (see Thompson, R. C., The Assyrian Herbal, London 1924) under the term arat. pa. pa.—a possible origin for the Latin papaver. It is there also designated by the Sumerian ideogram hul. gil., which dates from the fourth millennium B.C. and signifies joy (hul.) and plant (gil.), indi-

cating that the Sumerians were familiar with its euphoric properties. The method of collecting opium described in these tablets is the same as that in use today in opium growing countries. Later references are found in the Ebers Egyptian papyri, dated about 1550 B.C., which mention opium among approximately seven hundred remedies. It is not improbable that the Assyrians, Syrians, Egyptians, Persians, Turks and Arabs acquired their knowledge of the drug directly or indirectly from the Sumerians and Babylonians. Hippocrates, Herodotus, Vergil, Homer and other Greek and Roman medical and non-medical writers referred to the drug. About the year 40 A.D. Scribonius Largus described the method of procuring opium from the capsule of the poppy, and Dioscorides in the year 77 A.D. distinguished between the juice of the capsule and the extract of the whole plant, which he regarded as less potent. Later Pliny and Celsus described the medicinal uses of opium and Galen spoke enthusiastically of the virtues of opium confections. The drug became popular in Rome and was distributed by shopkeepers and itinerant quacks. Arabic physicians used it extensively. Avicenna (980 1037 A.D.) recommended it especially for diarrhea and diseases of the eye. Arab traders carried it to India before the time of Mohammed (570-632 A.D.), but its use there was doubtless spread by the Mohammedan invasion. Opium has been known in China since the seventh century A.D., when it was imported overland from India via Burma and Yunnan by Arab traders. The opium poppy is mentioned in Chinese literature as early as the T'ang dynasty (618-709 A.D.). The first Chinese mention of opium was in 973 A.D., when the reigning emperor ordered the preparation of a new herbarium in which the poppy was included as a cure for dysentery. From the twelfth century on medical writers mention the use of the poppy capsule in preparing a paste to be used for dysentery, a paste which is also mentioned later as a cure for diarrhea. Wang Hi, governor of Kansu, who doubtless came in contact with the Mohemmedans, wrote in 1488 of the method of extracting the juice from the capsule—the first description of this process in China. A Korean work of the same period (Eastern Treasury of Medicine) also describes the scoring of the capsule, gathering the juice and drying it in the sun. The trade originated by the Arabs was perpetuated by the Chinese and by the Portuguese and Dutch traders from India and from other opium growing countries, in

whose hands the trade remained until 1773, when English merchants from Calcutta engaged in it. The importation increased rapidly and in 1781 the East India Company took the trade into its own hands. At present the most important producing countries are Persia, India, China, Russian Turkestan, Afghanistan and Turkey.

In Europe opium was used in a disguised form in various therapeutic concoctions and confections containing many ingredients. Paracelsus (1490–1540), who administered opium to his patients, carried the drug in the pommel of his saddle and called it the "stone of immortality." Platerus of Basel strongly recommended it in 1600 and Sylvius de la Boe, a Dutch physician, declared that he could not practise without opium. Van Helmont in the seventeenth century used it so frequently that he was called Doctor Opiatus, and Sydenham about 1680 writes that opium was the most efficacious of drugs.

In 1803 Derosne and two years later Sertürner succeeded in separating from the crude opium an alkaloid base now known as morphine, marking the beginning of modern alkaloidal medicine. Robiquet isolated narcotine in 1817 and codeine in 1832 and in the same year Pelletier discovered narceine, thebaine, papaverine, cryptopine, gnoscopine and xanthaline. Other alkaloids and their derivatives such as apocodeine, heroin, dionin and peronine followed later. Throughout the nineteenth century in Europe and in America opium continued to be used for almost every malady. Opinions differed as to its physiologic properties and as to its mechanism in disease, but all agreed as to its efficacy.

The social problems involved in the nonmedical use of opium were evidenced first in those countries in which the poppy was cultivated and from which commerce carried opium to other parts of the world. The Persians, Turks and Arabs, all of whom cultivated opium, were noted for its use, and other countries such as India and China, to which opium was first carried by the Mohammedans presumably for medical purposes, became producing countries and pari passu consuming countries. The eating of opium for non-medical purposes developed in India and China, and in the latter country its use was interdicted before the smoking of opium had been introduced. The first known smoking of opium was by the Dutch in Formosa, who used it with tobacco as a preventive of malaria. From Formosa the custom was introduced into China about 1800, and soon opium was being

especially prepared for this purpose. The first anti-opium edict against the sale of opium and the opening of opium smoking divans is said to be that of Yung Cheng in 1720, although earlier edicts had been issued against tobacco smoking. The smoking of opium spread from China to wherever the Chinese migrated. It was brought to the United States by coolie laborers on the west coast. The first white man to smoke opium in the United States is said to have been a world tramp named Clendenyn (1868). The practise spread rapidly across the continent and occasioned prohibitory legislation first in the form of municipal ordinances and later of state laws. Practically every country has been invaded to some extent by the practise. The extent of the use of the crude drug and later of laudanum in Europe and America before the nineteenth century is not known. But with the discovery of morphine and of other alkaloids the problem of addiction grew rapidly, and just as the producing countries of the crude drug had become extensive opium consumers, so the countries manufacturing the alkaloids became heavy alkaloid consumers.

The hypodermic syringe discovered by Rynd of Dublin in 1845 and Wood of Edinburgh in 1853 became a factor in the spread of drug addiction. By the employment of this instrument to inject morphine and other derivatives of opium under the skin it was thought that the so-called opium appetite would not be stimulated as it had been by oral administration. This belief proved erroneous but as a result of it the hypodermic use of morphine as a drug of addiction has become in western countries the most common method of administration. In 1898 a further impetus was given to the use of opium through the discovery of heroin by Dreser in Germany. His claims and those of others were to the effect that it was free from habit forming properties and was useful in the treatment of opium addiction. Medical literature for the next ten or twelve years advocated the use of heroin, and it was not until about 1910 that the medical profession began to realize that heroin was as dangerous as morphine or other opium derivatives in addiction forming properties. Drug addicts in contact with the illicit traffic had already been aware of this. Heroin was taken orally and hypodermically and in addition came to be used by sniffing, a method earlier applied to cocaine. Its greater potency, the ease with which it could be sniffed and the rapidity of its absorption through the

mucous membrane of the nose made the drug popular as a drug of addiction. Since the adoption of local and national prohibitory laws heroin has become more profitable in the illicit traffic, and it is the most commonly handled drug along the Atlantic seaboard in the United States. The fact that its amorphous form permits easy adulteration has been a factor in this situation. Such a strong sentiment against heroin has developed in the United States that its importation and manufacture are prohibited, even though it is claimed in some medical circles that heroin possesses certain uniquely valuable therapeutic properties.

Wars have been responsible for an increase in the problem of addiction, although little mention of this factor can be found in available records until the advent of the Civil War in the United States and the Franco-Prussian War in Europe. So marked was the effect of the Civil War on opium addiction that it came to be known in America after 1865 as the "army disease." The World War also gave rise to many victims in all the participating countries, particularly in Germany, France and Italy, where the marked increase in drug addiction has been a matter of frequent comment in medical writings.

The medical profession has persistently shown lack of knowledge of and interest in drug addiction. When the practise of medicine was almost wholly empiric and the causes of disease were unknown and specific remedies were unavailable, treatment was directed at effect rather than cause. As pain, insomnia, nervous excitability or distress of some kind accompanies almost every disease and as desire for relief is practically universal, opium, the sovereign remedy for all of these symptoms, attained a popularity which has never been equaled by any other drug. This widespread use increased very materially the extent of addiction and it is quite probable that a hundred or more years ago the majority of addicts among western nations were the direct victims of the therapeutic use of the drug. As medical knowledge increased, especially within the last one hundred years, and therapeutic measures came to be directed more at causes and less at symptoms, the need for opium materially decreased. Better medical training and appreciation of the dangers of its continued use and of the difficulties surrounding its relinquishment by those addicted and in the past few decades the more widespread popular knowledge of its undesirable effects have tended to lessen the importance of the therapeutic

addict. Unfortunately, however, inadequate knowledge of tolerance formation and of the resulting dependence and unsatisfactory methods of treatment of existing cases have combined to retard medical progress in both the prevention and cure of this condition. The earlier concept that the use of opium was dependent upon a vicious "appetite" or weak mentality and more recently the ill judged enforcement in the United States of certain regulations under the federal narcotic law have deterred physicians from the handling of these cases. Estimates vary widely as to the degree to which the therapeutic use of opium now influences the development of addiction. It is unavoidable that some addicts be formed in the humane practise of medicine. Chronic, incurable painful maladies, the emergencies of war and accidents and injuries all contribute their quotas and such situations will continue as long as opium and its derivatives remain irreplaceable for the relief of pain. Other cases are formed from the use of opium in medicine with less pathologic justification. Studies made by the Committee on Drug Addictions, composed of representatives of the medical and social sciences interested in the problem, indicate that individuals are introduced to its euphoric properties needlessly by some physicians through either ignorance or carelessness. These practises may be expected to become less prevalent as higher professional standards and increased knowledge of the physical and psychic effects of opium on different personalities exert their influence. Patent remedies containing opium or its derivatives have led to the formation of many cases of addiction. Specious advertising in magazines and newspapers, billboard posters and handbills, as well as unscrupulous retail pharmacists, foisted upon the ignorant sick "remedies" for every conceivable human ailment. Cold "cures," consumption "cures," cancer "cures," "pain killers," soothing syrups and diarrhea cordials, practically all of them depending for what little virtue they possessed on opium, flooded the United States and other countries. Many individuals, discovering the potent drug in the mixture they had been taking, bought it over the counter in drug stores and continued its use unhampered by restrictive laws. The peak of the patent medicine industry in the United States was reached just prior to the passage of the Pure Food and Drugs Act in 1906. The decline of the industry began at this time, and it was further affected in 1914 by the passage of the Harrison Narcotic Act.

There are two effects derived from the use of the drug, the euphoric effect and the therapeutic effect. All cases should be classified according to two bases: the object for which the drug was taken originally and the predisposing influences, more than one of which may be operative in the same case. Those persons by whom the drug was first taken for its euphoric effect alone constitute the class whose addiction originated on a nonmedical basis. Among them may be included addicts of all social groups who were introduced to the drug through association, curiosity, bravado or other social stimuli. The literature on the subject popularized the use of opiates. Medical writings such as those of Doering, Young, Jones and others warning against the dangers of the too free use of opium dwelt at such length upon its euphoric and stimulating properties and endowed it with such mysterious qualities that they developed an interest in the drug. It is doubtful if any single work has had a more far reaching influence in stimulating its readers to undertake hazardous experiments with opium than has Thomas De Quincey's Confessions of an English Opium Eater (London 1822), the forerunner of a host of other less brilliant but equally morbid productions. The traditions so commonly circulated as to its alleged aphrodisiac properties, the deliberate proselytism of traffickers and other addicts, examples in the orginstic tendencies of certain types of social gatherings, have all increased the use of the drug. There are certain persons who by reason of their psychologic, emotional or temperamental characteristics become victims of the chronic use of the drug more readily than others, no matter what method of exposure, through medical use, environment or other means, may be involved. The statement has been made frequently that all addicts are constitutionally unstable. As yet sufficient evidence has not been produced to establish the validity of this hypothesis, for until the pre-addict has been studied and until the physiologic and psychologic mechanisms of addiction are better understood, due evaluation cannot be made of the influences exerted by the complex elements involved in the addiction itself upon the personality of the individual. Addiction may be acquired because of exposure to the use of the drug through the occupation of the individuals affected (pharmacists, nurses, physicians, etc.), through association with acquaintances who use the drug for therapeutic purposes but who ill advisedly pass on this knowledge, through

voluntary association of a vicious nature involving dissipation in many forms or through economic, domestic or other social or emotional difficulties leading to the euphoric use of the drug. Illness takes its place among the common predisposing causes of addiction. Regardless of the personality make up of the individual, environment or other contributory influences, an individual suffering from a chronic painful condition seeks relief and finds it in opium. As long as painful disease prevails and opium is the principal agent of relief, addicts will be formed by its use.

Illicit traffic in opium is enormous and reaches practically every corner of the earth. That it involves many tons of morphine and heroin annually in addition to opium prepared for smoking and that it is carried on in response to a very real demand are shown by many of the documents of the League of Nations. Seizures have been reported amounting to thousands of pounds, yet there seems to be no scarcity of smuggled drug; and individual histories of addicts show that morphine, heroin and cocaine are available practically everywhere in the United States and Europe. The very nature of the traffic is such that it cannot be defined with accuracy, yet the case histories of many addicts show that addiction is spread through the efforts of the retail peddlers.

The nature of opium addiction is not understood. It was early described as an appetite and its subjects designated as opium eaters (opiophagists). It has since been called a habit, addiction, mania and by other similar terms. Levinstein in 1877 termed it *Morphiumsucht* (morphine disease or craving). The French *morphinomanie* and the English morphinomania followed.

The time and amount required to establish addiction varies with individuals, but for whatever reason the drug is taken addiction will result ultimately if the period of time is sufficient. In the continued use of opium individuals are able to tolerate increasingly large amounts of the drug, amounts that would be fatal to the nonuser. Addicts have been recorded as having taken 50, 100 or even 200 grains of morphine daily, but the great majority of morphinists use much smaller quantities and the percentage of individuals using less than ten grains per day is far greater than that using more. As a growing tolerance requires an increase in the dose in order to secure the accustomed relief and as the period of time over which the drug is taken

lengthens, it becomes increasingly difficult to abstain from its use. Once established, addiction to a moderate dose is as difficult to overcome as that to large doses. Certain authors also describe a state of dependence other than the tolerance already referred to, in which the functions of the body have become so dependent upon the usual dose of the drug as to be definitely disturbed when it is discontinued, as evidenced by the so-called withdrawal symptoms. Others claim that this dependence is only a psychological manifestation—a craving for the drug.

The withdrawal symptoms, whatever their origin, occur with greater or less severity in practically all cases where tolerance has been well established, when the accustomed dose of the drug is materially decreased or stopped entirely. From a clinical point of view the reaction is typical and is not produced by any other known drug or medical situation. The symptoms usually consist of the following, in the order of their development: restlessness and depression followed by yawning, sneezing, excessive mucous secretion, sweating, nausea, uncontrolled vomiting and purging, twitching and jerking, intense muscular cramps and pain, abdominal distress, marked circulatory and cardiac insufficiency and irregularity, faces drawn and haggard, pallor deepening to grayness, exhaustion, collapse and in some cases death. The symptoms attain their greatest severity in about forty-eight hours, gradually abating for a variable period of one to several weeks before they cease entirely.

Numerous theories have been advanced in explanation of the mechanism of the development of tolerance and that of the withdrawal symptoms. By Gioffredi, Hirschlaff, Mavrojannis, Marikovsky, Mirto, Ferrai, Berri and Belgrano tolerance has been said to be analogous to the bacterial immunity in the case of certain diseases. This has been denied by Morgenroth, Pellini, Greenfield, Kolb and DuMez and is generally discredited today. Faust and Albanese have attributed tolerance to an increasing ability of the organism to destroy morphine; Cloetta, Morat, Biberfeld and Gunn ascribe it to a cellular immunity or resistance; Rubsamen, van Egmond, Langer, van Dongen, Jöel and Tamura to a combination of these two —an increased ability of the body to destroy the drug and cellular immunity or adaptations. Takayanagi added to the two preceding explanations that of an increased elimination of the drug. Other explanations of both tolerance and

the withdrawal symptoms, based on chemical changes in the drug and tissues of the body and their effect upon the central and vegetative nervous systems and on the storage of the drug in certain tissues, have been put forward by Brissemoret and Challamel, Loofs, Legewie, Wuth, David and Kahle. Marmé has explained the withdrawal symptoms on the basis of the formation of oxidymorphine, but this has been denied by Donath, Stark and Marquis. Hitzig stated that withdrawal disturbance was due to hyperacidity of the stomach and Sollier, Kraus and Schübel have attributed it to the sudden reawakening of glandular functioning. A general poisoning resulting from the paralyzing of bodily functions was offered in explanation by Pettey. Bishop explained the symptoms on the basis of the presence of a circulating antidotal poisonous substance. Cell assimilation of the drug with resulting dependence after continued administration is the explanation of Fauser and Ottenstein. None of the theories seeking to explain the state of tolerance or that of the withdrawal symptoms has been sufficiently well demonstrated to warrant its acceptance on the basis usually required for scientific demonstration, and there is no certain knowledge on these matters.

Addiction cannot be inherited, but it is conceivable, although not proved, that a predisposition to addiction may be inherited in certain temperaments, as, for example, the neurotic and psychotic. Tolerance to opium, however, may develop before birth and the child of an opium addicted mother will usually develop symptoms of opium withdrawal within twenty-four hours after birth. In some cases these symptoms are so severe that if the drug is not administered in suitable doses death will ensue. Many such cases have been reported, and the general practise is to supply opium in the form of one of the tinctures until the milk flow is established on the third day after birth. It is sometimes necessary to supply additional opium until the infant can be weaned and treated for its addiction. The current belief that opium prevents conception is not true, although pregnancy may occur with relative infrequency because of the fact that the continued use of the drug lessens or completely abolishes sex desire.

Methods of treatment based on the divergent theories of the nature of drug addiction have varied widely, each giving rise to enthusiastic advocacy. Treatment has been for the most part empiric or symptomatic, and there is no one procedure which is generally recognized as

specific or which can be applied successfully to the majority of cases of addiction with any greater degree of success than can any other. Treatments may be grouped into three types: abrupt withdrawal (Levinstein), rapid withdrawal (Erlenmeyer, Sollier and Pettey) and gradual withdrawal, probably the oldest of all methods. The rapid withdrawal method is probably the one most commonly employed in the United States, France and Germany, except in custodial institutions where abrupt withdrawal is the custom. In Great Britain the Departmental Committee on Morphine and Heroin Addiction of the Ministry of Health reached in 1926 the conclusion that the method of gradual withdrawal, requiring an average of about ninety days, was the probable choice in the majority of cases. Treatment by the substitution of other drugs such as hyoscine, Cannabis indica, the bromides, chloral, luminal and others from time to time has found adherents in all countries and frequently is combined with each of the other techniques described. The use of certain vegetable proteins by hypodermic injection has been advocated and unsubstantiated claims made for their value in this connection. The treatment of opium addiction, in so far as it consists in the removal of the patient from his drug, can follow any one of the above procedures, each of which will be successful in a variable proportion of cases but none of which can be stated to be in any way specific or rational from the point of view of the underlying mechanisms.

The methods for the successful handling of addicts vary, depending upon the origin of the addiction and the type of individual involved. The handling of individuals suffering from incurable painful maladies lies chiefly within the province of the attending physician. The problems arising out of the natural tendency of the patient to increase the dose should present no great difficulties to the well equipped medical attendant. Legally there should be no hindrances in securing supplies for such cases. Of the groups of individuals to whom the drug has been administered during self-limited or curable maladies the "normal," or mentally and psychologically stable, present no unusual problem. When their illness has terminated and the drug has been withdrawn they bear the incidental suffering, and when it is over they rejoice in their release and are not inclined voluntarily to use the drug again or, if so inclined, they appreciate and are deterred by the dangers of such use. The psychologically unstable and the mentally sub-

normal present considerably more difficulty. After the withdrawal by reason of the termination of the need of the drug they may be inclined to have recourse again to opium as the result of agreeable memory associations. Under stress and strain they will take the drug if it is available and may even go to considerable lengths to obtain it. The physician's early recognition of these tendencies and his skill and tact in the handling of individuals are crucial in these cases. They must be handled on the basis of their instability or subnormality and should receive society's best efforts toward emotional, mental, environmental and occupational rehabilitation. Active institutional treatment upon relapse, psychiatric clinics with social supervision through well organized follow up services and other social agencies adapted to their individual needs should be employed. Individuals addicted through self-medication and those who first took the drug through curiosity and bravado present the same problems and require the same treatment. The treatment of the group of individuals introduced to the drug through vicious associations presents the least encouraging outlook. Characteristics acquired through prolonged undesirable or vicious association keep these individuals without the purview of available control agencies until their activities have brought them into contact with police or custodial officials. Conditions in custodial institutions are not favorable either for medical or sociologic treatment. The smuggling of narcotics into these institutions is a matter of common occurrence, and not infrequently the first direct contact with narcotics is made in this way. The handling of the cases of this group presents all of the problems involved in the treatment of the antisocial and criminal types plus those incidental to narcotic addiction only.

In some of the countries in which opium is smoked or eaten the registration of users has been established and the numbers of those registered are available. The most trustworthy figures dealing with the numbers of consumers and with the amount of opium which they consume are those derived from documents of the League of Nations and are presented in Table I. These figures are by no means to be considered complete.

In China and some of the other countries where the alkaloids of opium, particularly morphine and heroin, have come to be used in place of the crude form of the drug with increasing frequency no figures are obtainable to indicate

the extent of their use. Similar figures for European and most of the Near Eastern countries and India are not available. In Egypt addiction to heroin is said to be rapidly increasing; T. W. Russell, commandant of the Cairo city police, in the annual report of the Central Narcotics Intelligence Bureau, of which he is director, for the year 1929 estimates that there are more than 500,000 addicts out of a total population of about 14,000,000, more than half of whom are users of heroin and the rest users of hashish (Cannabis indica).

TABLE I Number of Registered Opium Smokers and Amount OF OPIUM CONSUMED IN OPIUM PRO-DUCING COUNTRIES IN 1927

Region	Popula- Tion (in 1000's)	Amount Actually Consumed (in kg.)	Number of Registered Smokers
Burma	13,212*	14,570	14,003†
British North			
Borneo	258	4,375	6,276
Brunei	40	455	
Ceylon	5,125	175	549 [‡]
China (1923)		8,000,000**	2,250,000**
Formosa	4,099	37,323	29,536
French India	273	246	
French Indo-			
China	20,189	66,048†1	
Hongkong	1,000	11,068	
Irak	3,161	488	
Kwantung	1,000		31,062
Macao	160	7,319‡‡	
Malay States			
(Federated)	1,476	51,7881†	
Malay States			
(Unfederated)	1,124	32,417	
Netherlands			
East Indies	51,887	59,103††	97,317
Sarawak	600	7,127	4,783
Siam (1926)	9,831	55,462†1	3
Straits Settle-	_		
ments	1,004	52,692††	
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Figures for 1926.

Little is known about the extent of opium addiction in the United States prior to the Civil War. The first statistical study of opium addicts in the United States was made in 1877 by O. Marshall for the Michigan State Board of

Health. Through information secured from physicians in ninety-six towns and cities in Michigan he found 1313 opium addicts in that state outside of the larger cities. If the rate as determined from Marshall's data is applied to the population of continental United States as of 1874, the total is 251,936. According to Marshall his total was an underestimate, for pharmacists reported upon subsequent inquiries a considerably larger number of cases than those reported by the physicians. In 1913 the Jacksonville, Florida, health department reported 541 cases, or 0.8 percent of the population; this rate, applied to continental United States, gives a total of 782,118 for that year. The State Food and Drugs Commission of Tennessee in 1915, through a registration system not, however, uniformly enforced, determined 5000 addicts, which rate applied to continental United States gives 260,000. The New York State Commission in 1920, through incomplete registration, determined 39,000 cases, giving the estimated figure of 396,978 when applied to continental United States. The report of a committee appointed by the secretary of the treasury in 1918 estimated from a variety of sources that there were more than 1,000,000 addicts legally and illegally supplied in the United States. Kolb and DuMez in 1924, from an analysis of certain selected figures from previous surveys and on a basis of legally imported drugs, estimated smuggled drugs and world production figures, arrived at the conclusion that the number of addicts in the United States was about 110,000. In 1925–26 the Committee on Drug Addictions made studies in seven American communities, covering a total population of 2,200,000. In these studies 1019 addicts were found who obtained their drug legally. This ratio, applied to the total population of continental United States, would give a total of 52,955 addicts legally supplied. Even for this class of addicts this is a minimal figure, since factors operated to preclude a complete enumeration. Moreover, the total does not take into account the addicts illegally supplied, who undoubtedly outnumber greatly those legally supplied. In one of the communities studied it was found that of the individuals arrested for all causes during one year there were 734 addicts. If this figure is added to the number of legally supplied addicts, the resulting ratio for the population as a whole is 88,964 addicts. The number of addicts among city prisoners, however, forms but a fraction of the total number of addicts illegally supplied in

^{*} Figures for 1926.

548 Burmans (including Shans), 13,288 Chinese, 167 Indians.

Total number of consumers is 0591.

Estimate of Dr. Wu Lien-Tch according to II. L. May, Smoking Opium Conditions in the Far East, a pamphlet published by the Foreign Policy Association (New York 1927) p. 24.

Total Consumption:
An additional 10,129 kg. were sold.

Source: Except where otherwise indicated the statistics of this table have been compiled from League of Nations, Advisory

table have been compiled from League of Nations, Advisory Committee on Traffic in Opium and other Dangerous Drugs, Summary of Annual Reports, O. C. 877, Sess. M, Annex ii (Geneva 1920) pt. iii.

any community. In the one referred to the police department estimated the number of addicts securing illicit drugs to be between 10,000 and 12,000. Undoubtedly the actual number of addicts in the United States is far in excess of any of the figures given, although the findings of these studies comprising the most recent investigations and based on carefully conducted local studies represent the most accurate information available.

There is no reliable information as to whether or not opium addiction is increasing or decreasing in the United States at the present time. Whatever the exact figures in the United States and other countries may be, the extent of opium addiction is sufficiently great to indicate the existence of a major medico-sociologic problem.

The prevention of the formation of new cases constitutes probably the most important and far reaching of the problems involved in drug addiction. The first desideratum is to keep the drugs away from those who will or may misuse them through curiosity or vicious associations. As a first step in this procedure the control of the illicit traffic is paramount. Specific problems and the methods adapted to control of this traffic by international cooperation and effort will be considered elsewhere (see OPIUM PROBLEM). If these broader measures had made such progress as to be effective, there would be no need for other preventive activities; but the work of the League of Nations in this field has made little headway against the secure intrenchments behind which those financially concerned carry on their traffic. National efforts for controlling the channels of distribution of these drugs present the next logical line of defense (see FOOD AND DRUG REGULATION). In general the laws require that opium and coca leaves and their derivatives and preparations be supplied to the ultimate consumer only by registered physicians and pharmacists and that these drugs be handled by licensed dealers. The enforcement of such laws as the federal narcotic law in the United States is somewhat effective in the prevention of addiction in cases which develop as the result of self-medication. Illegitimate traffic is not curbed, however, through the federal law, which cannot successfully control smuggling from other countries. The control of the supply is directly bound up with the world production of the drugs, and the limitation of production necessitates effective and honest international cooperation. The drugs must be controlled at their sources, as the multitude of ramifications that

exist in their illicit end distribution gives rise to practical difficulties. There are state laws dealing with the traffic in these drugs, but federal laws developed as the result of the failure of one state to protect itself against traffic originating in another. State laws should provide equipment for extending and intensifying federal activities; but while every state in the United States has a narcotic law, the laws are not in harmony with the provisions of the federal law and effective operation is therefore considerably hampered. Also state institutional provisions under conditions calculated to induce voluntary commitment of individuals are negligible in this country. All existing efforts to control the traffic in drugs have failed to date. The broader methods of prevention may never hope to be effective as long as opium remains virtually irreplaceable as a therapeutic agent. The prevention here becomes dependent very largely upon the training, experience and wisdom of the practising physician.

The history and the social and medical aspects of cocaine addiction are so distinct from those of opium addiction that this subject requires separate discussion. Cocaine is an alkaloid derived from the leaf of the shrub, *Erythro*xylum coca, which is indigenous to, and is also cultivated in, Peru and Bolivia. The plant has been introduced successfully into other countries and is now cultivated extensively in Java, to a limited extent in Formosa and in certain sections of Africa. The cultivated plant produces a larger percentage of cocaine and convertible alkaloids than is found in the wild species. The stimulating and euphoria producing properties of the drug were known in South America in prehistoric times. It is said that among the Incas divine properties were attributed to it and for a long period its use was limited to the priests and nobility. Early European writers credited the drug with the marvelous properties of being able to create abnormal physical and mental powers, to fill the needs of hunger and thirst, to stimulate its users so that untold hardships could be borne without difficulty and even to induce insensibility to pain. In addition it was credited with marked aphrodisiac powers and the Incan Venus is represented with a branch of this shrub in her hand. Coca was used in the form of dried leaves. numbers of which were rolled into a quid and chewed. In order to hasten and possibly to emphasize the euphoric effect of the drug the native chewers carried a gourd filled with an

alkaline mixture of vegetable ash and pulverized calcined shells. The use of the plant was denied to the laboring class during the rule of the Incas. After Pizarro landed on the Peruvian coast in 1532 the Spaniards realized that the use of the drug could be turned into a revenue producing traffic and also that the submissiveness and output of native labor was much enhanced by its regular use. They therefore extended the use of the drug to the laboring classes. State taxes and at one time the revenue of the bishop and canons of the cathedrals of Cuzco were derived from the traffic in coca leaf. In the seventeenth century a religious controversy arose as to the propriety of giving the drug to children and of its use before communion, because certain theologians claimed that as it was an aliment it should not be so used; but Alonzo de la Peña Montenegro, bishop of San Francisco de Quito, declared that the plant contained no alimentary property and the threatened blow to the traffic was averted.

For about two centuries after the Spanish conquest the drug remained for the most part unaccepted in European medical circles, its very existence being denied by some. Claude Duret mentioned coca in his Histoire admirable des plants et herbes esmerveillables et miraculeuses en nature (Paris 1605); Nicholas Monardes called attention to it in his Dos libros, el uno trata de todas las cosas q trae de uras Indias Occidetales (Seville 1565); Abbé Longuerue in the same century mentioned it in connection with native labor; Linnaeus, Father Julian and Boerhaave also described its properties.

Chemical studies of the drug resulted in the discovery by Niemann in 1859 of the alkaloid cocaine. Gardeka is said to have isolated the same substance, which he called erythroxyline, in 1855. Demarle about the same time noted that on chewing the leaves the pupils of his eyes dilated and that the sense of taste was lost for a considerable period, a fact which he attributed to the contained alkaloid. The next important discovery was that of Charles Fauvel, who published in 1876 a report on the anaesthetizing effect of cocaine on the mucous membrane of the mouth and pharynx. Koller of Vienna published in 1884 his discovery of the anaesthetizing effect of cocaine on the mucous membranes of the eye. His experiments on animals were extended to the use of the drug in his eye clinic, and its employment spread among ophthalmologists throughout the world. Later the anaesthetic effect of cocaine upon injection was discovered, which resulted in its extensive use in surgery.

The knowledge of the anaesthetizing effect of cocaine on the mucous membranes of the nose and throat led to its employment in catarrhal conditions to give temporary relief and comfort. This led to its frequent use in the form of a spray or powder for insufflation and to the manufacture of numerous "catarrh cures," the sale of which was rapidly extended by unscrupulous advertising. In addition it was used internally as a tonic and to relieve painful conditions of the stomach. These uses led in many instances to definite euphoria and to addiction

In 1878, Bentley, a Detroit physician, claimed the successful treatment of a series of cases of morphinism by the use of cocaine. Bentley's articles aroused wide interest and his method of treating this intractable condition spread in this country and Europe. Dujardin-Beaumetz, who also reported on the value of cocaine in these cases, shares the odium of having initiated this method of treatment. The result was the establishment of cocainism as a substitute for morphinism and not infrequently the use of both drugs was continued. The influence of the therapeutic use of cocaine was of brief duration, for the attendant dangers became more apparent; and synthetic substitutes -alpha and beta eucaine, novocaine, butyn and otherswere devised. Nevertheless, as the stimulating and cuphoric properties of the drug became known more widely among the laity, particularly its aphrodisiac property, its use for purposes of dissipation spread and it became a drug of addiction in practically all countries.

The effects of cocaine are subjective for the most part and are evidenced at first by stimulation and exhilaration, progressing to inebriation. There is frequently dilatation of the pupils of the eyes, although this is not a constant symptom. Blanching of the nose is seen in sniffers after the taking of a dose and frequently this form of use later results in perforation of the nasal septum. Upon continued use or after the taking of large doses uncontrollable erratic twitching of certain muscles of the face may be observed, and visual illusions and hallucinations are experienced which may take the form of delusions of persecution. Not infrequently the use of the drug is abandoned voluntarily to put an end to the suffering occasioned by such psychic effects. Loss of appetite, emaciation, complete insomnia, loss of libido and marked mental and physical deterioration are symptoms of the more advanced stages of cocaine use. It is seldom that the use of this drug extends over a period of

more than a few years, as its toxic effects are so profound and so much more rapid than those of opium as to cause either death or abandonment within a relatively brief period.

Cocaine may be relinquished without the development of distressing withdrawal symptoms characteristic of opium, and special medical handling is not required. Some authorities claim that no tolerance to cocaine develops, that it is a matter rather of idiosyncrasy and that the large doses finally reached by cocaine users in an effort to experience its euphoric effects could have been taken with impunity by these individuals in the first place. Withdrawal symptoms are confined to prolonged sleep as reaction from the stimulating effect of cocaine and to muscular weakness, some nervous excitability and the effects of improper eating.

In the coca producing countries of South America the leaf is chewed very extensively, chiefly by the laboring classes. Many writers are opposed to prohibition of the use of the drug because they fear that serious labor and economic upheavals would result, since, while physically and mentally deteriorating effects eventually develop on continued use, individuals using it can subsist on a minimum of food while expending a maximum of energy. Three fourths or more of the coca leaf produced in South America is consumed in its crude form in the producing countries. In Java, where a considerable part of the coca leaf that enters commerce as material for convertible alkaloids is produced, the native grown leaf is not chewed, as this variety contains no cocaine as such.

In countries where the alkaloid cocaine is used by sniffing or injection the extent of its use has never been determined. Nor have systematic efforts been made to determine the extent of cocaine addiction. Recent European writers on addiction almost uniformly comment, however, on the increase in cocainism since the World War, especially in Germany, France and Italy. In the last named country there was virtually no problem of cocainism prior to the war. Cocaine addiction in the United States appears to have reached extensive proportions which attained their peak about the time of the enactment of the federal narcotic law. In the southern states cocaine was widely used among Negroes. With the high cost of the drug in the illicit traffic and the absence of the impelling incentives to continue its use which exist in the case of opium addiction, addiction to cocaine seems to be on the decrease, particularly addiction to

cocaine alone. Among the addicts who use both an opium preparation and cocaine, when circumstances render the acquisition of these drugs difficult cocaine is relinquished with but little struggle, while great sacrifices will be made to avoid the pain and discomfort of opium withdrawal. The decrease in the extent of cocainism has been noted in Egypt by Russell, who stated in June, 1929, that since heroin has been introduced the use of cocaine for sniffing has almost entirely ceased.

The therapeutic use of cocaine is now virtually negligible, and the drug when used in Europe and in the United States is used for dissipation. Even in this respect the cocaine problem is less complicated than the opium problem. The use of cocaine is not founded upon the traditions of thousands of years as is the use of opium, nor has cocaine ever been surrounded by the same mystery, for its use in Europe and North America did not develop until the present period of scientific knowledge. The control of the problem in these countries is considerably simplified inasmuch as it presents no medical aspects and requires no special provisions for physiologic treatment. Its prevention becomes wholly a matter of controlling the production and distribution of the alkaloid cocaine. The chewing of the leaf is a problem only in certain of the producing countries, notably Peru and Bolivia, where it is a major social problem the solution of which must be found in the social development of the countries concerned.

C. E. Terry

See: Opium Problem; Food and Drug Regulation; Public Health; Medicine; Mental Disease.

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DRUGS, PUBLIC REGULATION OF. See FOOD AND DRUG REGULATION.

DRY FARMING may be defined as the production of crops under such climatic conditions that the yield is usually and primarily limited by low rainfall. The term was first used in certain irrigated districts and other sections of the western United States and Canada, where there was, however, enough rainfall to permit the profitable production of drought resistant crops without irrigation; but dry farming practises are found in all subhumid regions of the world and in some form were known probably to many of the peoples of antiquity.

Dry farming is the final stage in the gradual advance of agriculture on to the grasslands of the world which has been made possible by science and invention. This use for crops first of subhumid and later of semi-arid soils was one of the most significant developments of the nineteenth century and is one that may prove equally significant in the twentieth. When Malthus wrote his famous essay on population in 1798, the prairies and plains of North America had not yet been crossed by white men except for a few fur traders, the steppes of Russia were the grazing grounds of nomads, the pampas of Argentina lay undeveloped and almost unknown, and only a fringe along the coast of Australia had been explored. The agricultural occupation of these grasslands, located mostly in the interior of the continents, was retarded by the lack of water, wood and means of transportation. Well drilling machinery gave water to the almost streamless plains, while the railroads and the steamships brought wood and coal to the settlers and carried back grain, cattle and wool to the cities in

the forested regions fronting on the north Atlantic Ocean. Moreover, the invention of grain harvesting machinery enabled one farmer to do the work of five and increased enormously the area available for profitable cultivation.

The early settlers in Utah, in the Pacific coast valleys, in the interior plateaus and in the great plains area of the United States found themselves handicapped not only by the inapplicability of their methods of tillage to semi-arid land but also by lack of varieties of crop plants adapted to withstand drought. Again and again series of dry years ruined settlers and depopulated the country, particularly in parts of the great plains region. The introduction of drought resistant varieties of crops, principally from Russia and Africa, and the development of such varieties in the United States, have been other important factors in the expansion of agriculture into the semi-arid regions of North America.

The development of dry farming methods, of grain farming machinery and of drought resistant varieties of crops still continues, and the transformation of the grasslands of the world into grain lands consequently is still going on. During the decade from 1920 to 1930 the increase in wheat acreage in the western United States (North Dakota to Texas and west), mostly in the dry farming districts, was nearly 6,000,000 acres; this was accompanied by a decrease of nearly 8,000,000 acres in the states to the east. In western Canada there was an increase of 7,000,000 acres in wheat. In Argentina and likewise in Australia the acreage of wheat increased by about 5,000,000 acres in the decade. In the Soviet Union the wheat area in 1930 was about 40,000,000 acres greater than the average for the years 1921 to 1925 (representing a doubling of acreage), but this earlier period was one of economic disruption and included a season of severe drought. Most of this increase in wheat acreage has occurred in dry farming areas.

The technique of dry farming normally involves the use of special methods to conserve the moisture in the soil, but the distinction from ordinary farm practises under humid conditions in this regard is largely a matter of degree. There is one practise, however, that of summer fallowing, in which the distinction between dry climate farming and humid climate farming is increasing rather than diminishing. Summer fallowing (cultivation of uncropped ground to prevent growth of weeds, allow quick absorption of rainfall and increase available plant food in the soil solution)

has almost ceased among good farmers in humid regions, the fallow having been replaced by intertilled row crops, such as corn, potatoes and roots. But this method of conserving in the soil part of the moisture from the rainfall of two seasons for the use of a single crop is becoming more common in dry farming regions, particularly in regions where intertilled crops are not grown. In those regions where the rainfall occurs in winter and spring it is almost universal.

Fully as important, perhaps, as the conservation of moisture in the soil by cultivation is the use of drought resistant crops and reduction in the rate of seeding so that there will be fewer plants per unit of area. Extensive research into the moisture requirements of plants, drought resistance, soil moisture conditions and similar problems has been carried on in Russia for the past thirty years and in the United States by the experiment stations since 1893, and under the direction of the federal Office of Dryland Agriculture since its organization in 1905. Similar research is also carried on by Canadian, Australian, South African and Indian experiment stations, which results in a greatly increased knowledge of dry farming methods. The principal crops grown in dry farming areas are drought resistant or otherwise adapted varieties of wheat, rye, barley and oats. The high protein or high gluten milling wheat, necessary to modern mechanical baking processes, is a product of the semi-arid regions. Especially in northern latitudes flax is a fair dry farming crop, particularly on freshly broken sod; while in middle latitudes corn is a very important crop, grown mostly for feed; in southern latitudes, where the hot, dry winds interfere with pollination of the corn and often burn up the plants, the grain sorghums (kafir, milo, feterita, etc.) are the safest crops the dry farmer can raise. Many types of cotton also have been discovered to be extraordinarily drought resistant. This crop has become very important in western Texas.

One of the serious problems in dry land farming has been to produce a hay crop, especially a leguminous hay that will help to maintain the fertility of the soil. In the western United States it appears that this need probably will be met in many subhumid areas by sweet clover, but in semi-arid areas this crop has been found to deplete the moisture in the soil. Alfalfa is also an important crop in the subhumid portion of the central plains of North America, and there is some promise in a Siberian alfalfa (falcata) for the northern plains. In the semi-arid portions

of the north central plains alfalfa is sometimes grown in rows for seed production. Brome grass is also grown in the more humid portions of the northern plains, and crested wheat grass is promising. But dry farming is characteristically grain farming and seems likely to remain so for many years in the newer regions. The problem of the maintenance of soil fertility in such regions, where there is little or no leaching of the soil, is not as yet a serious problem and probably will not become so within fifty years from the date of settlement.

The development of agricultural machinery has greatly increased the area of dry land crops. The use of machinery in turn has been facilitated by the introduction of non-shattering types of wheat, notably Turkey red and Marquis. When one farmer with the aid of his son for a few weeks can plow and seed and, more recently with the coming of the combine, can harvest 1000 or even 2000 acres of grain, it is obvious that much drier land (with the lower crop yields) can be cultivated with profit than is possible when only about four acres can be hoed by hand in the time permitted by the progress of the seasons, as is the case along the semi-arid margin of settlement in northern China. If in each case the yield is eight bushels per acre after seed is reserved, the Chinese farmer will have only thirtytwo bushels, which is scarcely more than enough to feed two persons a year, whereas the other farmer may have 16,000 bushels of grain. Dry farming is better adapted to the use of mechanical power and large scale machinery than any other type of agriculture, because physical limitations—muddy soil, hills and so on—are fewer in such regions and because weather interference with field work is relatively low. Surveys made by the Montana Experiment Station indicate that at the present time on large land units of about 3000 acres with the use of the largest practicable tractors wheat can be produced under the summer fallow system with less than one man hour of work per acre.

The use of the tractor and combine in the dry farming regions of the world is scarcely more than well begun. The question arises therefore as to how much dry farming land exists to be put in wheat and other small grain as a consequence of this mechanization of agriculture. To answer this question even very roughly requires an agreement as to the physical boundaries of dry farming areas. It has been customary to associate dry farming limits with a certain amount of precipitation (rain, snow and hail). But in the

central part of the state of Washington the arid margin is now about ten inches of precipitation, and it would probably move on to eight inches should the price of wheat in that area ever again reach \$1.00 and remain at this point or higher for several years. On the other hand, in southwestern Texas, where the evaporation is much greater and the seasonal distribution of the rainfall less favorable, almost no wheat is grown where the annual precipitation is less than twenty inches.

A much better measure of climate in relation to crops is the natural vegetation, and it might be possible to correlate dry farming conditions with short grass vegetation (Bouteloua, Bulbilis, and plants of similar habits of growth), at least in North America. But along the humid margin of dry farming areas short grass advances into humid territory on clay soils, especially if heavily grazed, while the tall grasses (Andropogon and Agropyron species principally) advance into the semi-arid territory on sandy soils. Moreover, along the margin between the tall and the short grass the aspect of the vegetation is different in a dry season from what it is in a wet season. The best measure, at least in the temperate zones of the world, is without doubt the soil itself, principally the color and the profile, especially the depth to the layer of lime (or other salt) accumulation. These characteristics are the result of hundreds of years of physical, chemical and biological activity under the climatic conditions, are the same in wet seasons as in dry and can be readily recognized and measured.

A further problem arises, however, in regard to whether dry farming regions should be defined to include or exclude the chernozem, or black earth, belt; in other words, whether the humid margin of a dry farming region should be drawn where deficient precipitation first becomes evident by the lime accumulation layer in the soil, usually noticeable at three to six feet in depth (two to three feet in northwestern Canada), probably the normal depth of penetration of the rains, or whether it should be drawn along the zone where the black earth turns to dark brown and the layer of lime accumulation lies only from twelve to twenty-four inches (in some parts of the world eight to fourteen inches) below the surface. Fifty years ago well informed opinion would have included the black earth soils in the dry farming areas; at the present time the tendency is to restrict the term dry farming to the brown earth region. Yet the possible future of dry farming can be more adequately pictured

from a survey of the available areas of each. The two major areas of these soils are in Russia and in North America.

COMPARATIVE AREAS OF CHERNOZEM AND CHESTNUT BROWN SOILS IN RUSSIA, THE UNITED STATES AND CANADA

(in 1000 acres)

Russia	
Chernozem	482,560
Chestnut brown soils and inferior	
chernozem	371,942
United States	
Chernozem	177,664
Chestnut brown soils and inferior	
chernozem	161,088

Canada (prairie provinces)

Chernozem	64,800
Chestnut brown soils	50,700

Sourier Figures for Russia and the United States from Marbut, C.F., "Russ | the United States in the World's Wheat Market" in Geograph | d Review, vol. xxi (1931) 1–12; figures for Provincial Soil Surv | for Manitoba by R. W. Murchie of Manitoba Agricult | d College; for Saskatchewan by O. E. Baker.

Not all of this land, however, is suitable for the production of crops by the use of large scale agricultural machinery. In the United States it is probable that because of rough or hilly land surface or other conditions only about 135,000,ooo acres in the chernozem belt and 100,000,000 acres in the chestnut brown soils belt are suitable for dry farming. In Canada there are probably 50,000,000 acres in the chernozem belt and possibly 35,000,000 acres in the brown earth belt available for crops. A. H. Joel, head of the Saskatchewan Soil Survey, believes, however, that when the surveys in the prairie provinces are completed these areas will be seen to be approximately equal. In Russia probably a larger proportion of the land is level or rolling and suitable for crop production. In 1924 there were over 60,000,000 acres of crops harvested plus crop failure in the United States portion of the chernozem belt and nearly 40,000,000 acres in the brown earth belt (together about one fourth of the total area in harvested crops in the United States). It seems probable therefore that there still remain in the United States about 75,000,000 acres in the chernozem belt and 60,-000,000 acres in the brown earth belt available for crop production. In the Canadian portion of the chernozem belt there were about 16,000,000 acres in crops in 1920 and of the brown earth belt also 16,000,000 acres (about two thirds of the total crop area of Canada). There were probably about 42,000,000 acres in cultivation in both

belts in 1931 and the ratio of increase presumably has been similar in the two belts. There appear to be therefore about 30,000,000 acres still available for crops in the chernozem belt in Canada and possibly 15,000,000 acres in the brown earth belt, although because of the need to summer fallow part of the land not all of this reserve could be used for crops in any one year. In Russia, although most of the European portion of the chernozem and brown earth belts is in crops or summer fallow, there is certainly a vast area in the Asiatic portion not yet so used, probably 100,000,000 acres and possibly much more. It may be as large as the area still available for crops in both the United States and Canada.

There is also a large area of dry farming land not yet used for crops in Argentina, probably 50,000,000, possibly 100,000,000, acres or more, while Griffith Taylor has estimated that Australia has 300,000,000 acres climatically suitable for wheat. Assuming that half of this land in Australia is too rough, stony, sandy or otherwise unsuitable for crop production, there remain 150,000,000 acres of wheat land, mostly of dry farming character, of which only about 24,-000,000 acres were in crops (18,000,000 acres in wheat) in 1931. In South Africa there are several, perhaps many, million acres of dry farming land not cropped and in east Africa a large but unknown area. In the Sudan there is probably a still larger area, possibly as large as the dry farming belt in North America or Russia. In India the use of modern agricultural machinery would probably push the arid margin of crop production many miles beyond its present location, and this is doubtless true also in northwestern China, especially in inner Mongolia, while in western Manchuria there are many millions of acres of potential dry farming land. Viewing the world as a whole it seems probable that not half of the potential dry farming land has yet been touched by the plow. But the area not yet plowed is in general drier or poorer than the land now in crops.

The existence of this vast area of land which is still available for crop production is likely to exert an influence upon the development of agriculture in the humid regions. In view of the economies in harvesting introduced by the combine it appears probable that the dry farming regions of the world will continue for some years at least to produce an increasing proportion of the small grain crops of the world and that the production of wheat in humid regions, except where the price is artificially maintained or the

fields are large enough to use the combine efficiently, will be accompanied by economic difficulties for a while.

Farming in the humid regions and also in the irrigated areas has for some decades been trending toward livestock, particularly dairy and poultry production, and toward the even more intensive use of the land for fruits and vegetables. This trend seems destined to continue. Even in dry farming areas livestock production probably will remain of great importance. The cultivation in the United States of over 100,000,-000 acres of former grazing land by dry farming methods has not been accompanied by a decrease in production of meat or milk; indeed, in the Canadian portion of the dry farming belt and in some counties in the United States portion there has been a notable increase in livestock products. The acreage of corn greatly exceeds that of wheat in eastern Colorado, while that of corn and oats combined exceeds the acreage of wheat in Montana. Moreover, if a fair crop of corn or oats is secured, the feeding value of an acre is equal to that from several acres of pasture. The production of feed crops, particularly in the dry farming areas of the United States, will doubtless increase; but dairying will probably prove to be better adapted to the black earth than to the brown earth belt.

While the tractor and combine are making more large farms along the arid margin of settlement, the automobile is making and doubtless will continue to make more small farms along the roads that lead into the cities. In open country with a humid climate, which includes most of the farming land of North America and Europe, it seems probable that the competition of grain from the dry farming regions will, unless artificial barriers are interposed, increasingly compel the consolidation of farms into larger units better adapted to the use of large scale machinery. Where consolidation cannot make farms well adapted to such machinery, as in mountainous districts, the alternative to the use of such land for grazing or forests appears to be in many cases the development of a peasant class more or less satisfied with a low standard of living.

The trend in dry farming regions also is toward the consolidation of farms into larger units. This necessity for larger units was felt even in the nineteenth century. The original homestead laws of the United States permitted allotments of 160 acres for agricultural land, but after homesteading reached the great plains region Congress in 1909 changed the size of the allotment to 320

acres. Before the coming of the tractor 500 acres was considered a desirable size for a crop farm in the brown earth belt, but at the present time with the tractor and combine 5000 acres, of which half may be rough or sandy land used for pasture, is probably about the most efficient size. Not only technical progress but economic factors as well are causing the trend toward increasingly large units in the dry farming areas. No other type of farming is so subject to fluctuations in material and financial returns from year to year. The dry farmer must be prepared to meet the vicissitudes of drought and hail and low prices. To do this he must build up a reasonably large reserve. One reason for the rapid consolidation of farms in dry farming areas has been the frequent failures of men who had not built up such reserve funds and the absorption of their lands by their more businesslike or more fortunate neighbors.

Dry farming thus makes necessary a somewhat different type of financial structure from that which has been associated with the more or less stable agriculture of the humid regions. This fact has resulted in the development of a few "corporation farms" and has also fostered in the individual farmer a new attitude toward his financial problems. The emphasis on exactly computed production costs may be expected to result in a more rational analysis of the economic aspects of all forms of agriculture. The most striking experiment in large scale farming which has accompanied the development of dry farming methods is that of the Soviet Union, where large areas of grassland have been brought under cultivation by state farms operating as vast units.

Extensive farming of this type in areas where crop production has atready developed means a decline in the population. In new dry farming areas the population, having been previously dependent on grazing, is sparse and scattered; consequently, the development of crop farming commonly causes an increase in population. But in older agricultural areas the enlargement and consolidation of farms is resulting in marked changes in the character of the rural community. Trucks and automobiles, which make it possible for the farmer to live at some distance from his land, have helped to bring many families into villages and towns where school facilities are better and cultural opportunities greater. In some counties not only the foreign population but also the rural non-farm and urban population is declining. In parts of Kansas and Montana the migration of population has been so great as to result

in the closing of large numbers of rural schools. It is impossible to foresee how far this development may go, but it is interesting to note that the decline of population in rural districts, where the birth rate normally is high, and its increase in the cities, where it is much lower, as well as the rapid decline in the birth rate both rural and urban are resulting in the early approach of a stationary or declining population in the United States. Quite likely lack of demand will soon set an effective limit to the expansion of the dry farming areas, unless the peoples of southern Europe and the Orient should greatly increase their ability to pay for the grain they need.

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See: AGRICULTURE; FOOD GRAINS; AGRICULTURAL MACHINERY; FARM; LIVESTOCK INDUSTRY.

Consult: Widstoe, John A., Dry-Farming (New York 1911); Bracken, John, Dry Farming in Western Canada (Winnipeg 1921); Diffloth, P., Les nouveaux systèmes de culture (Paris 1917); Parker, L. H., "Agriculture in Semi-arid Lands" in World Agriculture, vol. v (1925) 361-63, 371-72; Leppan, H. D., The Agricultural Development of Arid and Semi-arid Regions (Johannesburg 1928).

DRYDEN, JOHN (1631-1700), English man of letters and political satirist. Dryden was born of Puritan antecedents, and his first considerable poem, Heroic Stanzas (1659), was an elegy on Oliver Cromwell. Eighteen months later, however, in Astraea redux (London 1660) he was celebrating the Restoration of Charles II. Confronted with the necessity of earning a livelihood he began in 1663 to devote his energies to the drama, which was reviving after the Puritan eclipse. Although his plays seldom rise above the conventions and sentiments of contemporary tragedy and comedy they developed considerably his skill in the use of the rhymed couplet as well as his powers of satiric characterization. His Of Dramatick Poesie, an Essay, which appeared in 1668, established his fame as a critic and as the writer of a new kind of prose—terse, muscular and restrained—which was to be the model for the ensuing century. His appointment as poet laureate in 1670 was an official recognition of his preeminence among literary figures of the time. Throughout his career as a writer Dryden did not cease to interest himself in the political and religious controversies of the period. So far as any coherent political theory can be attributed to him he must be regarded as sharing the belief of Hobbes-and the Vicar of Bray—in the de facto government. An oppor-

tunist rather than a theorist, he carefully adjusted his opinions to his interests. Following the outbreak of the Dutch war he had at the government's instigation turned his hand to propaganda, and during the alarm over the Popish Plot he did not hesitate to stimulate anti-Popish hatred. In 1681, however, he accepted a commission from the court to wield his pen against Shaftesbury, who was awaiting trial on charges of political treason, and his clique of anti-Catholic Whigs. Dryden responded with Absalom and Achitophel (London 1681), a poem which ranks among the most bitter and brilliant of political satires. It consists of a series of characterizations strung together on the thread of the Bible story. The two most famous characterizations are those of Achitophel (Shaftesbury) and Zimri (Buckingham), the chief corrupters of the young prince, Absalom (Monmouth). The effect of the poem was tremendous and Dryden followed it with The Medal (London 1682), a satire ridiculing the medal in celebration of Shaftesbury's acquittal. The most caustic of Dryden's satires, Mac Flecknoe, is directed against the literary spokesman of the Whigs, Thomas Shadwell. In addition to his political satires Dryden wrote two poems dealing exclusively with religious controversy. In Religio laici (London 1682) he presents a reasoned defense of the Church of England; but on the accession of James II his elastic genius rendered him sensitive to the advantages of the Catholic faith, and after his conversion in 1686 he wrote on its behalf the poetic allegory, The Hind and the Panther (London 1687). When William III ascended the throne, Dryden, deprived of all his emoluments, returned to his purely literary work.

ESMÉ WINGFIELD-STRATFORD

Consult: Saintsbury, G., Dryden (London 1881); Verrall, A. W., Lectures on Dryden (Cambridge, Eng. 1914); Van Doren, M., The Poetry of John Dryden (New York 1920); Gooch, G. P., Political Thought from Bacon to Halifax (London 1914) p. 172-80; Collins, J. C., Essays and Studies (London 1895) p. 1-90.

DUAL CITIZENSHIP, or dual nationality, is the condition under which a person possesses the nationalities of two independent states. The terms nationality and citizenship are used interchangeably in this article. Generally speaking, acquisition and loss of nationality are governed by municipal law except in so far as they have been the subject of international agreements. There is no rule of international law which prohibits a state from conferring its nationality upon a person merely because he happens to possess the nationality of another state. A person may be claimed as a national by two, three or even more states, depending on the circumstances of his birth, descent, residence and the like.

While cases of triple nationality are relatively rare, cases of dual nationality are very numerous and arise from three principal situations.

(1) A child born in a country other than that of which his parents are nationals may possess the nationality of his parents under the jus sanguinis and the nationality of the country of birth under the jus soli. The problem of dual nationality is complicated by the fact that certain states whose laws of nationality are based upon jus soli have engrafted upon them to a greater or less extent the rules of jus sanguinis and vice versa. The United States has adopted both the jus soli and the jus sanguinis. The Venezuelan law has also adopted both rules (art. 28, constitution of 1929). A child born in either country of a father who is a national of the other would consequently acquire both American and Venezuelan nationality. (2) A national of one state naturalized in another may find that under the law of the former state he has not lost the nationality thereof. As the United States is committed to the doctrine of the "right of expatriation" it takes the position that foreign governments cannot rightfully assert their claims to the allegiance of their nationals who have lawfully and in good faith obtained naturalization in the United States. It cannot deny, however, that such persons have the legal status of nationals of their states of origin if they have failed to comply with the requirements of such states concerning expatriation. It can only contend that from the standpoint of natural human rights dual citizenship should not result in such cases. (3) In the case of a woman of one nationality married to a man of another the law of her state may provide for the retention of her nationality while the law of her husband's state may confer upon her the nationality of that state. This would be the case if an American woman should marry a German national.

The laws of a number of states which provide for the acquisition of nationality under both jus soli and jus sanguinis contain conditions which reduce the number of cases of dual nationality. Others provide for the termination of such dual nationality by the individual after attainment of the age of majority; this is the case in Denmark, Norway and Sweden, Great Britain and the sev-

eral British dominions, France, Brazil and several other Latin American countries.

It has been said, even occasionally by the United States Department of State (Moore, J. B., Digest of International Law, vol. iii, p. 546-51), that a person born with dual nationality and residing in the foreign country of which he is a national must upon attaining majority elect the nationality which he wishes to preserve and if he elects American nationality must take up residence in the United States within a reasonable time. Such statements, however, are justifiable only in so far as they relate to protection as distinguished from legal status. It is not a rule of international law or of the common law that dual nationality may be terminated by election, whether express or implied from residence or other facts.

The existence of dual nationality in cases of naturalized persons is prevented to a considerable extent by provisions under which the nationality of the country of origin is lost through naturalization in another country. Such provisions appear in the laws of many countries, including not only countries of the western hemisphere and members of the British Commonwealth of Nations but a number of continental European countries. The laws of some countries (such as the Belgian law of May 15, 1922, art. 18), provide that a woman marrying an alien does not lose her original nationality unless she acquires the nationality of her husband under the law of his country. On the other hand, the law of China (law of February 5, 1929, art. 2) provides that an alien woman does not acquire Chinese nationality through marriage unless she loses her foreign nationality under the law of her country.

As a general rule, neither of the two states of which a person has nationality can undertake to protect him while he is within the territory of the other state. A rule to this effect is contained in article 4 of the Convention on Certain Questions Relating to the Conflict of Nationality Laws adopted by the Conference for the Codification of International Law held at The Hague in 1930. Whether exceptions may properly be made is an open question. Perhaps they may if the individual is subjected to outrageous or inhumane treatment or discriminated against because of his connection with the state whose protection is sought. In a number of cases it has been held by arbitral tribunals that one of two states of which a person is a national cannot properly bring a diplomatic claim against the other.

Since nationality implies allegiance to a state, dual nationality is essentially an incongruity. A person, whatever his legal condition may be, can hardly entertain a genuine moral allegiance to two states at the same time. Moreover, the existence of dual nationality frequently causes hardship and inconvenience, especially through double taxation and double military obligations. During the World War numerous persons suffered hardships as a result of having the nationality of two countries, sometimes of two countries at war with each other. They were subject to compulsory military service in either of the two countries in which they happened to be and in some cases their property was seized because they had enemy nationality, although they also were nationals of the country where the property was seized (Kramer v. Attorney General, L. R., Appeal Cases, 1923, p. 528).

Naturalized citizens of the United States who have not lost the nationality of the countries from which they came frequently receive from the authorities of those countries in time of peace as well as in time of war calls to perform military service or to pay taxes in lieu thereof. In some cases their parents are required to pay the taxes in their stead. If such persons visit their native lands they are liable to arrest and impressment into the army. To some extent this situation has been ameliorated by the conclusion of naturalization conventions, (see Expatriation), but the United States has been unable to conclude treaties of this kind with a number of European countries.

Persons born in the United States of alien parents have also been impressed into the armies of the countries from which their parents came, when temporarily visiting such countries, or have been compelled to pay military taxes. A joint resolution of Congress of May 28, 1928, requested the President to endeavor to conclude agreements with foreign governments, allowing persons born with dual nationality as well as persons naturalized in the United States to visit the other countries claiming them as nationals without their being held for military service or any other obligation of allegiance (45 Stat., pt. 1, 789). Special conventions applicable to persons born with dual nationality were signed with Norway on November 1, 1930, and with Albania on January 21, 1931.

The problem of dual nationality was included in the topics submitted for consideration by the Conference for the Codification of International Law which met at The Hague in 1930. In view of the great divergences between the laws of many countries no serious effort was made at the conference to formulate a single, uniform rule for acquisition of nationality at birth, and the rule which was adopted for termination of one nationality in cases of dual nationality (art. 6 of the above convention) was so limited as to be of little practical value. Nevertheless, a Protocol Relating to Military Obligations in Certain Cases of Double Nationality was adopted, which if ratified by the required number of states will serve to remove to a great extent the inconveniences and hardships resulting from the condition of dual nationality.

RICHARD W. FLOURNOY, JR.

See: CITIZENSHIP; NATURALIZATION; ALLEGIANCE; DOUBLE TAXATION; MILITARY TRAINING.

Consult: Morse, A. P., Treatise on Citizenship (Boston 1881); Webster, Prentiss, A Treatise on the Law of Citizenship (Albany 1891); Van Dyne, F., Citizenship of the United States (Rochester 1904); Maxson, C. II., Citizenship (New York 1930); Cockburn, A. J. E., Nationality (London 1869); Gey Van Pittius, E. F. W., Nationality within the British Commonwealth of Nations (London 1930); Collection of Nationality Laws, ed. by R. W. Flournoy, Jr. and M. O. Hudson (New York 1929); Moore, J. B., Digest of International Law, 8 vols. (Washington 1906) vol. iii, ch. x; Hyde, C. C., International Law, 2 vols. (Boston 1922); Cogordan, G., Droit des gens, la nationalité (2nd ed. Paris 1890); Bar, K. L. von, Theorie und Praxis des internationalen Privatrechts, 2 vols. (2nd ed. Hanover 1889), tr. by G. R. Gillespie (2nd ed. Edinburgh 1892); Borchard, E. M., The Diplomatic Protection of Citizens Abroad (New York 1914); LaPradelle, Albeit de, De la nationalité d'origine (Paris 1893); Flournoy, R. W., Jr., "Dual Nationality and Election" in Yale Law Journal, vol. xxx (1921) 545-64, 693-709; Harvard Law School, Research in International Law, Nationality . . . Drafts . . . in Anticipation of the First Conference on the Codification of International Law (Cambridge, Mass. 1929); Conference for the Codification of International Law, The Hague, March-April 1930, Official Documents, League of Nations publication, 1930, V. 3 (Geneva 1930); American Journal of International Law, vol. xxiv (1930) no. 3, devoted to the discussion of nationality at the Hague conference.

DUAL UNIONISM. Dual or rival unions arise by the secession of a part of the workers from an existing trade union or by the founding of a new dual union by groups of unorganized workers or not infrequently by a combination of the two procedures. The concept of dual unionism as a harmful phenomenon arises out of the notion that in a given craft or industry and therefore in the general trade union movement the existence of more than one union within the jurisdiction or orbit hampers the possibility of effective, powerful action. Although dual unions exist elsewhere this attitude and in fact the term

dual unionism itself are of American origin and became current in conflicts arising in the 1890's. At that time there functioned three distinct types of unionism. The first was the indigenous trade union movement which had sprung up prior to the Civil War and which reached its culmination in the eighties in the "general" labor unionism of the Knights of Labor. This movement was anticapitalistic from a middle class point of view, demanding the abolition of the wage system and its replacement not by a socialist order but by a return to the handicraft system and independent self-employment. The second type was "pure and simple craft unionism" set up by the immigrants from the British Isles, of whom the Irish were numerically preponderant but whose leadership was English. This group considered that the achievement of its ends was possible within the framework of capitalism and formed a rival national federation of trade unions in 1881, which was the basis of the American Federation of Labor. The third type was that represented by the class conscious unionism of the continental European immigrants under the leadership particularly of the German anarchists and socialists. In spite of the essential difference in outlook and the isolation due to language differences, this group because of its philosophy of class solidarity as well as its urge for proselytizing threw in its lot with both the English speaking unions. Encouraged by its growth, this group determined to commit both organizations to its doctrines but was outmanoeuvred. Conflict between the other two groups resulted in the nineties in the victory of the Federation, whose leadership particularly stressed the dangers of dualism, pointing out the absence of rival unionism in the British movement as the cause of the latter's strength. The third or class conscious group which was operating within the Federation was then split in two over the question of tactics and policy. The more moderate of the radicals urged the policy of boring from within and condemned as destructive of class solidarity the policy of forming rival unions advocated by the more extreme group. This condemnatory attitude reenforced the attitude of the Federation leaders, who now added radicalism to the undesirable features of rival unionism.

A definitely radical and ideological dual unionism has existed through the sporadic appearance of various organizations. The first was the Socialist Trade and Labor Alliance formed in 1895 under the leadership of Daniel DeLeon, which never became a power because the moderate

radicals who believe in boring from within controlled the largest proportion of union membership. In 1898 the native born elements in the western regions founded the Western Labor Union and in renaming it the American Labor Union implied their intention of making it nation wide. This group furnished some of the impetus for the foundation in 1905 of the Industrial Workers of the World, which was intended to unite and for a brief time did unite all radical elements; but certain leaders returned to the fold of the moderate socialist movement and others participated in the forming of what later became known as the Workers' International Industrial Union, a purely propaganda association which went out of existence in 1918. The I. W. W. in its meteoric rise from 1907 to 1914 and until its swift decline after the war due to wartime persecution, communist incursions and internal strife constituted a definite dual union movement in essence, even though its constituency was made up of the hitherto unorganized elements: the unorganized immigrant workers of the east and middle west, the native born southern workers and the migratory workers of the south. The I. W. W. still exists as a propaganda organization of comparative unimportance, having a dues paying membership only 1 percent of that reported for the Federation. The communist unions, after several unsuccessful attempts in the post-war period, have now gained the challenging position formerly held by the I. W. W. After their policy of boring from within had resulted in expulsions, the communists turned to dual unionism as represented in a national federation by the Trade Union Unity League. The actual membership of its affiliated unions is perhaps not larger than that of the I. W. W., but it has conducted spectacular strikes in the textile, automobile and shoe industries.

In point of fact, however, dual unionism which was not based on ideological differences but which was merely opportunistic was then and still is a common phenomenon of American unionism. It springs out of such causes as quarrels between leaders, revolts against autocratic leadership, differences of immediate policy because of the neglect of groups of workers within their jurisdictions by existing unions or because of jurisdictional disputes or because of the desire of craft unions to persist in an industry controlled in the main by an industrial union. This type of dual union is not based necessarily on a more radical ideology than its rival. At the present time the most powerful of these opportunistic

dual unions, which for one reason or another have been outlawed or refused recognition by the Federation, exist in the clothing, shoe, textile, transport and food industries.

The independent railroad brotherhoods cannot be considered dual unions since the Federation has not organized rival groups in the field. Company unionism, which enrols 1,500,000 workers, is not dual unionism—not only because of the nature of its sponsorship but also because it is restricted to individual plants. The only important "yellow" union on a craft or industrial basis is the Loyal Legion of Loggers and Lumbermen.

Dual unionism in Germany developed far differently and is almost entirely ideological in basis. The dominant and most powerful type is the "free" or socialist unions. Partly because of priority in time they became firmly established with the masses. A rival grouping was set up by the Christian bodies in 1892 under the influence of the encyclical of Pope Leo XIII in an endeavor to win back from the atheistic leadership of the socialist unions those Catholic and Protestant members over whom these Christian organizations had previously lost their influence because of their original procapitalistic leanings. In contrast, the British labor movement never required a split on religious groupings, for its leadership had never embraced atheism and the nonconformist church leaders in particular had always espoused the workers' cause. This Christian group now has a numerical strength of about 720,000. The third grouping was that known as the Hirsch-Duncker unions organized by liberals who objected to the anticapitalistic bias of the socialists and the religious character of the Christian labor unions. The anarchists and syndicalists have also organized their own unions; and since the war the communists have also begun to organize theirs, although some of them are still boring from within. "Yellow" unionism introduced by the employers in the heavy industries to counteract the other types is ostensibly independent but actually subservient to the employers.

The statement has been made that despite these marked divisions within the same jurisdictions dual unionism in Europe has not had disastrous effects in the industrial field because of the high degree of trade union organization and the solidarity among the workers both during periods of strikes and in wage negotiations; whereas in the United States, where 85 percent of the workers are unorganized and even those

who are unionized lack class consciousness, dual unionism if carried to the same extent would result in wiping out group action by the workers. But even in the United States it is only infrequently that rival unions come into serious conflict in the same jurisdiction. Such unions as those of the teamsters, which are confronted by rival organizations in most large cities, secure conditions equally as good as unions that do not have rivals. One of the most successful of American unions, the Amalgamated Clothing Workers' Union, is a dual union which hopelessly outnumbers the "legitimate" Federation organization. While from time to time warfare breaks out, yet if both unions are strong, neither dares risk a decisive battle; skirmishes go on along the frontiers of control afforded by the vast area which is totally unorganized. In France, which had a practically united trade union movement before the war and has a comparatively divided one now, there has as yet been no serious test or disastrous effect from dualism. So long as differences, ideologic or opportunistic, permeate the labor movements of the world, dual unionism is destined to remain a permanent factor.

DAVID I. SAPOSS

See: Trade Unions; Labor Movement; Left Wing Movements, Labor; Knights of Labor; American Federation of Labor; Industrial Workers of the World; Christian Labor Unions.

Consult: Saposs, D. J., Left Wing Unionism (New York 1926); Lorwin, L. L. (Levine, Louis), Labor and Internationalism (New York 1929); Commons, J. R., and others, History of Labor in the United States, 2 vols. (New York 1918); Hoxie, R. F., Trade Unionism in the United States (2nd ed. New York 1923); Perlman, S., A Theory of the Labor Movement (New York 1928); Brissenden, P. F., The History of the I. W. W. (2nd ed. New York 1920); Savage, M. D., Industrial Unionism in America (New York 1922); Hillquit, Morris, History of Socialism in the United States (5th ed. New York 1910); Foster, W. Z., Misleaders of Labor (Chicago 1927); Dunn, R., The Americanization of Labor (New York 1927); Schneider, D. M., The Workers' (Communist) Party and American Trade Unions (Baltimore 1928); United States, Bureau of Labor Statistics, "Postwar Labor Conditions in Germany" by R. R. Kuczynski, Bulletin, no. 380 (1925); Webb, S. and B., History of Trade Unionism (rev. ed. London 1920); Saposs, D. J., The Labor Movement of Postwar France (New York 1931) pt. i, chs. i-iv; Clark, M. R., A History of the French Labor Movement (1010-1028) (Berkeley, Cal. 1930); Harada, S., Labor Conditions in Jupan (New York 1928) chs. x-xi.

DUBOIS, GUILLAUME (1656-1723), French statesman. Dubois is a classic instance of the political intriguer and the dynastic diplomat. In an age of unscrupulous rivalry between opposed

princely houses, when the king was the state, Dubois successfully served as diplomat and administrator and received rich rewards in return from his grateful prince. His position as cleric did not limit in any way his choice of means to achieve desired ends. He was the younger son of a physician and studied for orders at the Collège Saint-Michel in Paris. In 1687 he became preceptor to the duke of Chartres, later the duke of Orléans. When the latter became regent of France in 1715, Dubois planned with him the seizure of the throne in the event of the death of the sickly five-year old king. He went secretly to Holland and Hanover, bringing about with Stanhope an alliance between the regent, England and Holland directed against Philip v of Spain (the heir apparent to Louis xv) and the Stuarts. Dubois became the regent's director of affairs, a member of the council for foreign affairs and head of the diplomatic service-all extremely lucrative positions. He secretly sought advance consent of the Emperor Charles VI and even, if possible, of Philip v to the eventual succession of the duke of Orléans to the throne of France. He persuaded the regent to invite the emperor to join the Anglo-Hanoverian-Dutch alliance which declared war against Spain in 1718. By August, 1718, France had become accustomed to the absolute authority of the regent, and Dubois was made minister for foreign affairs. In 1720 he became archbishop of Cambrai.

As the young king's health became more robust, the comptroller and the Scoth banker Law plotted with the princes of the blood and with Spain against Dubois' scheme. With the help of the English Dubois brought about Law's downfall and discredited his system. By exploiting the ambitions of Elizabeth Farnese, the queen of Spain, he succeeded in forming a Franco-Spanish Alliance (1721), and he persuaded England to join in opposition to Austria should it oppose the establishment of a third branch of the Bourbons in Italy. Diplomatic marriages now made undisputable the regent's authority and Dubois became cardinal.

In August, 1722, Dubois persuaded the regent to reestablish the office of prime minister and to make him successor to Richelieu and Mazarin. A few months later he died.

ÉMILE BOURGEOIS

Consult: Capefigue, J. B., Le cardinal Dubois (Paris 1861); Wiesener, L., Le régent, l'abbé Dubois et les anglais, 3 vols. (Paris 1891-99); Bourgeois, É., La diplomatie secrète au XVIIIe siécle, 3 vols. (Paris 1909-10).

DUBOIS, PIERRE (1250?-1322?), French publicist and political theorist. He was the author of several pamphlets, most of which were written in support of Philip the Fair during his controversies with the papacy and Knights Templars. His important ideas are summarized in his chief work, De recuperatione terre sancte (c. 1306; ed. by C. V. Langlois, Paris 1891). Ostensibly a plea for a crusade against the Saracens, it served as the vehicle through which he urged a number of far reaching reforms. Peace among Christian princes was, he held, not only a necessary preliminary to the crusade but was also essential to the promotion of human welfare and culture. To put an end to the incessant feudal wars a European league should be established, composed of nobles and prelates of every rank, with an economic boycott as well as armed force as a means of coercing anyone who ventured upon war. Controversies between sovereign princes were to be settled by an international court of nine judges. Each party to the controversy was to choose three judges. The remaining three were to be prelates chosen by a board of arbitration set up by a council of princes and prelates.

Under the guise of a program of education for those going to the Holy Land Dubois advocated a complete school system ranging from the elementary to the professional, for the training of both girls and boys. The value of practical experience as opposed to purely theoretical education was emphasized and the proposed curriculum stressed modern languages, the natural sciences and mathematics.

For the reform of the church he proposed the secularization of its property, the abolition of clerical celibacy and strict limitation of monasteries. Within France he urged military and financial changes and the simplification of legal procedure. His chauvinism is very obvious in his demand that the Holy Roman Empire and the papal states be placed under the jurisdiction of the French monarch.

Dubois is typical of the numerous publicists and pamphleteers of the period who sought to further the cause of the rising monarchies against the papacy. Although he originated some reform schemes he is primarily significant for his presentation in unified form of the ideas which were current among the intellectuals of his day.

WALTHER I. BRANDT

Consult: Zeck, Ernst, Der Publizist Pierre Dubois (Berlin 1911); Brandt, Walther I., "Pierre Dubois:

Modern or Medieval?" in American Historical Review, vol. xxxv (1929-30) 507-21; Renan, Ernest, "Pierre Dubois, légiste" in Histoire littéraire de la France, vol. xxvi (Paris 1873) p. 471-536.

DUBOS, JEAN BAPTISTE (1670-1742), French historian and art critic. Dubos was born at Beauvais of a family of the noblesse de robe. He studied theology and was active in various diplomatic missions. His reputation as a historian rests chiefly on his Histoire critique de l'établissement de la monarchie françoise dans les Gaules (3 vols., Paris 1734; 2nd ed., 4 vols., Paris 1742). As a typical representative of the bourgeoisie allied with the royal power he combated the feudal and aristocratic ideas of Boulainvilliers and first formulated the Romanist theory of French origins. His thesis is that there never was a Frankish conquest, that the Franks came to Gaul as allies of the Romans without modifying the political and administrative regime of the country, that feudalism established itself four centuries later by the dismemberment of the sovereignty and the transformation of public offices into seigniories and that consequently the traditional government of France is a pure monarchy and not a monarchy with a feudal base founded upon conquest. Combated by Montesquieu, Dubos' historical ideas were later espoused in part by Savigny and more especially by Fustel de Coulanges.

As an art critic Dubos was the precursor of Taine in his formulation of the doctrine of milicu as the basis of literary criticism, and his Réflexions critiques sur la poésie et sur la peinture (2 vols., Paris 1719, 7th ed. 3 vols., 1770; tr. by Thomas Nugent, 3 vols., London 1748) put an end to the quarrel between ancients and moderns by its criticism of the thesis of the former that the perfection of ancient art constitutes the sole criterion for us, and of the latter that there is such a thing as indefinite progress.

RENÉ HUBERT

Consult: Lombard, A., L'abbé Du Bos, un initiateur de la pensée moderne (Paris 1913).

DU CANE, SIR EDMUND FREDERICK (1830–1903), English prison administrator and reformer. He was born in Colchester, educated at the Royal Military Academy, Woolwich, and then entered the Royal Engineers, eventually reaching the rank of major general. His experience with penal administration began in 1851, when he organized the convict labor employed on public works in western Australia. In

1863 he became director of convict prisons in England and surveyor general of prisons. He was appointed chairman of the prison commissioners in 1877 and was the dominating force in English prison administration until his retirement in 1895.

Prior to 1877 English prisons were provided by local authorities, and every county and almost every municipal corporation had its own prison. The jail was essentially a place of detention rather than of punishment. It was run by the jailer on a profit making basis, which inevitably produced appalling abuses. The local justices of the peace nominally possessed powers of supervision but in practise ignored the prisons.

In 1873 Du Cane submitted to the home secretary a scheme for the complete centralization of the prisons. This was embodied in the Prisons Act of 1877, which at one stroke transferred to the home secretary all the prisons of the country. On no other occasion in English history has a great administrative service, extending throughout the country, been transferred en bloc from the local authorities to the central government. Almost immediately the prisons were greatly reduced in number. Du Cane then proceeded to impress upon the prison system economy, repression and uniformity. Expenditure was rigorously cut down to an extent which now appears excessive. The repression of crime was attempted by the most severe methods of deterrence, including the cellular confinement of the prisoner during the whole term of his sentence. Uniformity was introduced to an almost fanatical degree in diet and a system of education, accounting and hard labor on the treadwheel. Du Cane improved the prison buildings, reduced the cost of maintenance, coordinated the staff, introduced the employment of prisoners on useful work and established the first registration of criminals. He was responsible for the idea of encouraging good conduct by "progressive stages" of leniency. He reduced the suicide rate among prisoners. The defects of the Du Cane regime were its excessive centralization and wooden uniformity, the sacrifice of human interests to undue economy and repression, the lack of attention to the problems of feeblemindedness and after care and a tendency to regard prisoners as a hopeless or worthless element in the community. A conscious departure from much of Du Cane's doctrine was made immediately after his resignation in 1895. WILLIAM A. ROBSON

Important works: The Punishment and Prevention of

Crime (London 1885); Introduction to a report, Results of Censuses of the Population of Convict Prisons in England, by William A. Guy (London 1875); Report on the Discipline and Management of Military Prisons 1874 and 1875, Great Britain, Parliament, Accounts and Papers, vol. xxxvi (1876) p. 505-70.

Consult: Webb, Sidney and Beatrice, "English Prisons under Local Government" in their English Local Government, 9 vols. (London 1906–29) vol. vi, ch. xii; Ruggles-Brise, E., The English Prison System (London 1921).

DU CANGE, CHARLES DU FRESNE, SIEUR (1610-88), French historian. Du Cange had a peaceful administrative career as treasurer of France in Amiens, his native city. He employed his leisure time in reading with pen in hand the Latin, Greek and French authors of the Middle Ages, and he was almost fifty when it occurred to him to publish the substance of the copious notes he had thus gathered upon the most diverse subjects. His Glossarium ad scriptores mediae et infimae latinitatis (3 vols., Paris 1678; new eds. by G. A. L. Henschel, 7 vols., Paris 1840-50, and by Léopold Favre, 10 vols., Niort 1883-87) is a vast catalogue, in the alphabetical order of the Latin words chosen to designate them, of mediaeval institutions, manners and customs in western Europe. An enormous mass of texts, which form the basis for an administrative, social and economic history of the Middle Ages, is classified and interpreted with rare sagacity and the work is still the vade mecum of mediaevalists.

Du Cange followed the Latin glossary with a smaller volume of the same nature for Byzantine history, the Glossarium mediae et infimae graecitatis (2 vols., Lyons 1688). Although much briefer it represents the beginnings of modern scientific investigation of Byzantine history and is for the present the only dictionary available for the study of Greek civilization in the Middle Ages.

Louis Halphen

Consult: Feugère, Léon, Étude sur la vie et les ouvrages de Du Cange (Paris 1852); Géraud, H., "Historique du glossaire de la basse latinité de Du Cange" in Bibliothèque de l'École des Chartes, vol. i (1839-40) 498-510, 595.

DUCHESNE, LOUIS MARIE OLIVIER (1843–1922), French church historian. Duchesne was born in Brittany and after completing the usual professional ecclesiastical studies devoted himself to the study of Christian archaeology and of church history. He taught in the Institut Catholique in Paris from 1877 to

1895 and in the Ecole Pratique des Hautes Etudes from 1885 to 1895 and was head of the École Française in Rome from 1895 to 1922. Through his activity as a teacher and through the Bulletin critique, which he founded in 1880, as well as through his numerous writings, Duchesne's influence was considerable, almost unique, in the revival of the study of ecclesiastical history in France. While he contributed indirectly to the modernist movement in the Roman Catholic church Duchesne was never personally associated with the movement and foresaw its failure. He regarded traditional dogma as beyond change and did not believe that the church, even if it were willing, could modify or correct its interpretations without destroying itself. His works were impregnated with the scientific spirit, yet they were from the beginning regarded with suspicion by the official guardians of orthodoxy. His reputation as a scholar saved him from censure under Leo XIII. Under Pius x his *Histoire ancienne de l'église* was placed on the Index. He submitted to this reproof as a matter of discipline and was in a measure restored to favor under Benedict xv. His work was that of a scholar, not of a theologian or apologist; the church resisted it, but without destroying or even seriously interfering with it.

A. Loisy

Chief works: Étude sur le liber pontificalis (Paris 1877); Origines du culte chrétien (Paris 1889, 5th ed. 1910), tr. from 3rd ed. by M. L. McClure (5th ed. London 1919); Fastes épiscapaux de l'ancienne Gaule, 2 vols. (Paris 1894-99; 2nd ed., 3 vols., 1907-15); Histoire ancienne de l'église, 3 vols. (Paris 1906-08, 5th ed. 1911), tr. from 4th ed. (London 1909-24).

Consult: Habloville, C. d' Monseigneur Duchesne (Paris 1911); Guignebert, Charles, "Monseigneur Duchesne" in Le flambeau, vol. vii, pt. ii (1924) 261-75.

DUCPÉTIAUX, ÉDOUARD (1804-68), Belgian social statistician and reformer. Early noted for a university dissertation against capital punishment, Ducpétiaux was rewarded for his share in the revolution of 1830 by the post of inspector general of prisons and charitable institutions, a position which he held for over thirty years. His administrative successes included agricultural reform schools for young vagrants and the improvement of the free colony for the insane at Gheel. In penology Ducpétiaux stood for the system of cell as against congregate confinement and under his influence the leading prisons of Belgium were erected into cell block

structures. He saw the practical suspension of capital punishment in his country, agitated for indeterminate sentence, probation and prisoners' aid societies and initiated a series of international prison and charitable congresses.

Ducpétiaux wrote voluminously in the field of social statistics and persuaded the government to publish regular decennial censuses of charities and corrections. He served as the compiler of Belgium's first official cost of living survey published in 1855, which had been planned by Ouételet and other members of the Central Statistical Commission. Ducpétiaux showed that nearly one third of the families reported were in receipt of relief in some form and that the quantity food budget of the typical worker was decidedly poorer than that of the soldier and sailor and even worse than that of the convict. Ducpétiaux appealed here as elsewhere for the abandonment of laissez faire and for the establishment of permanent commissions of inquiry, national and international.

DOROTHY W. DOUGLAS

Important works: De la peine de mort (Brussels 1827); Du progrès et de l'état actuel de la réforme pénitentiare et des institutions préventives aux États-Unis, en France, en Suisse, en Angleterre et en Belgique, 3 vols. (Brussels 1837-38); Statistique des tribunaux et des prisons de la Belgique (Gand 1834); De la condition physique et morale des jeunes ouvrièrs et des moyens de l'améliorer, 2 vols. (Brussels 1843); Enquête sur la condition des classes ouvrières et sur le travail des enfants en Belgique (Brussels 1848); Mémoire sur le paupérisme dans les Flandres (Brussels 1850); Budgets économiques des classes ouvrières en Belgique, subsistances, salaires, population (Brussels 1855); Des conditions d'application du système de l'emprisonnement séparé ou cellulaire (Brussels 1857).

Consult: Melun, A. M. J. de, Édouard Ducpétiaux (Brussels 1868); Juste, Théodore, Biographie d'Édouard Ducpétiaux (Brussels 1871); Rubbens, Edmond, Édouard Ducpétiaux, 1804-1868, Collection de l'École des Sciences Politiques et Sociales de Louvain, vol. i (Brussels 1922); Lentz, P., in Bulletin de la Commission Centrale de Statistique, vol. xii (1872) 71-82. For complete bibliography see Bibliographie nationale, vol. i (Brussels 1886) 607-14.

DUE PROCESS OF LAW. The concept of due process of law traces its lineage far back into the Middle Ages. In a feudal decree of Conrad II, one of the strongest of the Holy Roman emperors, we find the statement: "No man shall be deprived of his fief . . . but by the laws of the Empire and the judgment of his peers" (decree of May 28, 1037, in Stubbs, W., Germany in the Early Middle Ages, 476–1250, ed. by A. Hassall, London 1908, p. 146–

47). Nearly two hundred years later the same guaranty is elaborated and stressed in the famous thirty-ninth chapter of Magna Carta which reads: "No freeman shall be taken and imprisoned or disseised or exiled or in any way destroyed, nor will we go upon him nor send upon him, except by the lawful judgment of his peers and by the law of the land." Magna Carta, viewed from the beginning as a permanent charter of English civil liberty, was confirmed by succeeding sovereigns, and it is in one of these confirmations that the phrase due process of law first appears. In a statute of 1354 we read: "That no man of what estate or condition that he be, shall be put out of land or tenement, nor taken, nor imprisoned, nor disinherited, nor put to death, without being brought in answer by due process of the law" (28 Ed. III, c. 3, known as Statute of Westminster of the Liberties of London). None of these documents explained what was meant by the law of the land, or due process of law, but we have the authority of Sir Edward Coke that the two phrases meant the same. In American law they have always been held synonymous.

The concept of due process of law, or the law of the land, came to America as an important part of the rights of Englishmen, tenaciously claimed by the colonists. The not infrequent use of, or paraphrase of, the term law of the land in colonial charters and constitutional documents proves the importance attached to it by the American colonists. The phrase appears in the Virginia Declaration of Rights of June 12, 1776, and in varied forms in the revolutionary constitutions of several other states. It did not appear in the Constitution of the United States as originally adopted, but the Fifth Amendment contains the classic statement that "no person shall . . . be deprived of life, liberty, or property without due process of law," the first use of the phrase due process of law in an American constitution. At the present time there are only five of the United States which do not have in their constitutions either a due process clause or a close equivalent: Indiana, Kansas, New Jersey, Ohio, Oregon. Of these New Jersey is the only one which does not have a clause somewhat similar in import to due process of law. In 1868 the Fourteenth Amendment borrowed the phraseology of the Fifth Amendment in a due process clause applicable to the states. The courts have held the two clauses to be identical in meaning.

The evolution of the judicial interpretation of due process of law by American courts has been of tremendous interest and importance. Whatever its meaning in English legal history may have been (and upon this point students differ), there can be little question that due process of law in America was for nearly a century interpreted as a procedural restriction. It concerned itself not with what the government was doing but with how it was doing it. Thus it applied directly to the machinery or procedure by which persons were tried for crime, by which property rights were adjudicated, by which the powers of eminent domain and taxation were exercised. But it was not deemed to have any bearing upon the actual substance of the law. It is true that in the Dred Scott Decision in 1857 Chief Justice Taney declared that the Missouri Compromise Act of 1820, by depriving persons of their liberty or property (in slaves) merely because they moved into certain territory, "could hardly be dignified with the name of due process of law" (Dred Scott v. Sandford, 60 U. S. 303, 450). And in 1856 the New York court held that a prohibition statute which authorized the summary destruction of liquor already on hand amounted to a deprivation of property without due process of law (Wynehamer v. People, 13 N. Y. 378). These two judicial utterances, however, stand out alone from the great body of American decisions prior to the middle eightics.

There is no evidence that the inclusion of due process of law in the Fourteenth Amendment as a limitation on the states was intended to establish any new principles of civil liberty. In the early cases interpreting that amendment the Supreme Court gave the due process clause its traditional construction as a protection to procedural rights. In the Slaughterhouse cases (83 U. S. 36) in 1873, involving the validity of the New Orleans butcher shop monopoly, the due process clause was held to be wholly inapplicable. In Munn v. Illinois (94 U. S. 113) in 1877 the court refused to regard due process as a restriction upon the power to fix public utility rates. But impelling forces were to broaden the judicial interpretation of due process and transform it into our most important constitutional restriction upon the substance of legislation. The close of the Civil War ushered in a social and economic revolution marked by the growth of interstate markets through increased railroad facilities, the development of large scale production made possible

by huge accumulations of capital and the emergence of a fairly well defined laboring class. Out of these far reaching changes came problems both novel and complex with which state legislatures attempted to deal by police regulations and laws for the control of public utilities. Some of these were sound and necessary; others were ill advised, arbitrary and burdensome, and business men affected by these clamored for constitutional protection against what they deemed legislative excesses. Within the vague outlines of the due process clause the courts found the weapon demanded by the new conditions, and after some hesitation they abandoned their earlier views and accepted due process of law as a direct constitutional restraint upon the substance of legislation, a guaranty, moreover, which was applicable not only to natural persons but to corporations. By the late eighties the new judicial attitude had become firmly established.

In applying due process of law as a test of the validity of state police legislation there were no clear precedents to follow and the result was the emergence of the theory that such police regulations deny due process of law if they are arbitrary in character. But since every exercise of the police power involved a restraint upon individual freedom of action or the free use of property based upon some social need which presumably justified the restraint, a law could be said to be arbitrary only if the social necessity or interest it served was not a sufficient justification of the restriction of liberty involved. The judicial balancing of these two vital elements one against the other is in its simplest terms the test of due process as applied to social legislation.

But this leaves a vast field for the play of personal opinions and prejudices. Whether the social need for an employers' liability statute justifies the novel burdens placed upon employers is a question to be answered in the light of one's knowledge of social facts, one's philosophy of law and one's view as to the proper scope of governmental activity. It is not surprising therefore that judges schooled in economic individualism and the doctrine of laissez faire and imbued with the philosophy of natural rights should strike down without compunction laws requiring safety devices, shorter hours for women, regulation of the time and method of wage payment, employers' liability and many similar enactments. Of particular importance in applying due process of law to

protective labor legislation was the doctrine of liberty of contract which emerged in the state courts in the eighties and received its first recognition in the Supreme Court in the case of Lochner v. New York (198 U. S. 45) in 1905. By this doctrine liberty to contract freely was made part of the liberty protected by the due process clause. Ignoring the fact that liberty of contract exists only when the contracting parties have substantially equal bargaining power the courts insisted that it could be interfered with only under the most manifest public necessity, and in a typical decision we find the New York Court of Appeals invoking liberty of contract on behalf of the right of an adult woman to work "at any time of the day that suits her" in a case invalidating a statute restricting night work for women [People v. Williams, 189 N. Y. 131 (1907)].

The early reactionary decisions under the due process clause were owing in large measure to a wholly natural judicial ignorance of the social and economic problems which the states were attempting to solve. To dispel this ignorance the famous Brandeis briefs were prepared, the first of which was presented in support of the Oregon ten-hour law for women in 1908 in the case of Muller v. Oregon (208 U. S. 412). These briefs paid small attention to legal precedents and principles but marshaled a compelling mass of facts showing the social, economic and physiological basis for the legislation under review. The court still had to determine whether these facts justified the restrictions of liberty which the law imposed, but it at least had the real facts before it. The result was that numerous laws for social betterment were held valid which would undoubtedly have been held void without the adequate knowledge of social facts provided by the briefs. After Mr. Brandeis' appointment to the Supreme Court his work on these cases was carried on by Professor Felix Frankfurter. Both lawyers were aided by expert social workers, such as Josephine Clara Goldmark and Mary Williams Dewson of the National Consumers' League.

These liberal decisions did not, however, represent a permanent change in judicial attitude. With the shifting of the court's personnel and with the emergence of new forms of social legislation we have had recently a substantial group of decisions embodying the legal and economic philosophy of the eightics and ninetics. The most conspicuous of these is the decision invalidating the District of Columbia

Minimum Wage Law (Adkins v. Children's Hospital, 261 U.S. 525) in 1923. The point of view of the majority in this case is identical with that expressed in Lochner v. New York, supra, which held void the New York ten-hour law for bakers. Of a similar import are Burns Baking Co. v. Bryan [264 U. S. 504 (1924)], invalidating the Nebraska regulation of the weight of loaves of bread, and Weaver v. Palmer Brothers Co. [270 U. S. 402 (1926)], invalidating the Pennsylvania statute forbidding the use of shoddy in mattresses. The court's philosophy of due process of law has not progressed beyond the point which makes the decision rest upon the personal reactions of the judges to the factual and legal situation involved. A general definition of due process has been consistently refused by the Supreme Court. It has not been willing to adopt the doctrine of Justices Holmes and Brandeis that if the question of the social need for a police regulation may be deemed reasonably debatable by reasonable men the law is within the proper range of legislative discretion even if the judges themselves regard it as objectionable.

There has been an important recent expansion of the meaning of the term liberty in the due process clause of the Fourteenth Amendment. For many years the court had steadily refused to accede to the view that liberty included protection against any arbitrary interference with the "pursuit of happiness" and particularly included the fundamental civil liberties described in the federal Bill of Rights. It reaffirmed this position as late as 1922 in Prudential Insurance Co. v. Cheek (259 U. S. 530). The following year, however, the court held that the right to teach German in a private school was part of the liberty protected by due process of law and in a striking dictum gave to the term liberty a well nigh all inclusive scope. In 1925 the court upheld the New York Criminal Anarchy Act (Gitlow v. New York, 268 U. S. 652,666) against the contention that it denied liberty without due process of law because of its arbitrary impairment of freedom of speech and announced: "For present purposes, we may and do assume that freedom of speech and of the press-which are protected by the First Amendment from abridgment by Congress—are among the fundamental personal rights and 'liberties' protected by the due process clause of the Fourteenth Amendment from impairment by the States." It seems clear that the court is disposed now to include within

the meaning of the term liberty all the fundamental civil guaranties found in the first ten amendments.

As applied to procedure due process requires in criminal cases a fair and orderly trial publicly conducted before a court which has jurisdiction. It assures to the accused his right to be present and to put in his defense. It has been held, however, that it does not guarantee trial by jury, grand jury indictment or protection against self-incrimination. Due process requires, however, that criminal statutes must be sufficiently definite to enable reasonable people to know when they are violating them.

In civil procedure due process requires a fair hearing before a competent tribunal. A fair hearing is not always a hearing before a court but may be before an administrative tribunal, depending upon the character of the rights involved. In taxation and eminent domain the same broad principles apply. There must be essential fairness of procedure appropriate to the nature of the rights affected and the power exercised. The doctrine that taxes may be levied only for public purpose has come to be grounded upon the due process clause, as well as the requirement that under eminent domain private property may be taken only for a public use. The value of the land so taken must be fairly determined and adequate compensation made. Due process requires that taxes be laid only upon persons and property within the taxing jurisdiction; and when the tax levied is upon special properties according to their value, as is true of special assessments, due process requires that the taxpayer be allowed a hearing upon the value assessed.

In the field of public utility regulation the court, departing from its original view expressed in Munn v. Illinois, supra, has successively held that due process requires that the reasonableness of rates must be judicially reviewable—that the rates be reasonable and that a reasonable rate is one which allows the utility a fair return upon a fair valuation of the property used in the public service. What constitutes a fair return cannot be categorically stated but will vary with the character and risks of the business. Upon the problem of determining the valuation of public utility property experts differ; but the Supreme Court seems to have committed itself to the theory that the value of such property if not actually computed upon the basis of present reproduction cost must at least take that factor very largely into

consideration [St. Louis and O'Fallon Railway Co. v. U. S., 279 U. S. 461 (1929)].

Although there is some dispute among commentators as to whether equal protection of the law is included within the concept of due process, the concept would seem broad enough to afford protection against arbitrary classification as well as against oppressive and arbitrary laws. At any rate the due process clause has been seldom invoked against arbitrary classifications since the equal protection clause is more directly available for that purpose. In Truax v. Corrigan [257 U. S. 312 (1921)] Mr. Chief Justice Taft distinguished between the two guaranties by holding that rights were protected by the equality clause which were beyond the reach of due process. On the other hand, there is no specific guaranty of equal protection applicable to the federal government, and yet from the beginning the courts have construed the due process clause of the Fifth Amendment as guaranteeing fundamental equality before the law.

The task of applying the constitutional test of due process of law to modern legislation has enormously strengthened the prestige and power of the American courts and has brought out in sharp relief the unique character of the American doctrine of the judicial review of legislation. In no other field of the law is there so complete an absence of concrete tests and standards, so much room for the exercise of pure discretion by the court. In applying the due process test to police regulations of the control of public utilities the courts constitute a third chamber, marshaling their own views of social and economic policy and legal theory in settling the vague question whether the acts in question are arbitrary or not. American social policy is circumscribed by limits nowhere definitely stated but inhering in the social outlook of the members of the Supreme Court. This outlook while not at all times illiberal has been sufficiently conservative to keep American legislatures from using methods in dealing with certain pressing social problems which are approved by the enlightened experience of the other industrial nations of the world. As Mr. Justice Holmes has trenchantly put it in his dissenting opinion in Truax v. Corrigan (1921), supra, the concept of due process has frequently been so applied as to "prevent the making of social experiments that are an important part of the community desires, in the insulated chambers afforded by the several States. . . . "

On the other hand, the due process clause has been applied to invalidate legislation admittedly oppressive and burdensome in character, and thus it remains a powerful although dimly defined bulwark of individual civil liberty. Like the contract clause it has contributed an element of stability to the economic life of the country by guaranteeing protection against legislative invasion of the vested right of property and business.

ROBERT E. CUSHMAN

See: Rule of Law; Equal Protection of the Laws; Bills of Rights; Constitutional Law; Judicial Review.

Consult: McGehee, L. P., Due Process of Law (Northport, N. Y. 1906); Taylor, Hannis, Duc Process of Law (Chicago 1017); Mott, R. L., Due Process of Law (Indianapolis 1926); Willoughby, W. W., The Constitutional Law of the United States, 3 vols. (2nd ed. New York 1929); Hall, J. P., Constitutional Law (Chicago 1910); Burdick, C. K., The Law of the American Constitution (New York 1922); Guthrie, W. D., Lectures on the Fourteenth Amendment (Boston 1808); Collins, C. W., The Fourteenth Amendment and the States (Boston 1912); Pound, Roscoe, "Liberty of Contract" in Yale Law Journal, vol. xviii (1908 09) 454-87; Corwin, E. S., "The Supreme Court and the Fourteenth Amendment" in Michigan Law Review, vol. vii (1908-09) 643-72, and "The Doctrine of Due Process of Law before the Civil War" in Harvard Law Review, vol. xxiv (1910-11) 366 85, 460 79; Frankfurter, Felix, "Hours of Labor and Realism in Constitutional Law" in Harvard Law Review, vol. xxix (1915-16) 353-73; Kales, A. M., "New Methods in Due-Process Cases" in American Political Science Review, vol. xii (1918) 241-50; Warren, Charles, "The New Liberty under the Fourteenth Amendment" in Harvard Law Review, vol. xxxix (1925-26) 431-65; Hough, C. M., "Due Process of Law-To-day" in Harvard Law Review, vol. xxxii (1918-19) 218-33; Cushman, R. E., "Social and Economic Interpretation of the Fourteenth Amendment" in Michigan Law Review, vol. xx (1921-22) 737-64.

DUELING. The duel is a contest with weapons between two individuals who fight to secure satisfaction for personal grievances and in accordance with set regulations. It has several analogues in primitive cultures. Among aboriginal Australians combat is imposed upon a man, usually one who has defied the social regulations by eloping with a woman not, according to group usage, intended to be his wife. In such a case, when the man returns to camp he must allow the relatives of the woman to throw spears at him. He is allowed to defend himself with a shield, and usually at the first drawing of blood the elders, who stand by to insure fair play, intervene and terminate the

contest. Among the Greenland Eskimos, the "nith-song" is a non-material weapon of contest, although one with barbs that penetrate Eskimo sensitiveness. In this contest the injured person challenges his enemy to a duel of song. The disputants hurl witty, abusive and insulting songs at one another until one of the two contestants has exhausted his vituperation. The audience then gives the decision, and the contestants must thereafter be friends. In another form of the Eskimo duel the two men in the presence of others press a pointed bone into each other's cheeks until one shows signs of pain or anger and thereby confesses defeat. Scandinavian influence has been perceived by some in both of these Eskimo customs.

The duel proper is not found in any of the ancient civilizations. Such contests as those between David and Goliath, Achilles and Hector, are duels in form but actually arise from different motives and should be classed as contests of champions. The probable origin of the duel is in the trial by ordeal of the Germanic peoples; it developed out of one of the forms of the ordeal—the judicial combat to determine the guilt or innocence of the accused. If he declared himself innocent he had to fight the accuser in the presence of witnesses, who constituted the jury. The conduct of modern law cases is in large part but a softening of this early Germanic judicial combat, although weapons and procedure have become considerably modified. Although the custom is much older, the ordeal was first legally established in 501 by Gundobald, king of the Burgundians. In 887 Pope Stephen vi prohibited the judicial duel and all forms of the ordeal. In 855 the Council of Valence had issued an edict against dueling, but during the reign of Lothaire duels were frequent, and during the reign of Otto 1 (936-73) disputes regarding succession were settled by combat. In 1260 Louis IX forbade the duel in the courts of the realm although he allowed it in the courts of the barons. Philip the Fair later in 1306 permitted the judicial duel in charges of felony, treason and violence. In 1547 Henry II of France prohibited duels on French soil and thus terminated the practise of the judicial duel in France. Iceland and Norway forbade the judicial duel early in the eleventh century; and in 1215 during the reign of King John trial by ordeal, including the judicial combat, was abolished in England. In 1818, however, the right to judicial challenge was upheld in England by the court, which declared that

the common law had not been abrogated by act of Parliament; and an accused murderer was dismissed because the brother of the murdered girl refused the gage of battle. Shortly thereafter in 1819 Parliament passed a law abolishing the judicial duel.

In Italy the judicial duel of the Lombards and Goths gave place to the modern form of the duel; and from Italy it crossed the Alps in the latter part of the fifteenth century, having penetrated the armies of Charles VIII in northern Italy. It was given wider prevalence in France as a result of the Italian expeditions of Louis XIII in the sixteenth century. From this time on it was divorced from court procedure and it has since had an independent history. The practise of using seconds (parrams, or "godfathers") was introduced from Italy into France in 1578 among the mignons of Henry III. These seconds corresponded to the jury of the judicial combat, but in Italy and in France they frequently fought when the principals fought. Later, however, they did in fact endeavor to insure fair play, especially after the "affair of honor" duel had come into greater vogue. In the sixteenth century pistols were introduced as the weapon in English duels, and they remained the favorite weapon in the British Isles. In France, however, the small sword and the saber were preferred, until the English method was introduced into France through military circles in the latter half of the eighteenth century.

During the last four hundred years hundreds of thousands of duels have been fought, although there are only hints of more exact figures for any definite period of time or in any country. During his reign Henry IV granted 14,000 pardons to duelists, and it is estimated that between 1589 and 1607 four thousand gentlemen were killed in affairs of honor in France. The judicial duel was a struggle to the death, and the early non-judicial duels were of a most brutal sort, in which the contestants fought savagely and always one was killed, and often both. The English duel, however, was not synonymous with mortal combat; a study of nearly two hundred English duels showed a mortality of only one in fourteen combatants and injury to one in six. The later affair of honor duel was even less dangerous; in the nineteenth century it was usually terminated when one of the principals was injured, and frequently ended without injury to either of them. A specific phase of the duel of this type is illustrated in the German student duels (Mensur), in which

precautions prevent serious injury to the participants and the affair is a regularized fraternity procedure, a channel to esteem, prestige and later professional standing. The duel was prevalent among German students in the seventeenth century and was vigorous in the eighteenth century (article 9 of the 1713 Prussian edict against dueling refers to it). After falling into abeyance the student duel was revived about 1835 and became an important feature of university life, especially in Bonn, Heidelberg and Göttingen. Its vogue in the nineteenth century was largely a revival, stimulated by the romanticism which formed the basis of the nationalistic movement.

The history of ducling in western Europe is thus not without interest from the viewpoint of institutional development. Starting as a judicial device, it was divested of its function by the development of more satisfactory legal machinery. But it was retained by the military groups and consequently by the aristocratic classes as a mark of class differentiation and as part of a code of punctilio. When it became apparent that its use was excessively destructive, its rigor was mitigated, but by a process common in the history of social institutions its forms were retained.

Since the militaristic tradition is an important element, wars have stimulated dueling, especially among officers. Outbreaks of duels became prevalent in France after the revolutions of 1789 and 1830, and in the latter year there was a revival of the duel in Belgium. After 1815 there were many duels between English and French officers. In France during the present century, under the influence of traditionally intense political conflicts, they have been most prevalent among parliamentarians, journalists and authors. In all countries in which the duel has been in vogue many prominent people have been participants or have been involved in challenges: in France Richelieu, La Fontaine and Voltaire; in England Sir Robert Peel, Charles James Fox, the Duke of Wellington; in the United States Henry Phillips, Aaron Burr, Alexander Hamilton, Andrew Jackson, Stephen Decatur, Henry Clay, John Randolph. Abraham Lincoln was challenged to a duel. Gustavus IV challenged Napoleon to a duel, and such action was not without precedent among European crowned heads.

The non-judicial duel was first abolished in the Germanic countries and has been most persistent in the Latin countries. England was the first major European country to take this step. In Scandinavia, Holland and Germany the duel had practically disappeared before the end of the nineteenth century, but throughout that century duels were frequent in Latin countries, Hungary, Montenegro, Poland and Russia.

In America the duel persisted longer in the southern states than in the north; in the first thirty years of the nineteenth century there was only one duel in the state of New York, whereas they were frequent in Louisiana during the same period. Early in the present century associations to stamp out dueling were organized in all the European countries in which dueling still flourished, and in 1908 an International Anti-Ducling Congress was held at Budapest. Where the laws against dueling have been rigorously and impartially enforced, duels have noticeably decreased; public sentiment has also been an efficient factor. But where duels have persisted despite hostile legislation it has been because duels, like feuds, are part of the conception of personal honor in regard to which the usual sanctions of the law are inoperative. WILSON D. WALLIS

See: Honor; Gentleman; Aristocracy; Militar-ISM; Law, section on Germanic Law; Feud.

Consult: Hertz, Friedrich, "Das Duell als soziale Erscheinung" in Österreichische Rundschau, vol. xxii (1910) 401-07; Thurnwald, Richard, "Zweikampf" in Reallexikon der Vorgeschichte, vol. xiv (Berlin 1929) p. 555-57; Letainturier-Fradin, G., Le duel à travers les âges (Paris 1892); Steinmetz, Andrew, The Romance of Duelling, 2 vols. (London 1868); Vaux, Ludovic de, Les duels célèbres (Paris 1884); Willaert, L., "Duelling: Its Early History" in American Catholic Quarterly Review, vol. xxviii (1903) 463-79; König, Herbert, "Der Rechtsbruch und sein Ausgleich bei den Eskimo" in Anthropos, vol. xx (1925) 276-315; Below, Georg von, Das Duell in Deutschland (2nd ed. Kassel 1896); Fuhrmann, W., "Geschichte der studentischen Fechtkunst" in Burschenschaftliche Bücherei, vol. iii (1909) 429-72; Aymard, Marcel, Le duel et la loi en France et à l'étranger (Paris 1907); Seitz, D. C., Famous American Duels (New York 1929); Greene, E. B., "The Code of Honor in Colonial and Revolutionary Times, with Special Reference to New England" in Colonial Society of Massachusetts, Publications, vol. xxvi (1925) 367-88; Le Rohu, Pierre, "Le premier congrès international contre le duel" in Correspondant, vol. ccxxxi (1908) 1204-14.

DUFF, ALEXANDER (1806-78), Scottish missionary. As the first missionary of the church of Scotland in India Duff initiated and developed a system of missionary schools and colleges, in which English was spoken, for the education of higher caste Hindus. In this work

during the years from 1830 to 1863 he was intimately associated with Ram Mohun Roy (1774–1833), the famous Indian social and educational reformer, Sir Charles Trevelyan (1807–86), Lord William Bentinck (1774–1839) and Lord Macaulay (1800–59). Duff was influential also in the foundation and early educational policy of the University of Calcutta. From 1845 to 1849 he was editor of the Calcutta Review, and later the first occupant of the chair of forcign missions at New College, Edinburgh.

Duff's work was closely bound up with two great issues, the historical resolution of which he himself profoundly influenced: the relation of missionary preaching to the world of intellectual ideas, and the structure of education in India. He believed in the unity of truth and stood steadfast throughout his life for a conception of missionary work which welcomed education as an ally. This principle, established by Duff, that secular learning is no enemy to sacred things, has been vindicated by the missionary school and college in India and throughout Asia and Africa, in spite of the criticism that missionary education is too literary and insufficiently related to economic and cultural needs (charges which are now less true of it than of the educational systems surrounding it). He argued, moreover, in opposition to the "Orientalist" group in Calcutta, that the only way that modern western learning and thought could be conveyed to India was through the English language rather than by Sanskrit, Arabic or Persian. From this decision is derived much that is important in modern India, for English became the common language of educated Indians and so made possible the growth of an all India feeling, while the liberal ideas enshrined in English literature powerfully fostered the growth of Indian nationalism.

WILLIAM PATON

Consult: Smith, George, Life of Alexander Duff (3rd ed. London 1899); Paton, William, Alexander Duff (London 1923).

DUFFERIN AND AVA, FIRST MARQUIS OF, FREDERICK TEMPLE BLACKWOOD (1826–1902), British diplomatist and administrator. He was employed in diplomacy while still a youth, but his Letters from High Latitudes (London 1857; 11th ed. 1903), a book of travel, first brought him before the public eye. As British representative on the Syrian Commission (1860) he was the author of a satisfactory solution in Syrian autonomy. He entered politics under

Lord Palmerston and was made undersecretary for India (1864) and for war (1866). He became a member of Gladstone's government (1868) and governor general of Canada (1872). His government of the new Canadian federation through the difficulties of the Riel rebellion and the "Pacific Scandal" was a diplomatic and democratic achievement of the first importance for the future of Canada and of the empire. This was recognized by entrusting him successively with the embassies that were then of the greatest difficulty and danger: Petersburg (1879) and Constantinople (1881). With 'Abdul-Hamīd II Dufferin had to settle the Greek frontier and the Armenian imbroglio and finally the crisis caused by Arabi's nationalist rising in Egypt. He successfully established not only the new relationship of Turkey to Egypt but also the principles of the new regime of a British protectorate in an Ottoman province. His Egyptian report (1883) ranks as an imperial document with the Durham and Montague reports.

He thereby became the obvious successor to Lord Ripon in the viceroyalty of India (1884). There he had to deal with an internal situation of great difficulty due to the devolution of home rule in the Ripon reforms and in the Ilbert bill, and with an international situation of some danger caused by Russian imperialist interventions in Afghanistan culminating in the Penjdeh incident (1885) and the Ishak Khan insurrection (1888). Eventually he fixed a satisfactory frontier to Russian aggrandizement in Central Asia and placed relations between India and Afghanistan on a firm and friendly footing. Although he pursued a policy of marking time in the march toward representative responsible self-government in India he established a legislative council in the North-West Province and he eradicated a real root of unrest by his realization of the Ripon land reform in Bengal (1885), in Oudh (1886) and in Punjab (1887). Meanwhile Lady Dufferin was laying the foundations of a new cooperation between British and Indians by her welfare work for women. But if in these reforms he was promoting the principles of cooperation and conciliation of the new British Empire by permitting the Burmese war and the annexation of Burma (1866) and the Tibetan operations (1888), he was at the same time prosecuting the last and not the least questionable extension of the old empire principles of conquest and coercion.

GEORGE YOUNG

Consult: Lyall, Alfred C., The Life of the Marquis of

Dufferin and Ava, 2 vols. (London 1005); Walpole, Spencer, Studies in Biography (New York 1907) p. 141-60; Leggo, William, The History of the Administration of the . . . Earl of Dufferin (Montreal 1878); Stewart, George, Jr., Canada under the Administration of the Earl of Dufferin (2nd ed. Toronto 1879). The journals of Lady Dufferin, covering residence in Canada, Russia, Turkey and India, contain detailed and personal accounts of the diplomat's life.

DUGUIT, LÉON (1859-1928), French jurist and political theorist. Duguit was a professor in the faculty of law at the University of Bordeaux, where he taught for forty-two years. He also lectured at universities in the United States, Argentina, Portugal, Rumania and Egypt. Duguit is known for his application of philosophical positivism to jurisprudence and political theory. The third edition of his chief work, *Traité de droit constitutionnel* (2 vols., Paris 1911; 2nd ed., 5 vols., 1921-25; 3rd ed., 3 vols., 1927-30), is an exposition in their most complete development of his doctrines, which greatly influenced current legal and political philosophy.

Duguit's aim was to evolve a theory of the law and the state based solely upon experimental data and excluding all metaphysical ideas. Accordingly, he rejected the subjective conception of law, which consists in taking subjective right as the basis of law, because subjective right, being the power of the will to impose itself upon another will, is a metaphysical concept. To him the true conception of law is objective: law exists in the form of a body of rules arising from social relationships, necessitated and determined by them. These rules, beginning as mere social rules, develop into rules of law when "the man of individual consciousness" considers it necessary to assure their observance by a socially organized sanction. The primary fact in the realm of law therefore is not subjective right but the objective rule of law springing from social relationships. This conception led Duguit to reject the German theory of law as a creation of the state, a sovereignty subject only to its own limitations. He insisted that experience shows law to be anterior and external to the state, which because of its nature may itself be limited by law. The state, according to him, is a social phenomenon resulting from a differentiation of forces between the governors and the governed which necessarily occurs in every group, for the governed need to be governed and the governors have the force required for governing. The state has no title to sovereignty since it consists merely of a group of governing individuals. These governors in spite of their greater power are themselves subject to law and therefore have not that superiority of will which constitutes sovereignty. The notion of the state as an entity distinct from the governors and the governed is a metaphysical or fictitious concept.

Finally Duguit applied his positivist method to the juridical technique in order to eliminate all metaphysical concepts in that field. His theory of the juridical act is based upon the idea that the will is endowed with no creative power of relevance to law. The will merely launches the application of objective law in a particular case, and the effect of law thus proceeds directly from objective law.

ROGER BONNARD

Other important works: Les constitutions et les principales loss politiques de la France depuis 1789, in collaboration with Henry Monnier (Paris 1898; 4th ed. 1925); L'état, le droit objectif et la loi positive (Paris 1901); L'état, les gouvernants et les agents (Paris 1903); Le dreit social, le droit individuel et la transformation de l'état (Paris 1908; 3rd ed. 1922); "The Law and the State" in Harvard Law Review, vol. xxxi (1917–18) 1–185; Souverancé et liberté (Paris 1922); Les transformations générales du droit privé depuis le code Napoléon (Paris 1911; 2nd ed. 1920); Les transformations du droit public (Paris 1913), tr. by F. and H. Laski as Law in the Modern State (New York 1919).

Consult: Bonnard, Roger, "Léon Duguit" in Revue du droit public et de la science politique, vol. xlvi (1929) 5-51; Lucien-Brun, Jean, Une conception moderne du droit, Archives de Philosophie, vol. iv, no. 3 (Paris 1927); Jardon, Alberto, Las teorias politicas de Duguit (Madrid 1919); Eisenmann, C., "Deux théoriciens du droit: Duguit et Hauriou" in Revue philosophique de la France et de l'étranger, vol. ex (1930) 231-79; Mathews, J. M., "A Recent Development in Political Theory" in Political Science Quarterly, vol. xxiv (1909) 284-95; Elliott, W. Y., The Pragmatic Revolt in Politics (New York 1928); Willoughby, W. W., "The Theories of Duguit" in his The Ethical Basis of Political Authority (New York 1930) ch. xxi.

DÜHRING, EUGEN KARL (1833-1921), German economist and philosopher. Dühring studied and practised law until an eye ailment which resulted in blindness forced him to abandon it for a teaching career. He was an instructor in philosophy and economics at the University of Berlin from 1863 until 1877. Afterward he became editor first of *Der moderne Völkergeist* and later of *Personalist und Emancipator*. His writings in the fields of philosophy, literature, mathematics, ethnology and the natural and social sciences are among the important intellectual achievements of the nineteenth century. Dühring's lack of moderation and his attacks upon Judaism re-

sulted, however, in a general boycott of his work and it is only recently that his philosophic and sociological writings have been given proper recognition.

Dühring's philosophy, of which his economic doctrine is a part, has the point of view of positivism in that it demands a unitary knowledge of existence based upon clearly defined, fundamental principles which are to be derived solely from the study of the true nature and social life of man, uninfluenced by metaphysical concepts. Knowledge is to be the foundation of the harmonious reorganization of life in which social justice will reign and in which violence and pernicious egoism in human relations will be eliminated.

Dühring criticized sharply both the classical and historical schools of economics and was strongly influenced in his sociological thinking by Carey and List. He was the first scientific critic of Marxian doctrine and as a pronounced anti-Hegelian rejected Marx' dialectical argument of the development of capitalism into socialism, according to which social betterment will come not from united human effort but only from "a grim participation in the fiercest struggle of antagonisms." Dühring objected even more to the utopian theories of the early socialists because they rested upon a complete misunderstanding of human nature. According to Dühring it is not primarily the economic system which causes social injustice but rather the extra-economic, political and social factors which intervene in all economic processes. For example, existing property relationships are the result of historical-political development and accord property owners an unfair advantage over labor. Nevertheless, private property must not be abolished, for it is in accordance with the necessary division of function in human activity and without it great economic achievements are inconceivable. For the same reasons interest upon capital is entirely justified. It is not private property and capital, Dühring held, but their misuse which must be eliminated. Property owners, taking advantage of their position, may keep wages at a minimum of subsistence scale although the increasing productivity of labor warrants a growing wage quota. Only by organization can labor prevent this misuse of power and obtain its rightful wage, which consists of the earnings of production minus rent and interest. By organization labor will become equivalent in power to capital and the workers will be able to withhold the labor power which is essential to the utilization of capital. The state by appropriate intervention must also hinder the abuse of economic power.

G. Albrecht

Chief works: Careys Umwälzung der Volkswirtschaftslehre und Socialwissenschaft (Munich 1865); Capital und Arbeit: neue Antworten auf alte Fragen (Berlin 1865; 3rd ed. by U. Dühring with title Waffen, Capital, Arbeit, Leipsic 1924); Sociale Rettung durch wirkliches Recht statt Raubpolitik und Knechtsjuristerei (Leipsic 1907); Kritische Grundlegung der Volkswirtschaftslehre (Berlin 1866); Kritische Geschichte der Nationalökonomie und des Socialismus (Berlin 1871, 4th ed. Leipsic 1900); Cursus der National- und Socialökonomie (Berlin 1873; 4th ed. by U. Dühring, Leipsic 1925).

Consult: Albrecht, Gerhard, Eugen Dühring: ein Beitrag zur Geschichte der Sozialwissenschaften (Jena 1927), Eugen Dührings Wertlehre (Jena 1914), "Duhrings Stellung in der Dogmengeschichte der Volkswirtschaftslehre" in Archiv für Sozialwissenschaft und Sozialpolitik, vol. liv (1925) 741-74, and "Die Ausgestaltung des listschen Nationalitätsprinzips durch Eugen Dühring" in Zeitschrift für die gesamte Staatswissenschaft, vol. lxxxiii (1927) 1-32; Laskine, Edmond, "Les doctrines économiques et sociales d'Eugène Dühring" in Revue d'histoire des doctrines économiques et sociales, vol. v (1912) 228-76; Lamberz, H., Carey und Duhring (Warendorf i. W. 1926?); Köppe, H., "Das 'sozialitäre System' Eugen Dührings" in Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung, vol. iv (1914) 393-438.

DUMA. See LEGISLATIVE ASSEMBLIES.

DUMONT, ARSÈNE (1849-1902), French sociologist and demographer. Dumont was born at La Cambe (Calvados) and studied at the École d'Anthropologie in Paris. His special interest was in the problem of the depopulation of France. He held that the lowering of the birth rate, which is the immediate cause of the decreasing population of certain civilized peoples, is a purely voluntary phenomenon, one of the consequences of modern civilization in so far as the latter rests upon an individualistic conception of existence. In democratic societies, in which each individual has the hope and the possibility of rising, such a rise implies to the individual an alleviation of the family burdens involved in the rearing of children. Dumont defines as social capillarity (capillarité sociale) the ability to rise in the social scale along with the increasing desire to do so, leading to a voluntary restriction upon the number of children. This desire is stimulated in modern democratic societies by the fact that political equality exists side by side with economic inequality. Dumont established a law that if the social

capillarity is active the birth rate is low, but if for whatever cause social capillarity is checked the birth rate makes an upward turn. He supported his thesis by many regional demographic studies.

René Gonnard

Important works: Dépopulation et civilisation (Paris 1890); Natalités et démocratie (Paris 1898); La morale basée sur la démographie (Paris 1901).

Consult: Leroy-Beaulieu, Paul, "La question de la population et la civilisation démocratique" in Revue des deux mondes, vol. cxliii (1897) 851-89; Gonnard, René, La dépopulation en France (Lyons 1898), and "Dépopulation et législateurs" in Revue d'économie politique, vol. xvi (1902) 811-27, vol. xvii (1903) 98-132, and Histoire des doctrines de la population (Paris 1923); Manouvrier, Léonce, in Société d'Anthropologie, Bulletins et mémoires, 5th ser., vol. iii (1902) 591-97.

DUMONT FAMILY, German journalists. Marcus Theodor Dumont (1784–1831), the son of a family connected with official and ecclesiastical circles in Cologne and a lawyer by training, took over the Kölnische Zeitung in 1805. The paper was suppressed by the officials of the French occupation but reappeared in January, 1814. Dumont set for the paper a policy of supporting the Catholic church and opposing the spread of the "English machine system" on the argument that it would make beggars of two thirds of the German people.

His son Josef (1811-61), a champion of freedom of the press, gave the paper its first real importance. He made several important improvements in the technical aspects of the work, established a carrier pigeon service for news (especially stock exchange quotations) from Paris to Aachen, and set for the paper a new tradition of liberalism. The Kölnische Zeitung henceforth played an important role in the development of Rhineland liberalism. As early as 1837 it began to publish editorials, and in the troubled days of 1848 it voiced effectively views of the liberal group. Josef Dumont was also a pioneer in developing the amusement and special feature aspects of the newspaper; he introduced novels in instalments and special editions, such as that on the completion of the cathedral.

Beginning in 1880 August Neven, a son-inlaw of Josef Dumont, took over the paper and was followed by his sons Josef and Alfred Neven-Dumont. The Kölnische Zeitung continued to espouse liberal causes and was, under the editorship of K. H. Brüggemann, from 1846 to 1855 a pillar of free trade sentiment. It is still regarded as a significant liberal political newspaper.

HANS TRAUB

Consult: Buchheim, Karl, Die Stellung der "kölnischen Zeitung" im vormärzlichen rheinischen Liberalismus (Leipsic 1913); Dieudonné, F., 'Die kölnische Zeitung" und ihre Wandlungen im Wandel der Zeiten (Berlin 1903); Kelchner, E., "Marcus Theodor Dumont" in Allgemeine deutsche Biographie, vol. v (Leipsic 1877) p. 464-66; Nahmer, Ernst von der, Beiträge zur Geschichte der "kölnischen Zeitung" (Cologne 1921); Dumont-Schauberg, M., Kölnische Zeitung, Buchdruckerei und Steindruckerei 1802-1902 (Cologne 1902).

DUMOULIN, CHARLES (1500-66), French jurist. Dumoulin was an advocate at the Parlement of Paris. As a result of his conversion to Calvinism and his attacks upon the Catholic church he was forced to leave France and he went to Germany, where he lectured at Strasbourg and other universities. In his *Tractatus commerciorum et usurarum*, redituumque pecunia constitutorum et monetarum (Paris 1546), which particularly aroused the wrath of the Catholics, he contended that usury was not forbidden by divine law and that regulated interest should be permitted.

Dumoulin was a bitter opponent of feudalism and a staunch adherent of the doctrine of royal authority. He held that the administration of justice was an attribute of royal power, the feudal courts having only delegated authority. He was the first great exponent of a national law of France, breaking away from the imperial law, modified by custom, supported by his predecessors. In the "Oratio de concordia et unione consuetudinum Franciae" (Tractatus, p. 356-60) he advocated the amalgamation of all the customs into one code, which should be enforced in all territories governed by customary law. In his commentaries on the customs of various localities he constantly emphasized the superiority of the custom of Paris. His commentary on the latter was of special significance and most of his criticisms of it were accepted in the reform of

Dumoulin's chief contribution to the development of law was the doctrine of free will, that in all transactions not governed by a positive provision of law the will of the parties should be allowed full scope. This doctrine, which has had great vogue in France under the name "autonomy of the will," has determined the English rule that a contract is governed by the law intended by the parties. Where the intention of the parties is not clear he held that it should be determined by studying all the circumstances surrounding the making of the contract. Dumoulin's most famous application of his doctrine was to acquests of property during marriage. He was of the opinion that spouses whose first domicile was under the law of Paris had tacitly agreed, where there was no express agreement, to hold all acquests during the marriage in accordance with the provisions of the custom of Paris. While this is not law in the United States it has been accepted as the basis of a decision on a similar point in the English House of Lords. Dumoulin's general doctrine of freedom of the will in legal transactions has been adopted by most modern European jurists, and it is only lately that it is being questioned in important juristic thought.

JOSEPH H. BEALE

Works: Opera quae extant omnia, 4 vols. (new ed. Paris 1658).

Consult: Lainé, Armand, Introduction au droit international privé, 2 vols. (Paris 1888-92) vol. i, p. 223-48; Meili, Friedrich, "Argentraeus und Molinaeus und ihre Bedeutung im internationalen Privat- und Strafrecht, vol. v (1805) 363-66, 380, 452-72, 554-66; Aubépin, "De l'influence de Dumoulin sur la législation française" in Revue critique de législation et de jurisprudence, vol. ii (1853) 603-25, 778-806, and vol. iv (1854) 27-44, 261-300; Taeuber, Walter, Molinaeus Geldschuldlehre (Jena 1928).

DUMPING as a term in the literature of commercial policy was first used during the English tariff controversy of 1903-04, although reference had often been made previously to the use of one country as the dumping ground for another. In its original meaning and as now used by careful writers in English and in many other languages in which the term has become fairly well established it signifies sale for export at prices lower than those charged to domestic buyers. It should not be applied to cases of spurious dumping, where an apparent excess of domestic over export price can be explained by differences in the conditions and terms of sale, such as differences in quality, in size of order, in terms of payment, in dates of sale or in liability to special taxation. Conversely, genuine dumping may be concealed; the export price is apparently not lower than the domestic price but covers items not included in the latter, such as extra costs of packing and delivery, more favorable terms of payment and the like. Dumping occurs whenever the f.o.b. mill or factory price is lower for export than for domestic sale after reasonable allowance for any differences in conditions or

terms of sale. Dumping is thus the foreign trade parallel of local price cutting in internal trade, as defined in American legal usage.

Dumping appears to be an ancient practise. An Elizabethan writer charged foreigners with selling paper at a loss in England in order to crush a new domestic paper industry. In the seventeenth century the Dutch were charged with selling in the Baltic region at ruinously low prices in order to force the French out of the trade. The first American fine china pottery, set up before the revolution, failed, it was claimed, because of predatory English dumping. Adam Smith refers to an instance of the combining of producers in order to establish private export bounties and thereby reduce the supply for the domestic market. After the Napoleonic wars there were many complaints in the United States and in France that English producers were deliberately hindering the development of domestic industries in these countries by selling for export at especially low prices.

The rise of large scale production, using expensive plant and equipment and able to charge prices above the world market level in the domestic market because of monopoly control thereof and protection by the tariff against foreign competition, first made systematic dumping an important and conspicuous trade phenomenon about 1890. The American trusts, such as the United States Steel Corporation, which before the war accounted for 95 percent of American steel exports, largely at dumping prices, the International Harvester Company and the Standard Oil Company, constituted one prominent group of dumping concerns. Another group was the German cartels. They have stimulated dumping by the assignment of maximum domestic quotas to member concerns or by the grant of export bounties financed by levies on the members in proportion to their output or to their domestic sales. German cartels have also been charged with predatory dumping intended to crush competitors, but of this there have not been many well authenticated instances. Large manufacturing concerns in other countries, such as France, Belgium, Canada and to a less extent Great Britain, also resorted to dumping more or less systematically. With the inauguration of the five-year plan in U.S.S.R. there appeared considerable agitation against alleged dumping by that country, but in the absence in Russia of the ordinary costing and price systems of the capitalistic world the concept of dumping scarcely seems applicable to the Russian practises. On

the whole, dumping was widespread before the war and has been common in the post-war period.

Intermittent or sporadic dumping may be undertaken for various reasons. Where an exporter ships goods abroad for sale on consignment or at auction there may be unintentional dumping if the goods, after allowance for freight and other costs of shipment, bring less than the prices prevailing in the domestic market. An exporter may dump to get rid of an occasional overstock without "spoiling" his home market, to maintain connections and good will in a temporarily depressed market, to introduce his commodity abroad, to eliminate competition in a foreign market or to retaliate against dumping in his home market by a foreign competitor.

Dumping may be maintained for long periods where its objective is to obtain the economies of full utilization of existing production facilities while charging a high price at home. It may continue indefinitely where a plant is deliberately built on a scale larger than is required to take care of the domestic market. Government export bounties, especially if granted to a competitive industry so that they are not absorbed as an extra profit by the producers or exporters, tend also to lead to dumping, which will continue as long as the bounty is maintained. In fact, systematic long time dumping is not conceivable under competitive conditions in the absence of export bounties: competitive producers would tend to confine themselves to the higher price domestic market and leave the export trade to others, with a consequent tendency either toward the equalization of domestic and export prices or toward the cessation of export.

An approach to monopolistic control of the home market is perhaps the most important prerequisite to the existence of dumping as a systematic and normal practise. In accordance with the principle of discriminatory monopoly price, or charging what the traffic can bear, it will pay the monopolist to carry total production to the point where marginal cost for output as a whole, marginal gross revenue from home sales and marginal gross revenue from export sales are all equal to one another. Only by the unlikely coincidence that at the point of equilibrium the elasticity of demand will be identical in the two markets will this involve uniform prices in both markets. Since in the export market there will be other competing sellers, the foreign demand is likely to be more elastic than the domestic and the foreign maximum rev-

enue price therefore lower than the domestic. It may well be that the maximum revenue domestic price may be even higher than the maximum obtainable export price. For the special case where under a uniform price policy the optimum price would not permit of any export sales, it has been shown that resort to dumping with a consequent increase in output would lead to a higher domestic price if marginal costs increased and to a lower domestic price if marginal costs decreased. The important problem, however, of what is the effect of dumping on domestic price when some export business could be obtained even under the optimum uniform price still awaits solution; under these circumstances it appears that resort to dumping always raises the maximum revenue domestic price and increases the cost to the domestic consumer by more than the increase in monopoly revenue.

Tariffs facilitate dumping by protecting domestic monopolies in the home market from foreign competition. For bulky products, however, dumping on a systematic scale is possible up to the limit of the transportation costs to and from the foreign market even for industries in a free trade country. English industries, for example, have engaged in dumping without receiving any tariff protection. Occasionally the buyers of a dumped commodity will guarantee against its resale in the country of origin. There is no doubt, however, that without tariffs the possible extent of systematic dumping would be much less than it is.

Since agriculture is usually organized on the basis of small scale production by many individual farmers, dumping of agricultural commodities rarely occurs except when stimulated by government export bounties. It is agricultural commodities, however, which most frequently receive such bounties, and occasionally an agricultural industry organizes itself sufficiently to establish export bounties or minimum export quotas as a means of stimulating exports and thus bringing about higher domestic prices. Disposal of surpluses abroad at dumping prices has been a prominent feature of the McNary-Haugen and other schemes for farm relief which have been the subject of discussion in the postwar period in the United States.

Public opinion in the dumping country is often hostile to dumping on the ground that it results in higher prices to domestic consumers, which, as has been shown, may not be true; and that it provides foreign competitors with cheaper raw materials than are available to the domestic

producers. The prosperity of the Dutch shipbuilding industry, in fact, was largely due to the availability of German steel at dumping prices. To meet this criticism German cartels before the war adopted the practise of extending to domestic industries on their purchases of materials destined for export in further manufactured form as low prices as those charged to foreign buyers; this has occasionally been done also in the United States and elsewhere. It has sometimes been suggested that reimport free of tariff duties be permitted for products exported at dumping prices. An amendment to the tariff bill providing that tariff protection be withdrawn from industries selling for export at prices below the domestic prices was introduced into the United States Senate in 1921 and was defeated by only ten votes.

To the importing country cheapness of imports is an advantage, unless the cheapness is so temporary that it results in greater injury to domestic industry than benefit to consumers. Importing countries have legitimate ground for taking protective measures against dumping only because dumping is usually intermittent or short run and can never be depended upon to continue indefinitely. Even when the importing country has no competing industry it may be injured by temporary dumping if this results in the establishment by the dumper of monopoly control over its market.

Antidumping legislation made its appearance in response to the clamor raised against the allegedly injurious effects of American and German dumping. In 1904 Canada enacted the first antidumping law specifically providing for the imposition of additional duties on imports sold at dumping prices. Measures following more or less closely the Canadian model were enacted by the Union of South Africa in 1914 and by the United States, Great Britain, Australia, New Zealand and Newfoundland in 1921. Only the Canadian act of 1904, amended in 1907 and 1921, and the United States and Newfoundland laws of 1921 are clearly mandatory in form, the others being applicable at the discretion of the customs or other authorities. Australian legislation from 1906 to 1910 and several American statutes deal in addition with predatory dumping as a phase of unfair competition. Since the World War a number of countries, including Canada, New Zealand, Japan, Germany and Rumania, have passed laws which authorize an increase of duties by administrative act whenever a domestic industry is threatened

by abnormal or unreasonable foreign competition; although these enactments do not refer specifically to dumping they may be used as antidumping measures. For Canada, South Africa, Australia and the United States, where the antidumping laws are systematically applied, there appears to be fairly general agreement among the customs officials and the business interests that this legislation has been successful in checking serious and systematic dumping. The legislation in most of the other countries appears to be wholly or largely inoperative except as it provides reserve measures to be used if an emergency should arise. One factor explaining this failure to apply existing legislation is the absence, in countries using mainly specific duties in their ordinary tariffs, of adequate administrative machinery for the ascertainment of values of imports, which is essential for the effective use of antidumping legislation.

Since the 1860's many countries have attempted to protect themselves against dumping resulting from government bounties by introducing into their commercial treaties provisions pledging the signatories not to grant bounties. These pledges, however, have been frequently violated. The multilateral Brussels Sugar Convention of 1902 was fairly successful in bringing about the abolition of sugar bounties and also the limitation of import duties on sugar to a stated level which it was thought would not be high enough to stimulate dumping on private initiative, but the agreement became inoperative with the outbreak of the World War. Many countries, beginning with the United States in 1890, have enacted provisions for countervailing duties on imports which had received official export bounties. In 1922 the American provision was made to apply also to production bounties and to non-governmental export bounties. Most of these provisions, however, have been discretionary in form and have remained practically inoperative.

The compatibility of antidumping and bounty countervailing duties with most-favored-nation obligations, especially when such duties are made applicable to all shipments originating in specific countries instead of to specific shipments, has been seriously questioned and was in 1931 under investigation by the Economic Committee of the League of Nations.

During the post-war period the term exchange dumping has been applied to exports from certain European countries with rapidly depreciating currencies, although such exports have not

necessarily involved lower prices than those charged to domestic buyers. These export sales could be profitably made at prices which in terms of stable currencies were extremely low, because the exchange rates of the depreciating currencies often fell more rapidly than their internal purchasing power. Many countries enacted legislation authorizing the application of additional duties on imports from countries with depreciated currencies but only a few countries ever actually applied them, and then chiefly or solely on imports from Germany. The amount of such duties was usually made to depend on the difference between the exchange value and the mint par value of the foreign currency, an illogical standard since exchange dumping when it occurs is due not merely to the existence of depreciated currencies but to their progressive depreciation on the exchange market at a more rapid rate than in their internal purchasing power. It would be more logical to make the exchange dumping duties depend on the rate of exchange depreciation of the foreign currencies per unit of time. Even this procedure would cease to be appropriate after a time, because with the continuous depreciation of a currency a point is reached at which the rate of fall in its internal purchasing power tends to approach and even to surpass the rate of fall in its exchange value for stable foreign currencies. With the general stabilization of currencies of the European countries exchange dumping ceased to be an actual problem.

JACOB VINER

See: International Trade; Price Discrimination; Unfair Competition; Monopoly; Cartel; Trusts; Protection; Tariff; Customs Duties; Bounties; Farm Relief; Commercial Treaties; Foreign Exchange.

Consult: Viner, Jacob, Dumping: a Problem in International Trade (Chicago 1923), with extensive bibliography, p. 331-37, and Memorandum on Dumping, League of Nations, 11. Economic and Financial, 1926, 11. 63, C.E.C.P. 36 (Geneva 1926); Barone, E., "Les syndicats (cartels et trusts)" in Revue de métaphysique et de morale, vol. xxviii (1921) 279-309; Yntema, T. O., "The Influence of Dumping on Monopoly Price" in Journal of Political Economy, vol. xxxvi (1928) 686-98; Trendelenburg, Ernst, Memorandum on the Legislation of Different States for the Prevention of Dumping, League of Nations, 11. Economic and Financial, 1926, II. 66, C.E.I. 7 (Geneva 1927); Plant, Arnold, "The Anti-dumping Regulations of the South African Tariff" in Economica, vol. xi (1931) 63-102; Muhlbach, Walter, "Tariff Devices to Meet a Problem of Depreciating Currencies" in Journal of Political Economy, vol. xxxiii (1925) 293-317; Baer, Paul, Das soziale Dumping (Halberstadt 1928).

DUNANT, JEAN HENRY (1828-1910), Swiss philanthropist He was a member of a wellto-do and religious Genevese family and the promoter of a number of humanitarian ideas. As a result of witnessing the terrible suffering of the wounded at Solferino in 1859 Dunant published Un souvenir de Solferino (Geneva 1862; tr. by Mrs. D. H. Wright as The Origin of the Red Cross, Philadelphia 1911), an appeal to world opinion containing two proposals: the neutralization of the wounded and the creation in all countries of permanent societies to care for war victims, supplementing the inadequate army medical services. Dunant, while expressing disapproval of war, argued that its inevitability made necessary such steps for the sake of humane and Christian feeling. His book met with considerable response. He undertook a campaign to promote his ideas which resulted in the convocation in 1863 of an international conference, which has been called the Red Cross constituent conference and of which he was secretary. In 1864 a diplomatic conference met to decide on questions of international law raised by the resolutions of 1863. It drew up the Geneva Convention, which was completed by later agreements. This convention proclaimed the neutralization of ambulances, military hospitals and their personnel. The military sick and wounded of all nations are collected and cared for. A distinctive flag is adopted for hospitals, ambulances, evacuations; a brassard is permitted for the neutralized personnel. Both consist of a red cross on a white ground.

The signature of the Geneva Convention marked a new stage in the development of international relations. Dunant's second fundamental idea—the creation of national societies for aid to the war wounded—was realized later, and today most occidental countries possess a Red Cross society. He also published a condemnation of slavery based on Christian and humanitarian arguments. When he was awarded the first Nobel prize, protests were registered on the ground that such ideas as his tend to perpetuate wars by making them more tolerable.

Georges Milsom

DUNBAR, CHARLES FRANKLIN (1830-1900), American journalist and economist. Dunbar graduated from Harvard College in 1851. He engaged first in business and for a time in farming; later he studied law and was admitted to the bar in 1858. Public affairs rather than legal practise attracted him, however, and

starting with minor contributions he became an editor and part owner of the Boston *Daily Advertiser* in 1859. For the next ten years all his energies were given to its editorial and business management, and under his leadership it reached and held the position of the most influential newspaper in New England.

In 1869 Dunbar was offered a professorship in political economy in Harvard University. He devoted two years to preparatory travel and study and entered upon academic duties in the autumn of 1871. Professor Taussig has finely set forth Dunbar's ideal of the duties of the university teacher: "a leader in thought and in investigation, elucidating the principles on which the solution of current problems must depend, contributing by slow accretions to the mass of information on which the advance of knowledge must rest, and leaving it for others to spread abroad and apply the result of the scholar's research." During the next thirty years as teacher, as senior officer of the department of political economy, as dean of Harvard College (1876-82) and as dean of the faculty of arts and sciences (1890-95) Dunbar attained a commanding place in the development of economic thought in the United States. His contributions to his particular field consisted especially in penetrating studies of the history and theory of banking, in original analyses of the nature and service of credit and in a scholarly review of the origin and progress of American economic writing.

Even more important, certainly more enduring, than any of these was Dunbar's service as editor of the *Quarterly Journal of Economics* from the establishment of the journal in 1886 through the next ten years. The distinction of content and form and the adherence to scientific purpose which have characterized the journal among economic publications in the United States and abroad must be accounted to the impress of its first editor.

JACOB H. HOLLANDER

Important works: Laws of the United States, Relating to Currency, Finance and Banking from 1789 to 1891 (Boston 1891, rev. ed. 1897); Chapters on Banking (Cambridge, Mass. 1885; 5th ed. by O. M. W. Sprague with title The Theory and History of Banking, New York 1929); Economic Essays ed. by O. M. W. Sprague with an introduction by F. W. Taussig (New York 1904).

Consult: Eliot, C. W., Sons of the Puritans (Boston 1908) p. 59-90; Hall, E. H., "Memoirs" in Massachusetts Historical Society, *Proceedings*, 2nd ser., vol. xiv (1901) 218-28.

DUNCKER, FRANZ GUSTAV (1822–88), German politician and labor leader. In 1853 Duncker secured control of a suspended progressive newspaper and reissued it as the Berliner Volkszeitung, which became an important organ of the liberal opposition. He was one of the founders of the National Union in 1859 and later of the Progressive party, being elected in 1861 to the Prussian Landtag, in 1867 to the Reichstag of the North German Confederation and in 1871 to the German Reichstag, of which he was a member until 1877.

In his newspaper and in the legislatures Duncker opposed monarchical absolutism and worked to extend the people's rights. He criticized Bismarck's policy of force in internal politics where it ran counter to his own democratic and progressive views, and also championed social reform and the right of the workers to combine. His publishing house issued works by Marx, Lassalle and Schulze-Delitzsch. Duncker warmly supported the efforts of Schulze-Delitzsch and the cooperative movement as a whole. His friendship with Lasalle continued until the latter violently attacked the Progressive party.

The social question Duncker considered a chain of diverse problems to be solved by political measures of an economic as well as social character. Since the patriarchal relationships of the guild system were broken and could not be restored, Duncker insisted that employers and employees must cooperate in their common tasks. Together with Max Hirsch (q.v.) he strongly opposed the socialist insistence that the labor unions then being formed should be hostile to capital. The two men were the spiritual fathers of the Gewerkvercine, which came to be known as Hirsch-Duncker trade unions in contradistinction to the "free" socialist unions and the Christian unions. Addressing the delegates to the Gewerkvereine organization meeting in 1868 Duncker said that their movement was "not a class struggle but a defense of their just rights aiming at the establishment of sound and lasting peace; for social war works solely for the foes of freedom and the fatherland and injures the welfare of all classes, while class cooperation places the freedom and welfare of the fatherland upon sure and lasting foundations."

G. Briefs

Consult: Duncker, Karl, Franz Duncker: Lebensbild eines Volkesfreundes (Leipsic 1888); Gleichauf, W., Geschichte des Verbandes der deutschen Gewerkvereine (Hirsch-Duncker) (Berlin 1907).

DUNCKER, MAXIMILIAN WOLFGANG (1811-86), Prussian historian, politician and patriot. Duncker was the son of the famous Berlin publisher Karl Duncker and studied at Bonn and Berlin under Ranke, Ritter, Boeckh, Savigny and Hegel. He was a member of the Frankfort National Assembly of 1848 and later held the post of director of the Prussian state archives; for many years he was a close confidential adviser to Crown Prince Friedrich Wilhelm and one of the most active contributors to the *Preussische Jahrbücher*. A prolific publicist and ardent politician, Duncker stood in the midst of the movements that led to the unification of Germany and the establishment of the empire.

Duncker faced problems in the philosophy of history and political science as boldly as situations in practical politics. He felt it necessary not to separate his interest and activity in current affairs from his scientific research into the history of the ancient world. Thus he was acquainted with the spirit of all ages: antiquity, mediaeval and modern times. Peoples from India to England and of the remotest past as well as of the immediate present were of equally great interest to him. His Geschichte des Alterthums (4 vols., Berlin 1852-57, 5th ed. 9 vols., Leipsic 1878-86; tr. by E. Abbott, 6 vols., London 1878-82), which stands between Heeren's and Eduard Meyer's presentations and was written at a time when research into the history and culture of the ancient Orient was just beginning, takes up the migrations of peoples, the forms of their political and social organization and their political and religious struggles. His work is historically rationalistic, moderately liberal, full of a strong ethos, temperate but spirited, not always profound or critical. It has been criticized in many respects but for a long time held its place beside the works of Grote and Curtius and has been translated into several foreign languages.

WILHELM WEBER

Consult: Haym, R., Das Leben Max Dunckers (Berlin 1891); Westphal, Otto, Welt und Staatsauffassung des deutschen Liberalismus (Munich 1919) p. 64-70; Heller, H., Hegel und der nationale Machtstaatsgedanke in Deutschland (Berlin 1921) p. 182-85; Max Duncher, politischer Briefwechsel aus seinem Nachlass, ed. by J. Schultze (Leipsic 1923).

DUNNING, T— J— (1799-1873), English trade unionist. He was one of the group instrumental in the transformation of the "general" Owenistic unionism into the efficiently organized bargaining unionism of the second half of

the nineteenth century and in the formulation of its philosophy. As secretary of the London Consolidated Society of Bookbinders from 1843 on he participated in the practical work of organization, such as the formation of the London Trades Council, and as ally in the work of the Junta for the legalization of trade unionism as well as in the limited political program of the Labour Representation League, formed in 1869. As editor of the Bookbinders' Trade Circular he helped explain to the public as well as to trade unionists the basic principles of the newer unionism. His position of leadership was recognized in his appointment in 1860 to the celebrated Committee of Inquiry into Trade Societies set up by the Social Science Association.

A further important contribution was a pamphlet published by himself (London 1860) entitled Trades Unions and Strikes: Their Philosophy and Intention. This emphasized the necessity of a conciliatory policy limited to purely trade interests and based upon an acceptance of the "law" of supply and demand as applied to wages. But he urged that the effect of the law be mitigated by methods of mutual insurance and limitation of supply. The pamphlet has been hailed by the Webbs as "the best presentation of the Trade Union case which any manual worker has produced" (p. 188) and is still cited in controversial material on collective bargaining. It contained a criticism of the wage fund doctrine which gained the respect although not the adherence of John Stuart Mill.

Frances E. Gillespie

Consult: Webb, S. and B., The History of Trade Unionism (London 1920).

DUNNING, WILLIAM ARCHIBALD (1857-1922), American historian and politicat scientist. As teacher of history and political philosophy at Columbia University from 1886 to 1922 he exerted a profound influence on American scholarship, directing, especially in his seminars, the investigations of many students who later were to become outstanding authorities in their fields (see Studies in Southern History and Politics; Inscribed to William Archibald Dunning . . . by His Former Pupils, the Authors, ed. by J. W. Garner, New York 1914, and A History of Political Theories, Recent Times; Essays . . . Contributed by Students of the Late William Archibald Dunning, ed. by C. E. Merriam and H. E. Barnes, New York 1924). He was one of the founders of the American Historical Association and of the American Political Science Association and from 1894 to 1903 was managing editor of the *Political Science Quarterly*.

His doctoral dissertation, The Constitution of the United States in Civil War and Reconstruction 1860–1867 (New York 1885), was followed by Essays on the Civil War and Reconstruction (New York 1898, rev. ed. 1904), A Little More Light on Andrew Johnson (Cambridge, Mass. 1905), More Light on Andrew Johnson (New York 1906) and by his volume in the American Nation series on Reconstruction, Political and Economic, 1865-1877 (New York 1907). By his detached objective treatment he succeeded in removing the many prejudices which hitherto had prevented an accurate analysis of the reconstruction period, and by his influence on other scholars he cleared the way for a thoroughgoing reinterpretation. In 1914 he brought out a notable volume entitled The British Empire and the United States (New York), which contained a survey of Anglo-American relations during the hundred years of peace following the Treaty of Ghent.

It was in the field of political theory, however, that Dunning's most important literary contributions were made. These included A History of Political Theories, Ancient and Mediaeval (New York 1902), which contained a brilliant analysis and evaluation, with complete freedom from dogmatism, of the doctrines and philosophy of the more important political writers from Plato through Machiavelli. This volume was followed by A History of Political Theories from Luther to Montesquieu (New York 1905) and A History of Political Theories from Rousseau to Spencer (New York 1920). The conclusion reached by the author is somewhat pessimistic-perhaps not altogether borne out by the body of the work itself-in its skepticism as to whether during the twenty-three centuries from Plato to Spencer there was any appreciable advance in the solution of the problems of political philosophy. The three volumes, which in large measure have superseded the work of Bluntschli and earlier authorities, caused Dunning to be recognized as the outstanding American scholar in this field and have been in large part responsible for the increased attention now paid to the subject in American universities.

JAMES WILFORD GARNER

Consult: American Historical Review, vol. xxviii (1922-23) 174; Merriam, C. E., "William Archibald Dunning" in American Masters of Social Science, ed. by Howard W. Odum (New York 1927) ch. v.

DUNOYER, BARTHÉLEMY CHARLES PIERRE JOSEPH (1786-1863), French economist. As editor of the Censeur from 1814 to 1816 and of the Censeur européen in 1818-19 Dunoyer, with his collaborator Charles Comte, struggled against the aristocratic authoritarianism of the Restoration government. While other opponents of this attempted absolutism were arguing from "metaphysical" theories of sovereignty and of natural rights, Dunoyer urged a doctrine based on the social necessity of granting the maximum of opportunity to the producing class. Not only must the principle of laissez faire be strictly observed, but government must be transformed into a mere subsidiary institution, in effect the servant of industry. The establishment of the bourgeois monarchy in 1830 satisfied Dunoyer, the more so because it offered a bulwark for industry against the rising socialist and revolutionary factions. Dunoyer joined the government, assuming office as prefect in 1830 and as councilor of state in 1838. The great treatise of his maturity, De la liberté du travail (3 vols., Paris 1845), which appeared as a revision of a work first published in 1825, was a defense of the old economic liberalism against the new democracy.

In anticipation of Spencer, Dunoyer here developed the idea that society was an organism, in which it fell to the lot of a congeries of institutions and individuals to perform specific functions. The function of government was the preservation of order, and to this role, which in the Censeur he had minimized or overlooked, he now assigned vital importance. To justify the work of government officials as well as of those supporters of the bourgeois monarchy who were drawn from the professional classes Dunoyer extended the classical concept of product to include the "immaterial" product, or service; in this he followed J. B. Say, Germain Garnier and Destutt de Tracy. The *Liberté* was emphatic in denying the wisdom of governmental intrusion into economic affairs, particularly for the purpose of relieving the laboring class. Laborers were born in natural bondage, and with the utmost extraneous assistance could never hope to achieve genuine liberty, which Dunoyer defined as the power to make free and intelligent use of faculties. Pointing to the Malthusian law he showed that any diversion of wealth to the lower classes must inexorably diminish the proportion between population and subsistence. With these substantiating arguments he declaimed against public education, universal

suffrage and charity. After the Revolution of 1848 Dunoyer's qualified and specific liberalism submitted to a new modification and manifested itself in *Le second empire et une nouvelle restauration* (2 vols., London 1864) as a legitimism, an appeal for the return of the Bourbons.

ERNEST TEILHAC

Consult: Villey-Desmeserets, E. L., L'oeuvre économique de Charles Dunover (Paris 1899); Allix, E., "La déformation de l'économie politique libérale après

J. B. Say: Charles Dunoyer" in Revue d'histoire économique et sociale, vol. iv (1911) 115-47; Mignet, F. A., Nouveaux éloges historiques (Paris 1877) p.

239-84.

DUNS SCOTUS, JOHN (Doctor Subtilis) (1266–1308), scholastic philosopher. Scotus was born in Scotland. At an early age he entered the Franciscan order and was sent first to Oxford, where he soon became famous as a teacher of philosophy and theology, then to Paris and finally to Cologne.

Scotus is important in the history of political science as one of the pioneers of modern social theory. His doctrines bear a strong resemblance to the later teachings of Locke. Scotus' account of the social contract is a philosophic analysis of the origin of society. Society, he held, was naturally organized into family groups; but when paternal authority was unable to enforce order, political authority was constituted by the people. Accordingly all political authority is derived from the consent of the governed.

Concern for the public welfare is the basis of Scotus' economic doctrines. He regarded private property as a product of positive rather than natural law and insisted that property must not be administered in a way detrimental to the community. He formulated principles for the equitable employment of various commercial contracts, and while he accepted the current conception of a just price he recognized the social importance of a merchant class.

Scotus' chief importance, however, lies in the contrast of his teaching to that of his great Dominican predecessor, Thomas Aquinas, whose philosophical system was intended to harmonize Aristotelian doctrine with the traditional theology of the Catholic church. His philosophy is much less strictly Aristotelian than Aquinas' and he blends with the peripateticism almost universally accepted in the late thirteenth century many elements, Platonic rather than Aristotelian in origin, derived from the earlier Augustinian scholasticism, to which the Franciscan order continued to adhere. There is also in Scotus a dis-

tinctly empirical strain of thought reminiscent of Roger Bacon, particularly in his theory of cognition, the most penetrating and mature attempt made by the mediaeval mind to solve the epistemological problem. Another important point in which Scotus' teaching differs from that of Thomas Aquinas is his insistence upon the primacy of the will over the intellect. His theory of volition is original and surprisingly modern in spirit, a great advance in psychological analysis over the intellectualism of Aquinas with its deterministic implications. In theology it is interesting to note that Scotus upheld the doctrine of the Immaculate Conception, which was rejected by Aquinas. Scotus' doctrine has since become a dogma of the church.

C. R. S. HARRIS

Works: The most complete edition of Scotus' works, the authenticity of many of which are doubtful, is that by Luke Wadding, 26 vols. (new ed. Paris 1891–95).

Consult: Harris, C. R. S., Duns Scotus, 2 vols. (Oxford 1927); Longpré, E., La philosophie du bienheureux Duns Scot (Paris 1924); Werner, K., Die Scholastik des späteren Mittelalters, 4 vols. (Vienna 1881–87) vol. ii; Sharp, D. E., Franciscan Philosophy at Oxford in the Thirteenth Century (London 1930) p. 270–368; Taylor, II. O., The Mediaeval Mind, 2 vols. (4th ed. New York 1925) vol. ii, ch. xliii; Schreiber, Edmund, Die valkswirtschaftlichen Anschaumgen der Scholastik seit Thomas v. Aquin (Jena 1913) p. 146–60.

DUPLEIX, JOSEPH (1607-1763), French colonial administrator. Dupleix revolutionized the policy of the European powers during the critical period of their expansion into India and the Far East. Taking advantage of temporary French superiority of sea power in Indian waters he was able by means of skilful diplomatic intervention among the Indian princes to make himself the leading European influence in India. He changed the hitherto merely commercial interests of the French and British East India companies into a rivalry for territorial and political control. His ambition developed from the conviction that he could extend French influence beyond the coastal trading ports into the interior and erect there a political hegemony which would not only pay its own way but also vastly expand trading opportunities and produce for France and the French East India Company a revenue "fixe, constant et abondant."

Until 1740 the French and British companies had pursued a policy of trade only, avoiding interference in the internal political affairs of India and remaining neutral in the European conflicts of their respective governments. But on the eve of the War of the Austrian Succession,

when the decay of the Mogul power and a Persian invasion rendered opportunity favorable, Dupleix departed from the narrowly commercial policy and boldly supported pretenders to the thrones of the Carnatic and the Deccan. Employing money and native soldiers trained and armed by Frenchmen Dupleix made his protégés rulers of these Indian states. He then succeeded by the capture of Madras in confining the British footing in the Carnatic to a single stronghold; it seemed that all India lay within the grasp of France. Dupleix, a born diplomatist, ambitious, enterprising, at his best in adversity, effectively aided by his wife and the soldier diplomatist Bussy, now contemplated intervention at Delhi and the consolidation of French power by extensive territorial acquisitions.

Reasons for his failure are controversial. Conventionally assigned to the incompetence and corruption of the French government, to the indifference of the East India Company, to jealousies, to avarice, to the quarrel with La Bourdonnais, it seems more probable that the failure resulted from the inadequacy of his resources. India was not "rich" in the sense that Europe then believed. His measures did not pay their own way even though he diverted money sent by the company for other purposes. The French company was not, contrary to common belief, markedly inferior to its British rival in supporting its Indian agents but had neither the vision nor the capacity for imperial adventure. Dupleix, unwilling to be handicapped by the long delays involved in detailed communication with the company in Paris and excessively confident in the speed with which he could achieve success, did not take the company into his confidence; he failed to distinguish effectively between personal and public interests and he could not stem the tide of demoralization caused among his assistants by sudden wealth. In his military operations he made the serious mistake of dividing his forces. His early successes, both diplomatic and military, led him to underrate the tenacity with which the British would cling to their Indian trade and the keenness with which Lawrence and Clive would eventually adopt his own methods. Overconfident in the logical and theoretical soundness of his policy Dupleix discounted the absence of enthusiasm and support among his fellow countrymen and ignored the persistent and practical determination of the British.

LAURENCE B. PACKARD

Consult: British India 1407-1858, Cambridge History

of India, vol. v (Cambridge, Eng. 1929); Cultur, Prosper, Dupleix: ses plans politiques: sa disgrace (Paris 1901); Dodwell, H. H., Dupleix and Clive: the Beginning of Empire (London 1920) p. 3-113; Kelleran, René de, "Dupleix et Clive" in Revue de l'histoire des colonies françaises, vol. ix (1921) 99-122; Guénin, E., Dupleix d'après des documents inédits . . . (Paris 1908); Lavisse, E., Histoire de France, 11 vols. (Paris 1903-11) vol. viii, pt. ii; Martineau, A. A., Dupleix et l'Inde française-1732-1754, 4 vols. (Paris 1920-28).

DUPONT DE **PIERRE** NEMOURS. SAMUEL (also Du Pont de Nemours) (1739-1817), French economist and statesman. With characteristic versatility and inability to delimit his interests the youthful Dupont de Nemours considered the army, studied natural science, began to prepare for medicine and wrote poetry. His almost chance publication at the age of twenty-four of Réflexions sur l'écrit intitulé: richesse de l'état (Paris 1763) won the attention of Quesnay and of Mirabeau and turned him definitely toward economics. Dupont attached himself to the group of économistes headed by Quesnay; in 1765 and 1766 he edited the Journal de l'agriculture and from 1768 to 1772 the Ephémérides du citoyen. It was in these reviews and during Dupont's editorship that many of the inchoate principles of physiocracy were clarified, developed or given final form. Typical of the scope of the reviews was the variety of Dupont's own numerous contributions, which included a sketch of the history of economics, a clear sighted analysis, anticipating Malthus, of the relation between population and subsistence, schemes of equitable taxation, diatribes against the restriction of the grain trade, logical demonstrations of the economic wastefulness of slavery, ambitious plans for universal education, castigations of commercial monopolies and expositions of physiocratic theory, sometimes admirable for their conciseness, sometimes passing into lofty excursions in the realm of natural philosophy. When his intimate friend Turgot was appointed to the ministry in 1774, Dupont entered the government as his confidential adviser; and later under Vergennes he held a post, which was little to his liking, as minister of internal commerce and official in the "department of the balance of trade." Vergennes also dispatched him on two important diplomatic missions, first in 1783 to discuss with English delegates the question of American independence, then in 1786 to negotiate the Anglo-French commercial treaty, in which for once his thwarted desire to see the principles of economic liberalism realized

was partially satisfied. He sat in the Assembly of Notables and during the revolution represented the bailiwick of Nemours, for which he drew up an unusually original cahier, in the Constituent Assembly. Here he fought successfully for the suppression of indirect as well as of abusive taxes and unsuccessfully for sound currencythat is, against the assignats. Although he had long since rejected the physiocratic doctrine of "legal despotism" he still harbored a genuine dread of popular tyranny; hence he soon came under the suspicion of the more progressive revolutionists and after August 10, 1792, when he defended the monarchy, he was forced into hiding. A vicissitudinous career under the Directory ended with his removal in 1799 to America, which to him as to so many other Frenchmen of his time seemed to offer refuge from political persecution, success for commercial enterprise and an invitation for the launching of ambitious social reforms. In 1802 he returned to France and occupied himself with writing until 1815, when he finally settled in America.

It was Dupont de Nemours who first applied the name of physiocracy to the doctrines of Quesnay's school, in a work entitled *Physiocratic* ou constitution naturelle du gouvernement le plus avantageux au genre humain (2 vols., Leyden 1768), which represented a collection of articles by Quesnay preceded by a notice by the editor. Among his other works dealing with physiocracy were De l'origine et des progrès d'une science nouvelle (Paris 1768; new ed. by A. Dubois 1910), published as an abridgement of L'ordre naturel by Mercier de la Rivière; Du commerce et de la Compagnie des Indes (Amsterdam 1769); Tableau raisonné des principes de l'économie politique (Karlsruhe 1775); and Mémoires sur la vie et les ouvrages de M. Turgot (Paris 1782, 2nd ed. Philadelphia 1788), which he later supplemented by a complete edition of Turgot's works (9 vols., Paris 1808-11). In all these works his dominating purpose was to represent the ideas of Quesnay; yet as he grew more mature he was forced to qualify, gently, it is true, his acceptance of Quesnay's central doctrinethe produit net. The aspect of physiocratic theory to which he felt most strongly attracted was its liberalism, in which he saw expressed the immediate corollary of natural philosophy. Indeed, while with unsurpassed vigor he hailed political economy as a new science he never tired of pointing out the essential relation of its principles to the general conception of the world

which had been epitomized in the laws of nature. His conviction that the free operation of those laws would usher in undreamed of prosperity and happiness was equaled only by his awareness of contemporary social evils. At the time of his death Thomas Jefferson, who had been his correspondent for almost twenty years, wrote, "His object never varied, that of the general good."

ROGER PICARD

Consult: Schelle, G., Dupont de Nemours et l'école physiocratique (Paris 1888), containing complete bibliography of Dupont's works; Weulersse, G., Le mouvement physiocratique en France, 2 vols. (Paris 1910); Lioret, G., "Dupont de Nemours, député aux Etats Généraux et à l'Assemblée Constituante" in Société historique et archéologique de Gatinais, Annales, vol. xxxii (1914-15) 1-77; Cuny, L., Le rôle de Dupont de Nemours en matière fiscale à l'assemblée constituante (Paris 1909); Jefferson, Thomas, Correspondence between Thomas Jefferson and Pierre Samuel Dupont de Nemours, 1708-1817, ed. by Dumas Malone and tr. by E. L. Lehman (Boston 1930); Dupont de Nemours, P. S., Un épilogue du neuf thermidor: Lettres de Du Pont de Nemours écrites de la prison de la force, ed. by Gilbert Chinard (Paris 1929); Carl Friedrichs von Baden brieflicher Verkehr mit Mirabeau und Du Pont, ed. by Badische Historische Commission, 2 vols. (Heidelberg 1892), with introduction by Carl Knies.

DUPONT-WHITE, CHARLES (1807-78), French economist. A man of wealth, aristocratic tastes and rare conversational talents, Dupont-White lived during most of his life in a studious and literary retirement at Paris. His disciple, the Belgian sociologist Emile de Laveleye, has shown that he developed, probably independently of the Germans, who have sometimes been regarded as its originators, and more than a decade before the Congress of Eisenach (1872), the essential ideas of state socialism or socialism of the chair. As presented in the two most important of his numerous works, L'individu et l'état (Paris 1857) and La centralisation (Paris 1860), his doctrine was an exaltation of the role of the state founded on the thesis that the state alone possesses the right and the power to guide the forces of progress. The individualist assumption, which placidly declared the "interest of one to be the interest of all," was demonstrably false; the political counterpart of that assumption, the notion that the duty of the state was fulfilled by its preservation of a legal equality, was no more than a specious pretension to justice. Unless the state should intervene to adjust the physical, intellectual and economic disparities among men, progress, defined as the re-

lease of the human personality, must remain at best partial, at worst completely unrealized. Inequality was nowhere more apparent than in economic relations; Ricardo's theory of wages and Mills' iron law (Dupont-White was a thorough student of both economists) were in themselves irrefutable testimony of the necessary degradation of the worker under a laissez faire regime. Although with a characteristic diffidence before practical solutions he confined himself to suggesting as remedies popular education, public workshops and insurance and new norms of taxation, his program proceeded from the well sustained thesis that the state was the rightful arbiter of economic distribution. The state was more than an instrument directing transitional stages of progress; the perfected society, if that could be envisaged, could exist only by virtue of extreme intervention. An idealist like later state socialists in that he departed from an abstract conception of the state and of social justice, he resembled them also in making concessions to the historical method. He admitted, for instance, that the sphere of the state should vary from nation to nation, depending upon national psychology and traditional institutions. He was essentially a speculator, viewing transient political situations with a detachment so complete that he could develop his exalted idea of the state during the very period when the Second Empire was pursuing its highly arbitrary and to him utterly unjustified policy. Hence while the liberals, preoccupied with the immediate problem of curbing autocracy, were clutching the idea of devolution as a panacea, Dupont-White was presenting cogent arguments in favor of centralization as a corollary of his conception of state intervention. His influence upon contemporary politics remained correspondingly slight.

GEORGES WEILL.

Consult: Laveleye, É. de, Essais et études, 3 vols. (Paris 1894-97) vol. iii, p. 245-68; Spriet, H., Dupont-White (Paris 1900); Michel, H., L'idée de l'état (Paris 1895) p. 572-78.

DUPRÉ DE SAINT MAUR, NICOLAS FRANÇOIS (1695-1774), French economist and statistician. Dupré de Saint Maur entered the administration of finances and became a member of the Court of Accounts. In 1733 he was elected to the French Academy because of his prose translation of Milton's Paradise Lost (3 vols., Paris 1729). In the two of his books which are of economic interest, Essai sur les monnoies; ou réflexions sur le rapport entre l'ar-

gent et les denrées (Paris 1746) and Recherches sur la valeur des monnoies, et sur le prix des grains, avant et après le concile de Francfort (Paris 1762), he patiently compiled and shrewdly annotated a mass of facts and statistics. These deal chiefly with the names and weights of the principal European moneys and the relation between wages and prices; they cover especially the period from 1002 to 1745. His calculations with regard to the population of France and the distribution of land were frequently cited by physiocratic writers. In his Essai he presents at great length the ideas of John Locke on money and interest and his exposition probably aided considerably the introduction of the Englishman's views into France. Dupré de Saint Maur also composed some mortality tables which Buffon inserted in his "Histoire naturelle de l'homme" (in his *Histoire naturelle, générale et* particulière, vol. ii, Paris 1749, p. 589-603) with the comment that they were the only tables then available "on which one can establish the probabilities of human life in general with some degree of certainty."

Louis Vigouroux

DUPUIT, ARSÈNE JULES ÉTIENNE JUVENAL (1804-66), French civil engineer and economic theorist. Dupuit made important contributions to the development of waterworks and highways as a government engineer and in his technical treatises. As an outgrowth of these activities he became interested in certain problems of utility and monopoly which he elucidated in two articles, "De la mesure de l'utilité des travaux publics" and "De l'influence des péages sur l'utilité des voies de communication," which appeared in Annales des ponts et chaussées (2nd ser., vol. viii, 1844, p. 332-75, and vol. xvii, 1849, p. 170-248). With a view to measuring the utility obtained through a particular transaction by an individual purchaser Dupuit evolved a theory of the gradation of utility which he expounded with the aid of geometrical diagrams. He compared what he called absolute utility, the amount which a purchaser is just willing to give for a certain increment of a commodity, with the actual selling price paid or payable. Utility (relative utility) is then defined by him as the difference between the absolute utility and the selling price and is designated as utility profit. It corresponds to Alfred Marshall's consumer's rent. Except for W. F. Lloyd, Dupuit was probably the first to comprehend clearly the economic theory of utility, and with

the exception of Cournot he was the first to use a demand curve. His work was probably done entirely independently of these other men. Dupuit thus became one of the pioneers in both the psychological and mathematical fields of hedonistic economics.

Dupuit also maintained that a private monopoly will charge for articles the price the consumer will bear but that a government seeking the maximum advantage to the public on public roads, canals or railways will in general maintain lower prices than a private monopoly.

Dupuit's later economic writings included "Du principe de propriété: le juste, l'utile" (in Journal des économistes, 2nd ser., vol. xxix, 1861, p. 321-47), in which he discussed the origins, legal sanctions and social implications of various property relations and sharply challenged the natural law theory of property; La liberté commerciale, son principe et ses conséquences (Paris 1861); and "De l'utilité et de sa mesure" (in Journal des économistes, vol. xxxvi, 1853, p. 1-27). For a bibliography of his scientific works see Titres scientifiques de M. J. Dupuit (Paris 1857).

OTTO KÜHNE

DURAN Y BAS, MANUEL (1823–1907), Spanish statesman and jurist. Duran y Bas studied at the University of Barcelona, where he became a professor of mercantile law. He was subsequently chosen dean of the faculty of law and rector of the university.

Educated in the principles of the historical school of Savigny, Duran y Bas regarded law as a spontaneous expression of a nation's will. He strongly opposed the suppression of native law and the imposition of an alien legal system. Accordingly, he became a strong protagonist of Catalonian regionalism, a movement to which he contributed a doctrinal stimulus by drawing attention to the institutions and customs of private law in Catalonia, especially the law of property and the family. He edited the first volume of a résumé of Catalonian law entitled Memoria acerca de las instituciones del derecho civil de Cataluña (Barcelona 1883), in which he explained the customary law of his province with great lucidity. He also endeavored to revive the Catalonian language as a cultural medium and was instrumental in having chairs of Catalonian law and literature established at the University of Barcelona.

In 1898 he was one of the initiators of the great campaign for home rule, which demanded

administrative and political autonomy for Catalonia. The following year, when the Silvela cabinet sought a settlement of this question, Duran y Bas was appointed minister of justice. Shortly afterwards he resigned because he felt that the government's plan for administrative decentralization was not sufficiently far reaching.

FERNANDO DE LOS RÍOS

Works: His studies are collected in Escritos del... Manuel Duran y Bas, 2 vols. (Barcelona 1888-95). Consult: Riba, Prat de la, in R. Academia de Juris-

Consult: Riba, Prat de la, in R. Academia de Jurisprudencia y Legislación, Madrid, *Jurisconsultos* españoles, 3 vols. (Madrid 1911-14) vol. i, p. 283-98.

DURAND, GUILLAUME (Duranti, Durandus) (1237–96), French theologian and jurist. He studied law at Bologna under Bernardo da Parma and Henrico da Susa. Later he taught canon law at Modena and held numerous important ecclesiastical offices.

He was known as the Speculator from the title of his chief work, the Speculum judiciale (3 vols., Strasbourg 1473; new ed. Turin 1578), which Savigny said was one of the most important sources for the history of law. This work, which was an amplification of a chapter of his earlier work, Speculum legatorum, became a textbook of juridical education in Europe for the next two centuries. It is a four-volume treatise on procedure in both the canon and the civil law. The first volume treats of the judicial personnel, including judges, lawyers and witnesses; the second discusses civil procedure, especially in the Papal States; in the third volume Durant deals with criminal procedure with a thoroughness unknown in other works of the period; the fourth is a sort of civil code and includes a survey of contracts. The theoretical and practical aspects of the law are so well combined in the Speculum judiciale that it served as a summary of the canon and civil law as it stood in the second half of the thirteenth century. Johannes Andreae, Baldus and Alexandre de Nevo were among the many who wrote glossaries and commentaries on it. The other juridical works of Durant are Breviarium, sive repertorium glossarum et textuum juris canonici, also known as the Breviarium aureum (Rome 1474, new ed. Paris 1519), a collection of the opinions of canonists upon controversial questions arranged according to the plan of the decretals; and the Commentarius in sacrosanctum lugdunense concilium (Fano 1569), an exposition of the decisions of the council of Lyons of 1274.

The Rationale divinorum officiorum (Mayence

1459, new ed. Naples 1866) enjoyed as great a reputation and influence as the *Speculum*. It deals with the rules of liturgy and incidentally reveals a Gallican tendency to uphold the temporal independence of the king of France together with a strong adherence to the doctrine of papal absolutism within the church. Book 1 of the *Rationale* has been translated as *The Symbolism of Churches and Church Ornaments* (by J. M. Neale and B. Webb, Leeds 1843; 3rd ed. London 1906) and book 111 as *The Sacred Vestments* (by T. H. Passmore, London 1899).

Consult: Le Clerc, J. V., "Guillaume Duranti" in Histoire littéraire de la France, vol. xx (Paris 1895) p. 411-97; Schulte, J. F. von, Die Geschichte der Quellen und Literatur des canonischen Rechts, 3 vols. (Stuttgart 1875-80) vol. ii, p. 144-56; Savigny, F. K. von, Geschichte des römischen Rechts im Mittelalter, 7 vols. (2nd ed. Heidelberg 1834-51) vol. v, p. 571-602; Tardif, A. F. L., Histoire des sources du droit canonique (Paris 1887) p. 324-25.

DURANDUS. See DURAND, GUILLAUME.

DURAN'II. See Durand, Guillaume.

DURESS is the technical term for force in legal relations; it ordinarily applies to wrongful menaces which inspire fear. It has been noted from very ancient times that many apparently voluntary actions are not expressions of a real wish of the actor but are caused by the force or fraud of another person. These two notions, force and fraud, are coupled even in early legal references, although they are quite different. In the case of fraud it may be assumed that the actor was beguiled into desiring at least temporarily a course of conduct later found to be harmful. In the case of force it cannot be supposed that he ever desired it, except in order to avoid a worse evil.

In ancient societies magic was recognized as a force which might act coercively and directly on the human will. In such societies, as also in the case of some Greek communities, where the only obligatory transaction was based upon an oath, the fact of duress would not normally be relevant. Taking an oath called into existence new forces which were quite independent of the human participants. An oath might indeed be disallowed by the god by whom it was sworn or by a counter-ritual but in scarcely any other way. The one who had compelled the oath might be punished without lessening the binding character of the oath itself.

The problem of duress was first solved at

Rome in a similar manner by a penal sanction against the person guilty of duress. The obligation created by it remained unaffected. Quite early, however, special provision was made that certain acts had to be done freely or willingly; it may be assumed that otherwise they had no effect. The law of Solon which made testamentary disposition possible gave validity to the disposition only if it had not been procured by magic, force or undue influence. It was the first clear known case in which an uncoerced will was itself a prerequisite of a valid transaction. Neo-Babylonian contracts expressly declare that they are entered into "to satisfy the heart" of the parties. Similar phrases are found in Greek contracts even before the fourth century. There are, besides, unequivocal statements in both Plato and Aristotle refusing all moral and legal effect to transactions entered into through force. There seems, however, to be no statutory declaration of the principle and no specific technical remedy by which redress may be obtained is stated. When written documents created a sense of obligation by writing alone, it was easy to preclude the question of duress by an acknowledgment in advance that the engagement was freely and voluntarily made. Evidently such an acknowledgment could itself be obtained by duress.

Duress is an important problem in criminal as well as in civil law. Not only may it inflict wrong but it may compel a man to do wrong. Long before a distinction was attained between what are now called the criminal and civil sides of legal administration, it had become apparent that not all doers of harm were equally guilty morally. Crimes committed under the threat of serious and immediate physical force are accordingly free from punishment in whole or in part, much as injuries done by accident or in self-defense. Indeed, the compelled crime is a sort of selfdefense, since it implies that it is done to save the accused from injury, usually from death. Duress as a defense will therefore be inadmissible only when the legal system imposes a higher duty than that of self-preservation. An example is the pre-Talmudic Jewish law which allowed duress as a defense except in cases of murder, incest or idolatry. In these three crimes it was assumed that rather than commit them a man must be willing to die. The matter is still in doubt at the present time under special and exceptional situations. Nowhere in civilized countries today is duress a defense to a murder charge or to most crimes, unless the act is directed against the author of the force.

While the doctrine of physical duress has been widely recognized in criminal law, the significance of economic pressure has rarely been taken into account. During the Middle Ages, however, crimes against property could be excused by need: St. Thomas declared that for a starving man to take the property of another in order to save his own life was no theft. In modern times, with the greatly increased importance of private property, the use of economic duress as a defense in criminal accusations is regularly rejected, although it was occasionally admitted by radical courts such as that of the "good judge" Magnaud. It is likely, however, that where such duress is established it has a definite effect on the court even if it is theoretically treated as inadmissible.

In the field of contract the economic duress that consists in exploiting another person's necessities was the common rationalization of the popular opposition to usury in ancient and relatively recent times and was the basis of the principle of lesion in contracts which was introduced into the Roman law and which most civil law systems have adopted in a generalized form. In its simplest form it invalidates contracts of sale in which the seller has been forced to part with his goods at a price far below their "real value." The counterpart of this, the legal and moral objection to an exorbitant price by the seller, was not Roman but was introduced into European law during the Middle Ages with the doctrine of the just price and the violent opposition to forestallers and regraters. The action of employers who consciously exploit the economic necessity of their employees to their own advantage by reducing wages to the verge of subsistence was not until recently felt to be duress, nor could obligations assumed under such circumstances be lawfully repudiated. The doctrine that economic duress invalidates labor contracts has been greatly extended by the growth of labor organization and the spread of socialist theory; it has been made the basis of the right to strike and of the voidability of all labor contracts in the interests not only of the particular laborer but in the general interests of the labor organization to which he belongs. The great majority of jurists have never admitted this contention, however, and have treated the doctrine as an inexcusable attack upon contractual obligation.

In its more technical aspects duress had a very special history both at Roman law and at the common law. The publicity attaching to such transactions as the early will or conveyance left

little opportunity for duress, and the special importance of form made it impossible to suppose that even an extorted stipulation was inherently void. Protection had long been granted by the praetor against violent disturbance of possession, but it was apparently not until about 71 B.C. that a practor first granted a penal action of which the effect was to neutralize the advantage obtained by duress. Shortly afterward duress became a defense in suits and ultimately the praetor permitted recovery of property or of the advantages surrendered under compulsion. In transactions requiring a definite act on the part of the person threatened, either to establish or to execute the contract, the Romans held that a choice made under duress was still an act of volition and had to be specifically set aside in order to be rendered invalid. Duress as a ground for the setting aside of wills was not known, for in addition to their publicity and formality wills could in most cases be revoked as soon as the duress ceased.

As to the character of the duress itself, the lawyers formulated the doctrine that the duress exercised must be such as to intimidate not a mere reasonable man but a man of especially firm character (constantissimus). In practise the duress recognized was similar to that acknowledged in other systems, and the Roman criterion was perhaps no more than a warning that the defense of duress must not be abused.

During the Middle Ages a doctrine of duress much less developed than the Roman was derived from Germanic custom. It was apparently confined to actual force or to threats of death or mutilation, accompanied by acts of physical torture. It was not until the tenth or eleventh century that the Roman theory, under which threat of a present evil of possibly diverse forms was sufficient, was gradually accepted.

To the canonists the question of duress was sometimes associated with the theological dogma of the freedom of the will, but the authority of St. Thomas was thrown on the side of the Roman doctrine. In the main the canon law jurists adopted principles which in their most general phrasing could easily have covered the broadest application of duress that has at any time been attempted.

The common law courts dealt precisely and sharply with obligations or transactions that were obtained by force. Bracton in the thirteenth century declared them void, borrowing the terminology of the Roman law. The *Year Books* furnish frequent examples of cases in which the

Duress

plea of duress was made and sustained. Chancery from the beginning offered concurrent aid to persons who had been forced into making deeds or surrendering property.

The question soon had to be centered on the type of duress employed. It is frequently asserted that the Roman rule as stated in Bracton was liberalized and broadened so that the test for duress changed gradually from that which would affect a brave man to that which would move the reasonable man. But it is difficult to see how the Roman rule as it appears in practise differed from the later common law rule as applied even in very recent times. Threat of death was certainly enough to invalidate a transaction in any system and apparently threat of imprisonment was sufficient, although there were contrary views on this point in early common law. It was clearly sufficient in Roman law. Force, however, that fell short of threats of death, mutilation or imprisonment was insufficient at common law and Blackstone states unqualifiedly that fear of battery was not duress. This, if anything, was a harsher standard than the Roman and it was certainly much harsher than that which had long prevailed in continental Europe. Ultimately, the value of this type of defense must rest not upon knowing what threats have been used but upon the evidence which the courts will demand before they will believe that these threats were effective. A sound instinct accordingly induced the Romans to drop the term force (vis) and confine the idea to the effect of the fear (metus). This change made it possible to give relief whether the duress had been caused by the party to the action or by a stranger, a result which the common law also reached after some hesitation and struggle, although in a somewhat limited form.

Duress of goods, involving merely threats against property, did not receive sympathetic recognition from the courts. If the threatened seizure or withholding of goods was wrongful, the party affected appeared to have legal redress and need not purchase security by incurring a new obligation; such redress, however, is in many cases illusory. Relief is frequently granted in both England and America despite the positive statements of earlier English cases to the contrary, and some of the instances of relief are quite early.

The present scope of duress has been extended to cover also such matters as abuse of legal process and threats of civil or criminal prosecution, even where a case could be made out for prosecution. Obviously bad faith must be demonstrated

in these cases and the courts will undoubtedly be chary of finding a malicious purpose where the act itself is lawful.

A type of duress known as "undue influence" has since the time of Solon been taken into account for certain transactions, such as wills. The extension of this idea to contracts generally would open up opportunities of contention that might place too heavy a burden on the discretion of the courts. But in equity relief from a bargain in which the other party has exploited his superior position has been allowed. The English courts, faced with the repeal of the usury laws, have relied upon this principle to invalidate grossly unconscionable contracts.

Obviously the idea of undue influence is hard to separate from that of the reverential awe or fear with which a son might regard his father or a servant his master. Both the Roman and the canon law refused to consider contracts in which this element entered as contracts made under duress, particularly wnen marriage was involved. In equity, however, where such contracts are for the benefit of the superior party they will be scanned with suspicion. At Roman law certain types of transactions, such as gifts made under suspicious circumstances, were void or partly void by the famous *Lex cincia*. The present tendency is to liberalize rather than to modify the attitude toward undue influence in these matters.

The whole idea of duress is intimately associated with the doctrine of the autonomy of the will, implicit in most legal systems and most clearly expressed in the French civil code. It is unfortunate that a legal doctrine should be made to depend on a sharply controversial issue of psychology or philosophy. If the elements of good faith and conscience are made parts of every contract the psychological state of the person making the contract will be less relevant than the desirability of readjusting every contract in accordance with the personal and social needs of all persons directly and indirectly concerned. The whole theory of contract and obligation would, however, have to be revised in order to make this adjustment. In any event, enlargement of the theories of lesion, unconscionability and exploitation will be necessary to secure a larger measure of justice in legal transactions.

That duress must vitiate all engagements predicated upon mutual consent seems almost axiomatic; and when international law was transferred from the sanction of ancient custom to that of the law of nature, the earliest exponents of the law of nature found it difficult to explain

why treaties, which were like contracts, were not voidable for duress. In the last analysis the only explanation was the reassertion of the traditional fact that they were not so voidable. Treaties which ended or averted wars were always made under duress unless the parties were and remained exactly equal. Expediency as well as tradition demanded the validity of these treaties; otherwise there would be endless war.

The doctrine that duress is inapplicable to international conventions has been challenged by writers on international law and the question has also been brought before international tribunals. The issue was raised in reference to the Tacna-Arica settlement in the treaty of 1883 between Peru and Chile and also in reference to the Chinese concessions made to Japan in 1915. Some theorists would confine the doctrine to the validity of the treaty so far as third parties are concerned; some hold that the extortion of an unjust treaty by threat of war does not result in an obligatory agreement. Evidently the effectiveness of such a principle depends upon the existence of a supporting international public opinion; should this exist, it would probably prevent the original wrong. A real sanction for either contracts or treaties will come only when there is an international machinery of enforcement or a uniformly recognized scale of moral values.

MAX RADIN

See: Contract; Labor Contract; Fraud; Usury; Just Price; Treaties.

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DURHAM, FIRST EARL OF, GEORGE LAMBTON (1792-1840), British statesman. Owner of extensive collieries as well as of large landed estates, Lord Durham was the main link between industrial middle class leaders and the landowning aristocracy controlling Parliament. Entering the House of Commons in 1813 he carried on the family tradition by aligning himself with the more liberal Whigs. His position in the party was strengthened by his marriage in 1816 to the daughter of Lord Grey. He soon became an aggressive leader in the parliamentary reform movement, urging the abolition of rotten borough oligarchy. Because of his prominence as an advocate of electoral reform he was appointed by Lord Grey chairman of the committee which prepared the Reform Bill of 1832. He successfully urged its more liberal provisions, which were modeled probably on an earlier bill that he had unsuccessfully introduced in Parliament in 1821. The masterly report which won the consent of the cabinet to the Reform Bill of 1832 was the work of Durham, and during the ensuing struggle he was the most forceful and consistent advocate in the cabinet of the successful policy of retaining all its essential features. In the period following the Reform Act his radical policies, which on such subjects as household suffrage, the ballot and religious disabilities anticipated many of the reforms of the succeeding generation, alienated the Whig leaders. This, combined with his uncompromising individualism, removed him from the active councils of the party and frustrated his chances of leadership.

Following the Canadian rebellions of 1837 he was sent in May, 1838, to Canada as governor, with a commission to investigate and report. Reversing the attitude of his predecessors he made a determined and successful effort to foster Anglo-American friendship. But he came to believe that the Melbourne government was not adequately supporting his administration and in November of the same year he returned to England. His famous report, presented to Parliament January 31, 1839, effected a revolution in the character of the British

Empire. It laid the foundation of an effective Canadian democracy and of the type of selfgovernment which with its harmonizing of nationalism and imperialism prevails in the nations of the British Commonwealth. Its central recommendation—which was adopted partially in immediately succeeding years and fully under Elgin's governorship-provided that the governor's advisers must enjoy the support of a majority of the Canadian assembly (later House of Commons) and that no governor who found himself in conflict with the assembly should be supported by the mother country. This meant that British cabinet government would be introduced into Canada and that in matters of Canadian concern Canadians would enjoy the same degree of self-government as did British citizens. He excepted certain matters of imperial concern from the scope of Canadian self-government-foreign relations, foreign trade, public lands and the constitution. Durham probably foresaw that Canada would outgrow these restrictions, but he believed in the permanency of its connection with Great Britain. The imperialistic note was as strong as that of self-government. His recommendation of an immediate union of Upper and Lower Canada was carried out in 1841, while his suggestion of an ultimate union of all the British North American provinces was finally realized in 1867. His proposals for an adequate system of municipal government, substantial improvements in education and judicial reforms were all effected shortly afterwards. The greatest weakness of the report lay in its suggestion that French Canadians should be merged in a common British type of life.

CHESTER W. NEW

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DURKHEIM, ÉMILE (1858–1917), French sociologist and philosopher. He was born at Épinal of a family which counted rabbis among its members. He entered the École Normale Supérieure de Paris in 1879 at the time when Fustel de Coulanges was its director. After traveling in Germany, where he studied especially the tendencies of national economies, folk psychology and cultural anthropology, he con-

ducted a course in social science and pedagogy in the Faculté des Lettres at Bordeaux, where Alfred Espinas was teaching. Several years after the appearance of his thesis *De la division du travail social* in 1893 he was called to Paris to teach sociology and pedagogy. In 1898 he began the publication of the *Année sociologique*, to which he attracted many collaborators.

He was in France the successor of Auguste Comte in the field of scientific research, devoting himself more especially to moral sociology. His works are rich in factual content, statistical and ethnological. He declared that it was necessary to study societies before humanity; and returning to the tradition of Montesquieu, to whom he had dedicated his second thesis, he distinguished between the various types of social organization, each possessing its own system of institutions. The formation and functioning of these institutions, he held, should be studied as objectively as possible without consideration of the variables which one obeys, or thinks he obeys, when submitting to the constraint of the social systems.

Durkheim's reflections on the division of labor, of which he studied the moral function rather than the economic return, led him to distinguish two principal forms of mutual dependence (solidarité)—the one "mechanical," which demands uniformity, and the other "organic," which admits diversity. The progress of the division of labor, which itself results from the volume and increasing compactness of modern societies in which industry is predominant, reveals the fact that these societies are giving increasing importance to personality and are evolving toward a contractual and liberal regime. Durkheim did not advocate laissez faire but held that in order that the division of labor may produce the happy effect of social union individuals must be enabled to choose their occupations according to their true capacities, and the resulting balance must not be destroyed by inequality of wealth.

Durkheim's central theory is that of collective representation. He believed that a psychology of a special type must be established which will take account of the actions and reactions which individual consciousnesses exercise on each other and of the syntheses which are produced when the consciousnesses are united. Through these syntheses he explained religious beliefs, beliefs which are imperative because collective, the peculiar authority of value judgments, the tendencies of educational systems and the

formation not only of moral consciousness but of the categories of reason.

C. Bouglé

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DURUY, JEAN VICTOR (1811-94), French historian and educational reformer. Duruy studied with Michelet at the Ecole Normale Supérieure, where he was appointed professor after teaching for a time in the Lycée Henri IV. As a historian Duruy was chiefly important for his work in popularizing the study of ancient history and the history of France. His books, marked by sure scholarship and clear exposition, attained a wide vogue among students as well as the general public. His collection of historical manuals adapted for use in the lycées and colleges transformed the teaching of French history by adding to it the study of institutions, intellectual history and the history of art. In 1863 Napoleon III appointed Duruy minister of public instruction and in this position, which he held for six years, he distinguished himself as one of the greatest ministers of education that France has had. He continued the work of Guizot in connection with primary education by establishing 12,000 new schools; he organized school libraries and courses for adults. In the lycées and colleges, alongside the traditional humanistic program of education, he instituted courses based upon sciences and modern lan-

guages, specially adapted to young people entering industry and commerce. The supply of professors for this new instruction was insured —not without numerous protests—by the establishment of a new normal school at Cluny. In the field of higher education Duruy's importance rests on his establishment of the Ecole des Hautes Études, which, equipped with special laboratories and libraries and with the teaching conducted in small seminars without the routine of a definite program or of regular examinations, encouraged research among the professors, gave the students a practical training and has been of the greatest service to French science and scholarship especially during the period before the reform of the universities in 1896.

Ed. Esmonin

Chief works: Histoire des Romains, depuis les temps les plus reculés jusqu'à l'invasion des barbares, 7 vols. (Paris 1876-85, new ed. 1879-85), tr. by M. M. Ripley and W. J. Clarke, 8 vols. (Boston 1883); Histoire des Grecs, 2 vols. (Paris 1862; new ed., 3 vols., 1887-89), tr. by M. M. Ripley (Boston 1895); Introduction générale à l'histoire de France (Paris 1865, 4th ed. 1884); Notes et souvenirs, 1811-1894, 2 vols. (Paris 1901, 2nd ed. 1902).

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DUTOT, CHARLES DE FERRARE (eightcenth century, exact dates unknown), French economist. Dutot was one of the principal officers of Law's Compagnie des Indes. His important work, Réflexions politiques sur le commerce et les finances (2 vols., The Hague 1738; reedited by E. Daire in Économistes financiers du XVIIIe siècle, 2nd ed. Paris 1851), is devoted to an analysis and justification of Law's system and to an explanation of the causes of its downfall.

Dutot is considered one of the best and clearest theorists of his time in the field of money and credit. He belongs to the group of neo-mercantilists with Forbonnais and Melon. Although influenced by the latter he did not always share his ideas. Dutot differed from Melon particularly in upholding the conception that money should be in itself a valuable commodity rather than a mere token. He thus attached great importance to the precious metals—not, however, for their own sake, as did the mercantilists, but because he considered them instruments for

the acquisition of wealth. In his analysis of the quantity theory of money he emphasized, before Cantillon, the importance of the factor of velocity of circulation. In his theory of credit he stressed the importance of paper money and looked upon credit as a genuine source of the increase of wealth, as a direct agent of production. Dutot may be considered a forerunner of the physiocrats, for he greatly emphasized the importance of rural wealth. Mention should also be made of his ideas on colonial trade and of his fiscal theories, which advocated the apportionment of taxes on the basis of the ability of the individual to pay.

ROGER PICARD

Consult: Valéry, Lucien, Les idées économiques de Dutot (Ligugé 1920).

DUTY. The concept of duty represents the most general acknowledgment of the dominance of the social environment upon the individual. The common name for this dominance is conscience. If one seeks the major significance of this term he will be led logically into a survey of the variety of things which have been supposed to be known as moral, into the variety of implications carried by the notion of duty.

The first reference of the term, if not also the most basic, derives from religion. To do one's duty is to obey the will of God as revealed through conscience. The jural implication of such an orientation of duty is easily seen in the fact that if one's conscience does not function to reveal what the ascendant voices of the time and place call the will of God he has his duty to do nevertheless. For constituted authority borrows prestige as the manifestation of the divine will for those who acknowledge the latter, and is made to serve as its substitute for those who do not acknowledge such sovereignty or who though acknowledging it have nevertheless found their direct channels of communication with it obstructed. And if a little "gentle violence," as Plato has it, must be used to get acknowledgment of the human substitute from those who have sacrificed fresh access to the celestial essence, it is to be easily overlooked in the interest of a larger totality of good. A famous expression of this universal indirection is John Cotton's reply to Roger Williams' complaint that he had been driven out of Massachusetts for following his conscience: not because you followed your conscience, ran Cotton's retort, but because you refused to follow your conscience in doing what you knew

to be right. Thomas Hobbes' more ingenious proof from the derivation of the word that conscience cannot be private but must be publicly in the hands of the sovereign (*Leviathan* ch. vii) exemplifies the same motif from a less theological but no less authoritarian angle. The theological interpretation recognizes an objective basis for duty and shows a wise clairvoyance for the social nature of this basis by dramatizing the source into a transcendent personality, whose voice is the soul's own portable oracle.

A little less innocence or a little more honesty, and the voice as content for duty gives way to principles that may be read at leisure by the dutiful. These may themselves take the form of intuitions impressed upon the soul and revealed by appropriate experience, as in the doctrine of innate moral ideas or in the Kantian categorical imperative. Or they may be "laws of nature" to be discovered through research and acknowledged as and when found. The stoic formula, "live according to nature," located the source of duty in a natural order, characterized the emotions as obstacles to its practise and regarded the continuous function of reason as the means to its discovery. Plato's doctrine of reminiscence, in so far as it was an ethical doctrine, mediated the anthropomorphic religious view of duty and the subsequent stoic impersonal interpretation of it. Conscience gave place to reason as the moral organ, and an active attitude began to supplant a typically passive one toward the problem of finding out what ought to be done. Socrates illustrates both attitudes, characteristically pursuing the moral argument wherever it leads him and yet at crucial times standing immobile for hours listening raptly to his "voice" telling him "what not to do."

The ambiguity of the concept "nature," as used by both stoics and moderns, has concealed under an acknowledgment of an outer guidance for conduct an inner willingness on the part of men to assist in the job of drawing specifications for their own action. This willingness is the more clearly revealed by the fact that the appeal to nature has been traditionally made, as Ritchie observes in his Natural Rights, by those to whom new occasions have already taught new duties. When humanitarianism awakening through the Renaissance wished to prescribe new limits to old states, the voice of enlightenment, notably in the person of Grotius, spoke compelling intimations to reluctant sovereigns from oracles of nature.

What dictated new duties to old sovereigns

from behind the disguised but stern sanctions of a rising democratic sentiment bespoke more palatable duties to the new claimants of sovereignty, i.e. to the freshly enfranchised citizens. Natural law stood back of natural rights; and natural rights were interests: life, liberty, happiness and, not infrequently (see Locke particularly), property. When the right is used to support rights that are clearly interests, a new interpretation of duty is indicated.

Utilitarianism supplanted the natural rights philosophy as the latter had slowly transformed religious philosophy. The entire process represented a sort of "transvaluation of values." In both the older views, but notably the religious one, the business of life was to do one's dutyduty derived from without and sanctioned by external pressure. With relation to another life duty indeed might lead one to the good; but for this life to do one's duty was the good. It had, nevertheless, been long noted that while duty might be the good, it did not always get one the goods. (When I saw the prosperity of the wicked, ran the old Hebrew psalmist's complaint, then my feet almost slipped.) In the rising modern world of multiplying rights and increasing efficiency the goods were destined to become the thing. "Good" as the common quality of all kinds of goods became naturally the basic ethical concept, and duty but a means to good(s) as the end. God might still be needed as an ultimate buttress for nearer social sanctions; but nothing more was needed to explain the notion and to constitute the fact of duty than a clear understanding and an adequate appropriation of pleasures and pains. Instead of crucifying the flesh, as in the religious view, or suppressing emotion, as in the stoic view, the modern mind not only acknowledges feeling as morally legitimate but constitutes of it the ethical ends to which duty is prudential means. Duty appears in such a milieu as the demand laid upon us to use our intelligence to maximize utilities and to minimize disutilities.

For such a perspective two problems remain: how to explain the esoteric aspect of the experience called duty and how to procure the maximum intelligence for the guidance of conduct. It is admitted that many if not all people have an inner stress and strain in directing and particularly in redirecting conduct. This experience of obligation, the sense of duty, seems in the having to be more than a merely difficult calculus of advantage. Utilitarianism and its contemporary affinities (behaviorism, prag-

matism, Freudianism) admit that it is more but deplore the "more." Such poignant experience as that historically connoted by the term duty, while all too common, is pure inefficiency, indicates lack of personality integration and betokens the hangover of authoritarian institutions. exacting external standards and ugly early experiences. The stern father, the repressive school, inhibitory public opinion—these are the tyrants of whom such a sense of duty is the natural but misbegotten child. "Conscience is the inside of custom," "conscience is the voice of the group sounding in the individual," "duty is social dominance masquerading as individual censor"-these are contemporary sociological explanations of the psychological sense of duty where it is more than a positivistic preoccupation over how to achieve this or that.

But all these, although explaining duty derogatorily, assume that it is a social derivative. The problem then presses as to the fruitful role of the social in the individual. The romantic age is passed when men dreamed of either abolishing institutions or fleeing them: as for flight, there is nowhere to go; as for abolition, the concept "social" is now widely held to be implicated structurally in the very notion of the individual. "When me they fly, I am the wings." Consideration of the concept of duty leads easily to a struggle against every form of authoritarian institution and to an unremitting insistence upon a completion of the democratizing process in family, in school, in church, in state, in industry. Men cannot do their duty until they no longer feel the sense of duty. Thus the dictum of Immanuel Kant that duty is not duty unless done exclusively for its own sake is completely reversed. To be intelligent in the adaptation of means to ends becomes, for such a point of view, the supreme human virtue. The chief thing, moreover, that stands in the way of universal intelligence is the presence of authoritarian institutions transmitting their influence through an educational procedure like themselves. The sense of duty is the last silent witness of a past which the sooner overcome and forgotten, the better.

The use of some such criticism of existing duties in the current Fascist and Communistic protests against bourgeois morality does not mean, however, that in a future made by Communists or Fascists the social determination of the individual would be less than in the past. It appears to mean only that while they remain effective without having the prestige of being

traditional this determination will be more frank, even if also more ruthless. But they clearly strive to become traditional and to substitute inspired education of the young for difficult coercion of the old. Moderates, who struggle against the old order but fear equally the dominance of new class conscious groups, still pin their faith to liberty democratically arrived at and still hope that subversion of authoritative institutions can be made to justify itself by diminishing authoritarianism. For those, descendants for the most part of nineteenth century liberalism, it remains a working faith that men are active by nature; that the common ends of activity are the only moral goals; that the cooperative quest for the most efficient means thereunto is at once the scientific and the ethical process; and that the only generalized duty is the duty to be uniformly intelligent.

T. V. SMITH

See: Ethics; Morals; Religion; Education; Law; Custom; Tradition; Institution; Social Process; Authority; Conformity; Coercion; Sanction; Conduct; Natural Law; Natural Rights; Utilitarianism; Individualism; Liberty; Democracy; Liberalism; Facism; Communism.

Consult: Plato's Republic, text and translation by Paul Shorey, Loeb Classical Library, 2 vols. (London 1920); Aristotle's Nicomachean Ethics, text and translation by Harris Rockham, Loeb Classical Library (London 1926); Grotius, Hugo, De jure belli ac pacis (Paris 1625), tr. by A. C. Campbell (Washington 1901); Hobbes, Thomas, Leviathan (ed. by A. R. Waller, Cambridge, Eng. 1904); Locke, John, Two Treatises on Government (2nd ed. London 1694); Ritchie, D. G., Natural Rights (ed. by J. H. Muirhead, London 1895); Green, T. H., Lectures on the Principles of Political Obligation (London 1895); Mill, J. S., Utilitarianism (15th ed. London 1907); Dewey, John, and 'Tufts, J. H., Ethics (New York 1908); Jodl, F., Geschichte der Ethik in der neueren Philosophie, 2 vols. (Stuttgart 1882-89).

DWIGHT, LOUIS (1793–1854), American penologist and philanthropist. Dwight prepared for the ministry at Yale and the Andover Theological Seminary but was early incapacitated for an active pulpit career because of a hemorrhage of the lungs, which he suffered from inhaling "exhilarating gas" at a chemical lecture. He became an agent for the American Tract Society in 1819 and for the American Education Society in 1823, but persistent ill health finally drove him to undertake a thousand-mile horseback trip through the south Atlantic states in 1824–25, distributing Bibles to prisoners for the American Bible Society. Shocked to the quick by the terrible neglect of

the prisoners and the grave abuses in the institutions, upon his return he founded the Prison Discipline Society of Boston, taking as inspiration the work of John Howard, the English prison reformer. As the guiding spirit of this society for the remainder of his life Dwight was chiefly responsible for the victory in the United States of the Auburn system of congregate work and dormitory cell isolation of prisoners over the Pennsylvania system of isolated cellular confinement at all times. His reports on imprisonment for debt were a leading factor in the abolition of this abuse, and he worked constantly for the segregation of the insane in hospitals rather than in prisons. The best source material on prison conditions in the United States in the second quarter of the nineteenth century is to be found in Dwight's annual Reports of the Prison Discipline Society (3 vols., Boston 1855). He also made an important report on the prisons of England and the continent as the result of a trip to Europe in 1846.

HARRY E. BARNES

Consult: Jenks, W., A Memoir of the Rev. Louis Dwight (Boston 1855); Lewis, O. F., The Development of American Prisons and Prison Customs, 1776–1845 (Albany 1922) ch. xxiii.

DYAKONOV, MIKHAIL ALEXANDRO-VICH (1855-1919), Russian historian. Dyakonov was professor of the history of Russian law at the University of Yuriev and later at the University of St. Petersburg; in 1909 he was elected member of the Russian Academy of Sciences. His works are concerned chiefly with the Moscow period of Russian history. Vlast moskovskikh gosudarey (Authority of Moscow kings, St. Petersburg 1889), based mainly on a study of the church literature, covers the history of Russian political ideas to the end of the sixteenth century. Ocherki obshchestvennago i gosudarstvennago stroya drevney Rusi do kontsa XVII veka (Essays on the social and political organization of ancient Russia to the end of the seventeenth century; Yuriev 1907, 4th ed. St. Petersburg 1912) is a university text remarkable for its clarity and compactness. Ocherki iz istorii selskago naseleniya v moskovskom gosudarstve XVI–XVII vekov (Studies in the history of the rural population of Muscovia in the sixteenth and seventeenth centuries, St. Petersburg 1898), a collection of studies on the several rural classes of Russia, is interesting for its contribution to the origins of serfdom. Upon a careful examination of sources Dyakonov

concluded that attachment to the soil, a gradual process extending over a century, was forced by indebtedness on the proprietary peasants and by fiscal considerations on the state peasants.

Although he was a student of Sergeyevich, a brilliant historian of dogmatic jurisprudence and a legal historian by specialization, Dyakonov disliked juridical construction in history, preferring to study legal institutions in their social and economic context. Nor did he trust the broad generalizations of sociological history, maintaining that caution is particularly essential in Russian historiography because the source material is, for the earlier period, scant and, for the later period, unsystematized. His own work was always based on a minute first hand analysis of all available sources.

GEORGE VERNADSKY

Works: A bibliography of Dyakonov's works has been compiled by V. A. Grigoryev in Russky istorichesky zhurnal, 1921, no. vii, p. 26-30.

Consult: Presniakov, A. E., "Trudi M. A. Dyakonova po russkoy istorii" (Dyakonov's works on Russian history) in Russky istorichesky zhurnal, 1921, no. vii, p. 8-25.

DYE INDUSTRY

EARLY DYE TRADE. Trade in natural dyestuffs is far older than written records. No locality has totally lacked resources for the satisfaction of the desire for color; the juice of fruits and berries and extracts from crushed flower petals, roots of herbs or bark of trees were among the earliest dyestuffs; and throughout the world today in isolated regions local dyers rely on just such materials, used according to traditional processes and individual skills, to produce a range of color often considerable.

Dyes were perhaps first applied to the human body. Caesar's blue streaked Britons, the henna fingered women and henna bearded men of the Orient and the rouged ladies of all times are witness to the appeal of the practise. Skins worn as garments must early have been stained with colors. The art of leather dyeing is well developed in modern Africa, as it was also in ancient Egypt. Most primitive peoples stain the grasses with which they weave their baskets or their garments, and the mineral earths are used to color cloths or skins as well as pottery.

But the number of dyeing materials that can be applied directly to cloths or fibers is limited, and many such dyes are extremely fugitive. A great advance in dyeing was made with the discovery of the use of mordants, substances which have the property of fixing the dye upon the material to be colored. Alum is the most important, but many natural mordants exist in all parts of the world. Native dyers in Africa use an alkaline earth as a mordant and those in India and South America use the leaves and bark of certain trees. It was nevertheless a noteworthy advance which the Hindus made when they discovered, at least as early as 2000 B.C., the use of alum. The technique became the basis of a complicated dyers' craft not only in India but also in Persia and Egypt, to which countries it had quickly spread.

The development of dyeing was closely associated with that of two other arts, medicine and painting. The herbs and plants which were the dyers' chief materials were also in many cases the best known medicaments, and trade in the two was interrelated. On the other hand, the coloring matters used in dyeing could also become the basis of painters' materials; the scum of the dyeing vats was powdered and mixed with wax or the dyeing liquid was combined with gypsum, i.e. chalk, to form a lake. The palettes of Roman painters, like those of the early Italian Renaissance, were enriched by the multiplicity of contemporary dyestuffs.

Trade in dyes began as soon as the plants of any one locality were recognized as superior for dyeing. All over Africa today in the native markets bundles of bark or roots or sheaves of a kind of sorghum which has been cultivated as a dye plant in the Sudan for centuries are bartered or sold. Such commerce must have existed very early. But for some of the more important dyes, the very ones which entered later into world trade, the problem of producing a commercial product was more difficult. Indigoferae, or indigo bearing plants, for instance, are found widely distributed over America, Asia, Africa and the East Indies. Throughout most of the world men early knew how to use the water soaked leaves and stems of these plants to dye blue; garments found in the Inca graves of Peru and Chile as well as those in the early Egyptian tombs show traces of this color, and primitive African tribes still use it locally. But the commercial importance of indigo depended upon the discovery of methods of precipitating out solid indigo from the yellowish liquid of the plant, making it into cakes and then discovering methods of redissolving it, for the dried indigo is not soluble in water alone but requires the addition of some other agent. All this the Hindus learned to do very early and upon their skill was

based the very considerable indigo trade of antiquity. Knowledge of processes, however, did not always travel as fast as the material; the Greeks and Romans, although they imported considerable quantities of indigo, appear not to have known how to redissolve the cake for dyeing but instead powdered it and used it as a paint, the Roman *indicum*. It is not certain whether the early Egyptians dyed their garments with locally grown indigo or knew the use of the commercial product. In China for many centuries most cotton plantations were flanked by small fields of indigo, which was used to dye the material locally, and there was almost no trade in the dye.

Greater knowledge of the Aztec civilizations may reveal the existence of an important trade in dyestuffs throughout the Americas. A variety of materials are available and are known to have been used: a native indigo, logwood for black, brazilwood for red, the cochineal for crimson, several herbs for yellow. A species of shellfish similar to that obtained from the Mediterranean and giving the famous Tyrian purple is found on the coasts of Central and South America and has been used by the natives for centuries. The art of dyeing was highly developed by the early Aztecs, but not until the Spaniards carried away cochineal in the sixteenth century did it have any appreciable effect on the rest of the world.

The great center of the dye trade and industry in the ancient world was India. The Hindus not only made indigo into a commercial product but developed the art of calico printing—the dyeing of one piece of cloth many colors either through the use of different mordants or through waxing and repeated dipping. This technique traveled eastward to Java, where it developed into the famous Javanese batik work, and westward to Egypt, where Pliny saw and described it with wonder.

In addition to a wide variety of vegetable dyes the craftsmen of India, Persia and Egypt used several important insect dyes. Kermes, the scarlet of the Old Testament, was made from insects found on a species of oak growing around the eastern shores of the Mediterranean. When dried and dissolved in an acid the insects gave shades of scarlet, crimson or purple according to the mordant used. Very similar are the lac dye of India made from an insect which lives on fig trees and the cochineal of Mexico. Lac dye was early and extensively used in India and Indo-China and was the center of a flourishing trade throughout the East for many centuries, although

it was not introduced into Europe until the thirteenth century. Kermes, on the other hand, seems to have been introduced into commerce by the Phoenicians. The insects, long growing wild throughout Persia, had apparently been early cultivated by the Persians and later by the Armenians. Pliny says that in his time the insect, which the Romans called *coccum*, was grown in Galatea, Africa, Pisidia and other places, while Spain discharged half her tribute to Rome through the exportation of the *coccum* grains. Kermes was one of the few dyes knowledge of the use of which did not disappear in early mediaeval Europe: the reds of the Gothic tapestries were dyed with it.

The Phoenicians also introduced into commerce the most famous of the dyes of antiquity, the Tyrian purple. This crimson purple stain was made by a fluid, chemically similar to that of indigo, from certain mollusks which are found in abundance along all the shores of the Mediterranean and as far north as Britain as well as on the coast of Central America. 'The use of this dye had been known since about 1500 B.C.; it was probably used by the Minoans, but it was the Phoenicians who developed it into an important dye, and Tyre and Sidon remained the centers for the finest dyed purple cloths. The fabulous price of the Tyrian purple, in so far as it was not a monopoly price, resulted from the fact that considerable labor was required to extract the fluid from the tiny mollusks. Poorer qualities of the dye could be made by drying and grinding the mollusks, but the best color was produced by an immediate application of an aqueous solution of the liquid. Trade therefore was not in the dye, but in dyed cloths or wool. In addition to Tyre and Sidon there were less opulent centers for the dyeing of the purple all around the shores of the Mediterranean. The Phoenicians appear to have carried knowledge of the process even to Britain, where it survived in isolated regions as late as the seventeenth century. The use of the purple had at first been restricted to a limited class by its cost if for no other reason, but the influx of wealth into Rome in the first century B.C. made possible a great extension in its use. Combined with madder or kermes or archil (orchil), a lichen dye, it became so common that the later emperors sharply restricted its use. In the Eastern Empire the privilege of dyeing purple was confined to a very small group of craftsmen; it is therefore not surprising that after the downfall of that empire knowledge of its use should have been com-

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pletely lost. Mediaeval scholars even doubted its existence. The nature of the dye was rediscovered in the eighteenth century through the curiosity and persistence of a group of chemists, but not until 1906 was its exact chemical constitution ascertained.

The Greeks and Romans had as dyestuffs not only the Tyrian purple and the materials brought from the East but also a wide variety of local products. For yellow they used saffron, the common crocus, which produced a beautiful if fugitive color. For blue they had woad, a plant native to western Europe which yields a coloring matter chemically identical with that of indigo but of a very inferior quality. For red they had, in addition to kermes, madder, known for centuries all over the Near East.

The collapse of the Roman Empire shut off for a time the dyes of the East from Europe. Even the cultivation of madder declined and the native woad was the one dye that continued to be of importance in trade. Northwestern Europe has always been poor in coloring matters. For many centuries the chief dyes of Ireland, Wales, Scotland, Norway and Sweden were lichens, giving chiefly very dull crimson or brownish red colors. But the people of Sweden had learned to prepare from a species of lichen a very beautiful bright crimson which gave a different character to their textile art. The bright reds of Russia and northeastern Europe came from an insect similar to the kermes, in which there was some trade north and eastward throughout the Middle Ages.

During this period the center of the dye trade shifted again to the East, where it continued to be an important element of commerce. The great market for indigo was Bagdad, to which the dye was brought from India and Persia over the regular trade routes and from which it was shipped out again to Alexandria and Constantinople. Calcutta and Cambay were the chief eastern markets for lac, which found its way into Europe somewhat later through Aden and Alexandria. Madder was cultivated quite widely, but toward the end of the Middle Ages the madder of Georgia was so highly valued that it was sent all the way to India, probably down the Caspian Sea and then overland.

This rich knowledge of the East slowly seeped back into Europe again. The Moors revived the cultivation of madder in Spain; the crusades and the growing trade of Venice and Genoa led to the borrowing of skills and materials from the East. Venice was for a time not only the most

important European market for dye materials but famed for the superiority of her dyeing industry. The kermes dye was for years known as Venetian scarlet, because the skilled craftsmen of that city continued to use it on fine goods long after it had been displaced throughout the rest of Europe by the cheaper cochineal from America. In the fourteenth century Florence enjoyed the monopoly of archil, the violet dyeing lichen, knowledge of the use of which was brought back from the Levant by a merchant named Federigo who founded one of the principal Florentine families, taking the name Oricilarii-later Rucellarii or Rucillai-from the dye. He was able to secure all of the lichen which grew on the shores of the Mediterranean and thus monopolized the trade until the discovery of the Canary Islands in 1402. About 1730 archil was discovered growing on the Cape Verde Islands and became an even more important article of European commerce.

Italy for a time possessed another advantage in her ability to secure alum for use as a mordant. Throughout the early Middle Ages Europe was dependent on the East for alum, which was one of the most prized objects of commerce. Constantinople and Alexandria were the chief markets for the product, which was brought from such distant places as Upper Egypt and Arabia. When the Turks captured Constantinople they seized the alum mines near that city and for a time disrupted the trade. The difficulty was solved for Italy in the discovery, by a Paduan who had lived in Constantinople as a dyer until the arrival of the Turks, of alum rocks at Tolfa near Civitavecchia. This man was at the time in the service of the pope, who thereby came into possession of the mines, working them to his great profit. In spite of the fact that the pope declared purchase of alum from his mines a Christian duty and threatened with excommunication anyone who bought from the Turks, the price of the Turkish product was so much lower that it continued to be imported. Eventually the discovery of other mines in northern Italy and France broke even the semimonopoly enjoyed by the pope.

One after another the major dyes of the Orient were brought into Italy and gradually found their way into Flanders, Holland, France and England. In 1516 the Dutch began to bring indigo around the Cape of Good Hope, and early in the sixteenth century two important new dyes were introduced from America: cochineal and logwood. The latter produces an un-

usually true black and is one of the few natural dyes which is still of commercial importance.

Supplying this extensive dye trade was a series of more or less well developed industries which had changed little in character over a period of centuries. Marco Polo describes great indigo plantations which he saw in India. Probably these plantations as well as the plants where the paste was made were run by semiservile labor, much as were the plantations later developed in India by the East India Company. The gathering and drying of the kermes insects was organized by merchants on a large scale; an old German manuscript gives an interesting picture of the leasing of their lands at certain seasons of the year by the great landlords of Poland and the Ukraine to the Jews who gathered, for sale to the Turks, the similar insect which is found throughout eastern Europe. The gathering of cochineal was a profitable business.

As the new dyes were introduced into Europe they met opposition in many cases from the producers and dyers of the older colors. Indigo in particular was opposed as a foreign product far inferior to woad; in Germany the guild of woad dyers for a time succeeded in preventing its importation, and in France from 1669 to 1737 regulations forbade its use except in combination with far greater quantities of woad. Not only mercantilistic policy but also the attitude of the guilds underlay such restrictions.

The use of dyes developed into a separate craft very early. In primitive times dyeing was practised largely by the women who prepared the skins or wove the cloth, but as the use of certain colors took on a ritual significance and as craft skills developed, dyeing became specialized in certain families, then in guilds. In India dyeing developed as a special profession very early; since the Mohammedan conquest most of the dyers have been Mohammedans. The dyers' craft was well organized in Rome, where a special quarter of the city was set aside for their use. Throughout the Levant each city had its dyers' guilds and considerable specialization had occurred by the eleventh or twelfth century, with certain dyers dyeing blue, others red, still others black. The Arabian Nights tale of Abu Kir and Abu Sio presents a humorous picture of a city in which all of the dyers had forgotten how to dye any color except blue, although their market was supplied with other dyes, and of the difficulties encountered by a foreigner who wished to set up a dyehouse for all colors.

Dyers' guilds appeared in Italy at least as early as the thirteenth century. In Germany there were guilds of black dyers in the fourteenth century. In 1472 a company of dyers was incorporated in London. An interesting picture of the type of specialization which developed in most countries is to be found in the regulations of French dyers issued by Colbert in 1669 (Instruction générale pour la teinture des laines et manufactures des laines de toutes nuances, et pour la culture des drogues ou ingrédients qu'on emploie). In order to improve and standardize the technique of the craft this document first gives instructions for the preparation and use of all the important known dyes; it then divides the dyers' guilds into those of the bon teint, who dyed madder, cochineal, woad and other bright colors, and those of the *petit teint*, who dyed black goods first woaded by the dyers of the bon teint and who were also allowed to dye poorer qualities of goods with cheaper dyes. To prevent adulteration neither group was allowed to have in its possession certain specified dyeing materials used by the other. Not until 1737 was this regulation voided.

Other expanding national governments of Europe early took an active interest in the dye trade and attempted to secure for themselves monopoly positions. The Spaniards had observed the use of cochineal by the natives of Mexico upon their arrival there and reported its beautiful color to the Spanish ministry, which ordered Cortés to take measures to multiply it. The Spanish adventurers seem to have left its actual care to the natives; nevertheless, by 1587 a single flotilla is reported to have brought to Spain 141,750 pounds of fine cochineal. The trade developed in importance after the accidental discovery about 1630 of methods of mordanting cochineal on tin, thus heightening its color considerably. This method was first practised at Leyden; a Flemish painter learned the secret and communicated it to the Gobelins at Paris, while another Fleming carried the knowledge to England. The new dye so gained in popularity that the old and flourishing trade in kermes was completely disrupted. Various efforts were made to break the Spanish monopoly of the cochineal trade; in the latter part of the eighteenth century a Frenchman managed to smuggle some cochineal insects from Mexico and grow them in Santo Domingo, but this never became an important source of supply. About the same time the East India Company attempted to raise cochineal in Bengal, but for

some years trade ran in the other direction—cochineal was carried from America to Asia by way of the Philippines.

There was also a sharp trade rivalry in indigo. The Spanish and Portuguese had learned to know the plant in India and recognized it growing wild in Mexico and Brazil. Both began to cultivate and manufacture it there for importation into Europe. Later the French and English cultivated it in their colonies, and in 1774 the French exported from the island of Santo Domingo alone 2,350,000 pounds of indigo, while in 1773 the English exported 1,107,000 pounds from South Carolina. These sources were rapidly outstripped in importance by India. In 1792 the importation of indigo at the East India House in London was only 582,000 pounds; by 1807 it was 5,154,000 pounds. Throughout most of the nineteenth century there was sold in the European market indigo from India, Java, Manila, Egypt, Senegal, Guatemala, Mexico, Brazil, South Carolina and the Antilles. The most esteemed varieties were those from Bengal, Java and Guatemala.

The increase of wealth and leisure and the development of the textile industry fostered the demand for new and more brilliant dyes. In every country eminent scientists began to experiment with improved methods. As early as 1644 Sir Robert Boyle had presented to the Royal Society the results of certain experiments on colors, but little came of his efforts. In France, Colbert encouraged many scientific as well as practical experiments. In 1666 he introduced madder into Avignon, and for the next two centuries French scientists were busy attempting to improve the cultivation of madder and woad. The chief chemical constituent of madder, alizarin, was isolated in 1826, and thereafter several commercial preparations of madder were made; for example, garancine, made by treatment of the root with sulphuric acid. About the same time the artificial production of ultramarine, hitherto made from powdered lapis lazuli, introduced a new blue dye and founded a new industry.

Throughout the latter half of the eighteenth century a vast amount of research was devoted to attempts to discover, often for purely theoretical purposes, the chemical constitution of the important dyes. Such experiments as well as the whole complicated dye trade and the industries upon which it was based were brought to an end with dramatic suddenness by the discovery (1856–1900) of the use of coal tar for

synthetic dyes. The natural dyes could not compete with the new ones, which were not only far cheaper and in many cases brighter but were far more uniform in color and required therefore much less skill in application. Ten years after the synthesis of alizarin the world production of madder, which had been about 70,000 tons a year, had completely disappeared, and large regions of France which had specialized in its production were ruined. In 1896 indigo was cultivated on more than 1,600,000 acres in India; by 1906 only 450,000 acres were under cultivation and the prosperity of Madras was gone.

It was some years longer before the synthetic dyes of England and Germany began to displace the natural dyes in India, China and Africa; but even before the World War this displacement had begun and it is continuing at an increasingly rapid pace. In 1924 China was the largest consumer of synthetic indigo next to the United States. Throughout India the dyers' guilds have been disrupted and the customary economic basis of life in many districts has disappeared with the introduction of cheap aniline dyes. Only in isolated districts can one find the old knowledge and the old skills in dycing. During the World War, when dyes from Germany were cut off, the countries of western Europe and the United States attempted to utilize natural dyes; they failed to apply them successfully, largely through lack of craft knowledge, and with the end of the war turned again to the synthetic product.

Throughout most of the Orient the introduction of cheap synthetic dyes has brought a marked deterioration in quality. The packaged dyes can easily be used by anyone, and the old skills are no longer necessary. With this loss of skill in dyeing has gone a deterioration in the quality of the textile products. Expertness in dyeing was the secret of the value of the early Indian cottons, as of many of the fine China silks. The two have perished together. A few belated attempts have been made to preserve the older crafts, such as the Persian regulation against the use of aniline dyes for Persian rugs. The fine batik work of Java, now done by the natives under the direction of Chinese or Dutch entrepreneurs, is still based on use of the natural dyes. But except in isolated regions and for certain conscious art and craft purposes the use of natural dyes seems destined to disappear as the dye trade has already disappeared.

IDA CRAVEN

Modern Dyestuffs Industry. A laboratory discovery gave birth to the modern synthetic dyestuffs industry; mankind's quest for color found its goal in a barrel of tar. Chemists had been attempting for a century to analyze the natural dyestuffs, and in 1845 a chemical product, picric acid, had been used as a dye; but the distinction of having founded the coal tar dyestuffs industry belongs to W. H. Perkin. In 1856, as a student at the Royal School of Mines in London, while endeavoring to secure quinine from aniline, he produced an unexpected purplish substance, mauve. He saw its possibilities as a dye and set up a plant for its manufacture.

The most outstanding technical characteristic of the industry thus founded—and one which has continuously influenced the evolution of its industrial structure—is the fact that it is based on complicated chemical reactions all involving minute chemical control. The chemical processes basic to the industry at the present time may be illustrated diagrammatically: coal (1 ton) \rightarrow coal tar (140 lbs.) \rightarrow 5 crudes important for dyestuffs (benzene 1 lb., toluene .9 lb., anthracene .3 lb., phenol .6 lb. and naphthalene 9.6 lbs.) \rightarrow 300 intermediates \rightarrow 1000 dyestuffs \rightarrow 5000 brands of dyes. These coal tar crudes also yield rubber accelerators, camphor substitutes, germicides, insecticides and flotation compounds for the concentration of ores. The intermediates also make possible more than fourscore medicinal chemicals, a similar number of perfume materials, a dozen synthetic flavors, several artificial resins, tanning materials and photographic chemicals. Four of the dyestuffs—indigo, sulphur black, direct black and alizarin-account for roughly one half of the quantity and one fourth of the value of all dyes manufactured. Less than 5 percent of the modern dyes are produced in quantities exceeding 100 tons and less than 10 percent in amounts greater than 10 tons. The rest are produced on a poundage basis. All involve painstaking and sometimes highly skilled labor. A single dye usually requires from ten to eighty times its weight of raw materials and involves scores of separate operations, the unit processes-chlorination, caustic fusion, alkylation, liming, carboxylation, reduction, nitration, sulphonation, oxidation, condensation, diazotizing and coupling—being repeated many times.

The history of the industry consists of a succession of solutions to technological and economic problems. The technological history of coal tar dyes can be reviewed from the standpoint of their source materials (as aniline, anthracene,

phenol, naphthalene), their structure (as azo, sulphur, indigoid, anthraquinone) or their manner of application (water or spirit soluble, calling for acid or basic bath, direct or requiring mordants, developers or resistants, vat dyes and the like). In similar fashion the economic history of the industry can be surveyed from the point of view of the changes in its location (first England and France, then Germany and Switzerland, finally dispersed), its structure (single commodity, small plant as contrasted with joint cost, international monopoly) or its institutional interrelationships (as with patent, technical education and tariff systems). The selection of the years 1871, 1900 and 1915 as dividing marks in the variegated stream of dyestuffs development is thus wholly arbitrary.

The first period, from 1856 to 1871, may be called the rosaniline period, for it was from aniline that Hofmann and his pupils Perkin, Lightfoot, Medlock and Nicholson developed the first dyestuffs. It was an epoch of empirical individual experiment, although the fact that Graebe and Liebermann in 1869 succeeded in patenting a synthetic alizarin process just one day earlier than Perkin was a harbinger of the ultimate triumph of mass research. It was the era of English dominance, albeit under the aegis of a German professor and with the substantial contributions of other German chemists such as II. Caro (discoverer of the first successful azo dye, Bismarck brown, in 1862) Griess and O. Witt. Finally it was a period of single commodity productionfirst mauve, then magenta (invented by Verguin 1859), and in the early seventies alizarin.

In the second period, from 1871 to 1900, with dramatic suddenness the dyestuffs industry shifted to Germany. In 1872 German production of alizarin outstripped that of England. Perkin estimates that in 1878 the value of German dyestuffs production was £2,000,000, English £450,000, French £350,000 and the Swiss £350,000. Other indicia of the developments in Germany have been summarized in Table I.

Numerous reasons have been given for the transfer of the industry to Germany. The lack of a patent law there until 1877 was undoubtedly a factor. The return of Hofmann and Caro, who became the guiding genius of the huge Badische concern, and the close interrelation of university and industry so that the majority of dyestuffs manufacturers were professors—mostly pupils of Liebig, Hofmann and von Bäyer (the latter first synthesized indigo in 1880)—were important. In English banking and industrial circles

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SYNTHETIC DYESTUFFS INDUSTRY, 1856-1910

Ypar	Dyf-stuffs Patents Granted is England (for quinques- niums ending in the years indicated)		Number of Employees of the Badische Antin- und	Exports				
				QUANTITY (in metric tons)		Value		
	To German Inventors	To English Inventors	SODAFABRIK	German	Swiss	GERMAN (ID 1000 marks)	Swiss (in 1000 francs)	
1860	8	20		-				
1865	21	54	30					
1870	17	23	520					
1875	8	11	835				i	
1880	47	13	1534	8,294		53,537	1	
1885	113	15	2330	10,643		47,782	5,657	
1890	201	39	3596	19,014	1,338	58,162	8,925	
1895	386	29	4743	31,852	2,476	81,540	14,598	
1000	427	52	6711	46,858	3,116	109,172	15,343	
1905	447	38	7007	76,495	5,301	165,795	20,014	
1910	561	30	7610	84,110	6,975	193,840	25,415	

Source: Figures for patents were compiled by the author from the records in London; figures for the number of employees are adapted from Die Budische Anilin- und Sodafabrik (Ludwigshafen a.R. 1923) p. 25, and figures for exports, Redlich, F., Die rolkswirtschaftliche Bedeutung der deutschen Teerfarbenindustrie (Munich 1914) p. 97-98.

at this period the words academic and theoretical were sarcastic epithets connoting inefficiency. German scientists had huge laboratories and used them for the patient prosecution of research —the commercial production of indigo, for example, involved an expenditure of \$5,000,000 on research lasting from 1880 until 1897. The superb German chemico-technical schools were after 1870 almost wholly supported by the state, so that in Berlin in 1876 only 10 percent of the expenditure for chemical instruction was financed by the student. The German dye industry was favored by the existence of an intellectual proletariat; in 1900, for example, 84 percent of the technical and sales staff of the German dye companies were found to possess some formal training in chemistry whereas for England the figure was only 31 percent. Finally, one must take into account the eminent suitability of the Rhine River for a dyestuffs industry, particularly after the war of 1870 had made it safely domestic, not only as a connecting link between low cost sources of the many necessary raw materials but also as a purveyor of abundant supplies of pure water. The important Swiss industry at Basel, although based, as was the German industry until 1885, upon imported coal tar crudes, is generally accounted for upon similar grounds.

The second period was an era of systematic experimentation in molecular dyestuff architecture according to the blueprint furnished by

Kékulé (benzol theory, 1865). Thus the extremely important azo (Congo red, Böttiger, 1884) and sulphur (sulphur black, R. Vidal, 1894) classes of colors were developed. It was an epoch of joint cost production leading into such wholly new fields as pharmaceuticals (Knorr, antipyrin, 1883; Baumann, sulphonal, 1886), flavoring extracts (Tiemann and Haarmann, vanillin, 1876), perfume materials (musk or trinitrobutyltoluene, Baur, 1890) and photographic chemicals. All the important natural dyestuffs except indigo were displaced. The French production of madder declined from 25,000,000 kilograms in 1872 to 500,000 kilograms in 1879. Meanwhile the prices of all dyes sank rapidly; alizarin, for example, quoted at 270 marks per kilogram in 1869, fell to 23 marks in 1878 and to 1.78 marks in 1908.

In the third period, from 1900 to 1915, a dramatic end was brought to the centuries old indigo trade. The area planted in India decreased from roughly 1,600,000 acres in 1896 to 300,000 in 1912. Meanwhile German exports of synthetic indigo increased from 1364 tons in 1899 to 24,827 tons in 1912. It was a creative epoch; specialty dyes of exceptional fastness to light, washing and perspiration were sought, rather than new colors. Beginning in 1901 with Bohn's discovery of indanthrene blue, the first of a series of fast vat dyes from anthraquinone, patent activity increased with amazing rapidity. Of the 819 patents for organic colors granted in the United States in the period from 1900 to 1910,

685 were given to German inventors, 113 to Swiss, 9 to American and 5 to English.

The period was marked, furthermore, by a growing uneasiness in other countries than Germany about the dyestuffs situation. German production began to be concentrated in less than a half dozen large plants—in 1907 two of them employed 6519 workers of a total of 9071 employed in the whole industry. Ludwigshafen, Leverkusen and Höchst became veritable selfcontained baronies, each with hundreds of chemists, elaborate housing developments and the like. Cartel agreements were succeeded by amalgamation of the largest companies into communities of interest. Two such communities of interest were formed in 1904, each uniting three large companies; relations between them, while at times strenuously competitive, became none the less increasingly closer until in 1916 they agreed to exchange technical information and to establish common prices and sales policies. By definite merger in 1925 the present Interessen-Gemeinschaft Farbenindustrie was formed. In an age of trustophobia, such agglomeration naturally aroused apprehension. In addition, however, the Germans established foreign branch factories and sales offices, partly in order to give direct technical service to the dyer, partly because of tariffs, as in the case of Russia and France, and in part because of legislation, as that of England in 1907, providing for speedy lapse of patents unless they were worked. Their commercial policies, such as full line forcing, overcame competition everywhere, in Germany as well as abroad; but in a period of nationalistic suspicions these appeared to be the methods of expansionist imperialism, while in the notorious Schweitzer episode the foreign dyestuffs subsidiaries were even alleged to be agencies of the military intelligence service.

The extraordinary services which the German dyestuffs industry was able to render its government during the World War are well known. The Interessen-Gemeinschaft produced in 1918 approximately 2000 tons of explosives and 750 tons of gases per week. Parts of the Leverkusen plant, for example, were converted to military purposes in six weeks. The materials and processes for making Congo red were the same as those required for T.N.T. (trinitrotoluol) or tear gas (brombenzyl cyanide). Similarly, a slight variation in the process for making sulphur black yielded the explosive pieric acid. Chlorine, phosgene (Kern, 1883) and mustard gas (dichlordiethylsulfide, Victor Meyer, 1886) had been

handled for decades in Germany. Other countries, having no such skilled labor, had to rely on slow and costly improvisation.

The salient feature of dyestuffs development since 1916 has been the growth of a domestic industry in the United States, England, France, Italy and Japan. Each of these supplies at present on the average 90 percent of home consumption. They grew up, of course, almost altogether as a result of war measures. In the United States, for example, more than 4500 German patents seized during the course of the war by the Alien Property Custodian were sold in 1918 for the ridiculous price of \$250,000 to a special licensing corporation organized by producers and consumers, the Chemical Foundation. The industry in the United States was protected after the war first by an embargo and subsequently by a tariff, amounting in 1926 on the average to 86 percent ad valorem. In England and France the government organized special corporations which took over the German branch factories and regulated the importation of the dyes which by the Versailles Treaty Germany was compelled to turn over to the Allies on reparations account—one half of its stock of dyes and one fourth of its output for a period of five years. These payments did not fully cease until 1928. Since the war licensing arrangements, tariffs, subsidies and similar aids have been liberally granted, even in free trade England. Most of the dye producing countries have become exporters; the United States, characteristically enough, specializes in indigo and other dyes of large volume and low unit value, while such a country as Switzerland exports expensive vat colors. The development of the industry since 1928 is epitomized in Table 11.

A second feature of extraordinary international importance has been the growth of huge national monopolies. In every country the presence of substantial excess capacity, severe competition and the economies of avoiding duplication in research, of exchanging patent and process information, of integrating operations all the way from securing the various raw materials to marketing the thousands of products, and of consolidating sales agencies, have brought about cumulative concentration. In Germany a more solidly organized Interessen-Gemeinschaft, in England the Imperial Chemical Industries, Ltd., organized in 1926, in France the Etablissements Kuhlman, and in the United States such giant concerns as the Allied Chemical and Dye Corporation, organized in 1920, and E. I. du Pont

TABLE II

PRODUCTION AND EXPORTS OF SYNTHETIC DYESTUFFS, 1913 AND 1928

	Production					Exports			
	1013		1928			1913		1928	
COUNTRY	QUANTITY (IN 1000 SHORT 10NS)	PERCENT OF WORLD TOTAL	QUANTITY (IN 1000 SHORT TONS)	PERCENT OF WORLD TOTAL	PERCENT OF CAPACITY	QUANTITY (IN 1000 SHORT TONS)	VALUE (IN \$1000)	QUANTITY (IN 1000 SHORT TONS)	VALUE (IN \$1000)
Germany (in-	150.0	88	82.5	41.0	47	119.8	51,689	52.1	54,831
eign branches) United States	3.3	2	48.3	24.0	81		_	13.9	6,532
Great Britain	5.6	3	25.4	13.0	95	2.7	863	5.8	3,925
Switzerland	11.0	6	12.0	6.0	84	9.7	5,550	10.7	15,100
France	2.2	1	15.4	7.7	73	.6	276	4.0	2,357
Italy			7.6	3.8	100	.1	22	-4	465
Japan			9.1	4.5	90			1.3	270
Total	172.1	100	200.3	100.0	63	132.9	58,400	88.2	83,489

Source: Production figures for 1913 adapted from C. Ungewitter, "Monograph on the Chemical Industry" in The Chemical Industry, International Economic Conference, Documentation, League of Nations publication, 1927, II. 4 (Geneva 1927) p. 28; production figures for 1928 and export figures adapted from United States Tariff Commission, Census of Dyes and Coal-Tar Chemicals (1920) p. 148 and 144.

de Nemours, Inc., not only control from 75 percent to 100 percent of the domestic production of dyestuffs but generally monopolize the synthetic fertilizer, rayon, organic solvents, explosives, alkali, acids, pharmaceutical and electrolytic chemical markets as well. Each of these giant concerns has branch factories and sales agencies spread out over the face of the earth.

International competition in dyestuffs, as in several other chemical products, has thus become a conflict of commercial "great powers." There has been a growing tendency, however, for a drawing together of these great opposed concerns. An important step in this direction was the Franco-German dye agreement signed in November, 1927, for a period of two years, extended in 1928 for five more years and superseded in April, 1929, by an agreement between Germany, France and Switzerland for the formation of an international cartel controlling probably 70 percent of the world production of dyes. By this agreement prices were fixed, export quotas established and provisions made for the exchange of technical information and for the joint use of sales agencies. In such ways the consuming markets of the world are divided by a militant diplomacy that operates almost as precisely as it did in the partition of Africa and

China. During the French and German dyestuffs negotiations of 1927, for example, both governments were in constant conference with the financial plenipotentiaries. After the latter had been allowed to draft in substance the vital sections for chemicals in the tariff agreement both the commercial treaty and the private protocol were signed. The principle battlefield for foreign trade is at present the Far East. Among the European producers Germany holds the dominant position there, but the United States is becoming an increasingly formidable rival. The French export mainly to Spain, South America and the French colonies.

The dyestuffs industry furnishes a classic example of the economic and social changes which constitute the chemical phase of the industrial revolution. It has opened the way for increasing returns in scores of ways—by providing dyes at a small fraction of their former cost, by making them available in a wide range of color and quality, by setting free millions of acres of land for other uses and by making valuable an offensive waste. It has revolutionized the dyeing industry and brought about numerous changes in the design of chemical engineering equipment, for example autoclaves, filter presses and fractioning columns, that have proved useful in

a number of other industries. It has stimulated production of contact sulphuric acid and synthetic nitrogen. It has disrupted with dramatic suddenness age old arteries of commerce and created the uncertainties of intercommodity and interprocess competition. In making cells visible by staining, it made possible the isolation of various disease germs, such as those of tuberculosis and sleeping sickness, and devised such remedies as aspirin, salvarsan and diphtheria serum. It has developed large research laboratories equipped with exhaustive chemical libraries and hundreds of highly trained chemists. It has compelled joint cost production and the growth of international enterprises manufacturing hundreds of products and selling them under procedures similar to those of international arbitration. In peace and in war the worker has been injured and sometimes healed by dyestuffs products. Finally, it has made imperative, if the genie of chemical and particularly dyestuffs knowledge is to render maximum service to humankind, the abandonment of laissez faire and the increase of unified cooperative control by government, university and industry.

THEODORE J. KREPS

See: COMMERCE; COMMERCIAL ROUTES; GUILDS; INDUSTRIAL REVOLUTION; CHEMICAL INDUSTRIES; CARTEL; ALIEN PROPERTY.

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EASEMENTS. See Servitudes.

EATON, DORMAN BRIDGMAN (1823-99), American lawyer and civic reformer. After graduating from the University of Vermont in 1848 and from Harvard Law School in 1850 Eaton assisted Judge William Kent in preparing the eighth edition of Kent's Commentaries. In 1851 he was admitted to the New York bar. He retired from active practise in 1870 after a murderous assault by unknown persons and devoted the remainder of his life to civic reform. Eaton made many contributions to the improvement of municipal government, especially in New York City. He drafted the New York City Health Law of 1866 and served as counselor to the Metropolitan Board of Health from 1866 to 1870. He was instrumental in the reorganization of the fire department and the organization of the department of docks in 1870 and the establishment of civil magistrates in 1873.

Eaton is chiefly remembered for his long association with the merit system. His contacts as lawyer and citizen with the municipal government of New York under Tweed and with the operations of the buccancering railroad magnates of the sixties gave him ample cause for joining the small band of leaders who sought the purification of American public life through the merit system, an interest confirmed by a visit to England in 1866. He served as chairman of the national Civil Service Commission from 1873 to 1875. Two years later President Hayes

invited him to investigate contemporary English civil service reforms. The result of this investigation represents the best known and most influential of his writings. Eaton assisted in the formation of the New York Civil Service Reform League in 1877 and of the National Civil Service Reform League in 1881. He drafted the legislation which established the United States Civil Service Commission in 1883, and became its first president. He may well be called "the legislative architect of the reformed civil service in the republic" of the United States.

LEONARD D. WHITE

Principal works: Civil Service in Great Britain (New York 1880); The "Spoils" System and Civil Service Reform in the Custom-House and Post-Office at New York (New York 1881); The Term and Tenure of Office (New York 1882, 2nd abr. ed. 1882); The Problem of Police Legislation (New York 1895); The Government of Municipalities (New York 1899).

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EBBINGHAUS, HERMANN (1850–1909), German psychologist. Ebbinghaus taught psychology at the universities of Berlin, Breslau and Halle. He won his fame through his epoch making original experiments in 1885 in the field of memory, which paved the way for a host of related investigations. He also devised the so-called completion or combination test which requires the examinee to fill in omitted letters and words—a test which has been incorporated in a revised form in current mental tests.

Ebbinghaus' psychological system included much of what would now be called social psychology. Almost a fifth of his Abriss der Psychologie (1908), the only complete outline of his psychology which he himself prepared, is devoted to such questions as conduct, morality, religion, art and ideals. He was prevented by a premature death from bringing his labors to a definitive point. Yet he was able to systematize his science in his Grundzüge der Psychologie, which Wundt's encyclopaedic Grundzüge der physiologischen Psychologie surpassed in details but not in form and clarity. Ebbinghaus' Grundzüge can be compared only with James' Principles of Psychology. In 1890 he established with Arthur König the Zeitschrift für Psychologie und Physiologie der Sinnesorgane, which is probably to this day the leading German psychological periodical. Shortly before his death he assumed

the editorship of a series of volumes by specialists under the general title of *Psychologie in Einzeldarstellungen*.

As a psychological theorist Ebbinghaus was inclined toward nativism as against genetic and empiristic theories in the explanation of spatial and temporal perception and of discrimination. He nevertheless favored a genetic theory to account for tridimensional perception and a peripheral theory of tone analysis as against Stumpf's view of central fusion.

A. A. Roback

Chief works: Über die hartmannsche Philosophie des Unbewussten (Bonn 1873); Über das Gedächtnis (Leipsic 1885), tr. by H. A. Ruger and C. E. Bussen as Memory (New York 1913); Grundzuge der Psychologie, 2 vols. (Leipsic 1902–08, vol. ii completed by E. Durr, 1913; vol. i, 4th ed. by Karl Bühler, 1919); Abriss der Psychologie (Leipsic 1908; 18th ed. by Karl Bühler, Berlin 1922).

Consult: Jacnsch, E., in Zeitschrift für Psychologie und Physiologie der Sinnesorgane; 1 Abteilung, Psychologie, vol. li (1909) iii-viii; Boring, E. G., A History of Experimental Psychology (New York 1929) p. 379–86; Murphy, Gardner, A Historical Introduction to Modern Psychology (2nd ed. New York 1929) p. 189–97; Woodworth, R. S., in Journal of Philosophy, Psychology and Scientific Methods, vol. vi (1909) 253–56, containing bibliography.

EBERT, FRIEDRICH (1870-1925), German statesman, first president of the German Republic. Ebert was the son of a tailor in Heidelberg and became a journeyman saddler. Early a member of the German Social Democratic party, he filled many party and communal offices and in 1905 became a member of the central committee of the party. In 1912 he was elected to the Reichstag and in 1913 succeeded Bebel as party leader. Ebert's importance outside his own party began during the World War. The policy which he represented both as party leader and as chairman of the budget committee of the Reichstag may be summed up in two phrases: national defense and peace by mutual agreement. In furtherance of the latter he took part in the socialist peace conference in Stockholm in 1917. This double policy aroused the antagonism both of the advocates of peace by annexation and of those within Ebert's own party who opposed the voting of war loans and who finally withdrew to form the Independent Social Democratic party. In internal politics throughout the war period Ebert advocated change from autocratic to popular government. When in October, 1918, the empire made a belated attempt to save itself

by turning to parliamentarism, Ebert induced his party to cooperate with and accept responsibility in the newly established government. He took over the chancellorship from the last imperial chancellor, Prince Max, on November 9, 1918, and thereafter brought the revolutionary movement under the moderating control of his own party. As a member of the provisional government he opposed the demands for a dictatorship of the proletariat, aided in the suppression of violent insurrections of radical parties and urged the earliest possible return to law and order through the calling of a national assembly. He was elected president in 1919; democracy and national unity continued to be the leading motifs of his policy in that office. The danger of national destruction was the deciding factor in his advocacy of acceptance of the Treaty of Versailles; defense of democracy motivated his suppression of the Kapp Putsch reactionaries in 1920.

As president, Ebert accomplished two great tasks: the strengthening of the republic and the reconstruction of the nation. His domestic policy was directed toward overcoming his own party's unwillingness to work with capitalistic factions, creating coalitions of parties loyal to the republic and keeping reactionary groups from active participation in the government as long as possible. His foreign policy laid the foundation for that program of loyal fulfilment of the terms of the peace treaty which Wirth and Stresemann later pursued in the conviction that only thus could they hope to demonstrate the limits of possible fulfilment. Ebert took an active although not always apparent part in every important political decision reached during his administration and thus made the office of president, invested by the constitution with limited powers, one of political as well as of representative importance. With Ebert's death in 1925 the voices of insult and slander which had accompanied him throughout his term of office were silenced, giving way to recognition of his great human qualities and political abilities. Prime Minister MacDonald of England aptly called him "Europe's wise and patient servant."

GUSTAV RADBRUCH

Works: Schriften, Aufzeichnungen, Reden, 2 vols. (Dresden 1926); Kämpfe und Ziele (Dresden 1927).

Consult: Löbe, Paul, and others, Friedrich Ebert und seine Zeit (Charlottenburg 1928); Baden, Max von, Erinnerungen und Dokumente (Stuttgart 1927), tr. by W. M. Calder and C. W. H. Sutton as The Memoirs

of Prince Max of Baden (London 1928); Müller-Franken, Hermann, Die Novemberrevolution (Berlin 1928); Scheidemann, Philipp, Memoiren eines Sozial-demokraten, 2 vols. (Dresden 1928); Der Prozess des Reichspräsidenten, ed. by K. Brammer (Berlin 1925).

EBERT, MAX (1879-1929), German historian and archaeologist. Ebert was born at Stendal in Saxony and studied at Innsbruck, Heidelberg, Halle and Berlin. He was successively professor of prehistory at Königsberg and Riga and after 1927 at Berlin. Taking German antiquities and origins as his starting point he stressed the need of calling in the aid of the allied sciences of anthropology, ethnology, folklore and philology to the elucidation of his theme, and he further emphasized the view that no knowledge of a single European region can be adequate without embracing the perspective of primitive and archaic culture as a whole both in Europe and in western Asia. His writings include books and articles dealing with the antiquities of southern Russia and with primitive eschatology, but his chief contribution to the social sciences is the monumental Reallexikon der Vorgeschichte (14 vols., Berlin 1924-29), to the editing of which with the collaboration of various specialists he devoted the last eight years of his life. The illumination of the material findings of archaeological exploration by an extended use of the comparative method was the guiding principle which inspired Ebert's treatment of the history of culture.

ERNST SPROCKHOFF

Important Works: Sudrussland im Altertum (Bonn 1921); "Die Bootfahrt ins Jenseits," and "Die Anfänge des europäischen Totenkultes" in Praehistorische Zeitschrift, vol. xi-xii (1919-20) 179-96, and vol. xiii-xiv (1921-22) 1-19.

ECCLESIASTICAL COURTS. Although in its broadest sense the term ecclesiastical courts embraces perhaps the tribunals of all religious organizations, it will be used here in a narrower sense as meaning the courts of the Christian church, particularly those of the Roman Catholic church and the Protestant churches which have developed alongside it since the Reformation. To understand their development it is important to recognize that, while the creeds and sacraments of Christianity and the principles of the canon law were partly derived in varying degrees from Judaic and Graeco-Roman elements, the constitutional framework of the church incorporated in an ever increasing degree the main hierarchical and political features of

the imperial Roman organization. The Roman Catholic church far more than the Holy Roman Empire was the true successor in the West of the ancient Roman Empire.

The mediaeval constitution of the church, the main features of which have endured to the present day, is predicated upon the idea that the Catholic church is the community or society of all those who under the leadership of the pope, as Christ's visible representative, and of the bishops are bound together by the Catholic faith and the sacraments, and that only this Catholic church is general, apostolic and infallible. For he realization of its objects the church has received from its Founder three powers: the potestas ordinis, for the dispensation of divine grace and the sacraments; the potestas magisterii, for the declaration and spread of true doctrine; and, finally, the potestas jurisdictionis, for the leadership and governance of the ecclesiastical body-powers belonging, however, not to the church as a whole, composed as it is of both clergy and laity, but possessed only by the clergy, a special rank or order in ecclesiastical membership acquired only by ordinatio. From the point of view of government, or jurisdictio, the chief officers of the church, in the ascending scale of the hierarchy, are the bishops, the archbishops and the pope.

In the law of the church, in sharp contrast with the conception of jurisdiction in secular laws, jurisdictio ordinaria is extremely broad: it embraces both legislation and administration. While these are sharply distinguished, it is to be observed that administration (administratio), which embraces all the powers of government that are not legislative in character, includes not only governmental administration in general but also the judicial administration of the law. The term judex ordinarius is moreover applicable to jurisdictio ordinaria in all its implications: the *judex*, in the exercise of *jurisdictio*, is legislator, administrator and judge. Thus, in contrast with modern conceptions of secular constitutionalists, in the canon law the notions of jurisdictio and judex are both wide and elastic; nevertheless, only those functions of the judex which have to do with the administration of justice will be noted here.

The persons who exercise the powers of jurisdictio ordinaria, known as judices ordinarii, derive their authority either from jus divinum, as the pope and the bishops, or from jus humanum, as the archbishops and the archdeacons; and each one of the judices ordinarii has his own

well defined share in the exercise of the legislative and administrative powers embraced in jurisdictio ordinaria. In the canonical conception of the Middle Ages, which is, however, post-Gratian, the pope, as distinct from all other judices, is the judex ordinarius singulorum; for not only is he the ultimate source of justice on appeal from the decisions of the lower judices but, as in the case of the emperor, all legal causes may be brought directly to him for judgment. The totality of the pope's rights of leadership in the church is known as his primatus jurisdictionis in contrast with his primatus honoris. In his supreme government of the church the pope is assisted by the Curia Romana.

While jurisdictio ordinaria is the original and basic form of jurisdictio, the growth of the church amid the complexities of mediaeval life, coincident with the rise of papal power, led to the development of jurisdictio quasi ordinaria, delegata, mandata and vicaria. The growth of these several forms of jurisdictio, which had its beginnings in the first half of the twelfth century, rested at first on practise; but the forms soon became the subject matter of doctrine and were finally incorporated, together with the fine distinctions of the canonists, in the jus canonicum. The influence of these newer forms of jurisdictio on the system of ecclesiastical courts will be seen to have been especially marked upon the system of appeals.

Only the judices ordinarii can delegate jurisdictio; and the scope of the jurisdictio delegata is determined by the *commissorium*, which, on pain of nullity attaching to the acts of the judex proceeding under a delegation, cannot be exceeded. In general a judex ordinarius can delegate powers to another person either for a single matter or for a category of matters; and normally the delegate is empowered to do everything necessary for the performance of the commissorium. In contrast with the delegates of bishops the papal delegates are empowered to subdelegate; and in respect of this power the delegatus a summo pontifice appears to be placed on an equality with the person who receives delegated power ab imperatore. On general principles of the canon law only clerical persons can be made delegates to deal with spiritual matters but lay persons can be delegated in temporal causes.

The bishops' courts, as they came to be constituted at the height of the church's spiritual and temporal power, deserve special attention, since they were on the whole the tribunals of primary importance in the judicial system of the

church. In the Middle Ages the bishop, if at the same time he was a feudal lord, possessed a jurisdiction over his vassals that was exercised on his behalf by a vice dominus (vidame); but this jurisdiction, restricted to feudal and temporal matters, was entirely distinct from the jurisdiction which the bishop exercised, as a member of the ecclesiastical hierarchy, over the clergy and laity. In the earliest history of the church the bishops acted as arbitrators of disputes, and under Constantine their decisions were regarded as binding. Although in the West this episcopal authority in arbitration cases had fallen into disuse long before the time of Charlemagne, the imperial constitution of the post-Constantine epoch recognized nevertheless that in ecclesiastical matters the bishops possessed judicial power.

As judex ordinarius the bishop was invested with powers of administratio, which included, as has been seen, the administration of justice; but by the twelfth and thirteenth centuries this part of the bishop's jurisdictio came normally to be exercised on his behalf by an official (officialis) commissioned by the bishop. The word officialis had been used to designate the members of the officium of a Roman magistrate; but it now indicated an ordained clerk who although possessed of no jurisdiction of his own was charged, under a mandate issued by the bishop, with the exercise of his spiritual jurisdiction as bishop.

This important development of jurisdictio mandata, which reformed the episcopal court, was due to two historical causes; and it coincided with the revival and renaissance of the study of Roman law at Bologna and other universities in the twelfth and thirteenth centuries. Since the procedure of their courts had become more technical and complicated, the bishops, who were not necessarily lawyers, found themselves obliged to employ clerics versed in the Roman and canon law to exercise their judicial powers; these clerics were the officials. Another reason for their introduction was the rise of the archdeacons during the twelfth and thirteenth centuries to a position of independence as judges. Although by the jus commune the archdeacons were the bishops' assistants, by custom they acquired their own jurisdiction at the expense of episcopal jurisdiction; and the courts of the archdeacons became tribunals of first instance, from the decisions of which appeals could be carried to the courts of the bishops. This encroachment upon the bishop's original jurisdiction was not terminated until the later Middle

Ages, when the jurisdiction of the archdeacon as judex ordinarius was ended by the Tridentinum. Since his assistant had become his rival, the bishop was forced to struggle for his own jurisdiction; and he accomplished his purpose by appointing an official to exercise his jurisdiction who, having acquired all his powers from the bishop, was under the bishop's control as his mandatarius. Apart from these reasons for the introduction of the officials there was the rise of the church to the position of a world state with claims to temporal as well as spiritual authority, resulting in a vast increase in the duties of the bishop as the governor of his diocese and making it natural for him to seek relief by entrusting the judicial part of his administratio to a specialist.

Without attempting to examine comparatively the composition of the mediaeval episcopal courts in the several countries of the West, notice may be taken of the constitution of the bishops' courts in France during the period from about 1180 to about 1328. In the France of that time, as elsewhere in the West, a distinction was drawn not only between the principal official and the vicarius generalis but also between principal officials (officiales) and non-resident officials (officiaux forains). The bishop's principal official had his seat at the place where the bishop resided (in the case of the archbishop's principal official, where the archbishop resided) and his mandate extended to all matters (universitas causarum). He was not a delegated judge exercising jurisdictio delegata but a judex ordinarius. The court of the principal official was in fact the bishop's court itself, and hence no appeal lay from his decisions to the bishop. The non-resident official, on the other hand, had limited powers. Not only had he no competence with respect to certain important matters, as, for example, matrimonial causes, but he was also limited in respect of territory to a part of the diocese. He exercised, moreover, merely delegated jurisdiction (jurisdictio delegata), and accordingly an appeal lay from his decisions to the court of the bishop.

The bishop's court, normally held by the principal official in the exercise of jurisdictio ordinaria, included in its personnel several assistants, chief among whom were the assessores, the sigillator, the receptor actorum, the registrator and the promotores. Normally several assessors (assessores) who were not permanently attached to the court assisted the principal official by advising him during the hearing of a cause. They were lawyers, generally chosen from among the

advocates in the see; and although the official was not bound to follow their advice he always mentioned, when he gave judgment, that he had taken their counsel (juris peritorum freti consilio). Next to the principal official the sigillator, the sealer, was the most important and dignified personage of the court. He had the custody of the seal, by which he authenticated all the acts of the court; he was held to be learned in the law and the practise of the court; and it was he who warned the principal official and his notaries of any possible errors which they might commit. He also examined documents and in general supervised the notaries. The receptor actorum exercised his functions in the camera episcopi or camera officialis, and as one of his principal duties he received and had the custody of all documentary acts sent to the court. Among the duties of the *registrator* was the keeping of a register of the names of all persons who were censured, excommunicated or otherwise penalized under the sentence of the court. The promoters (*promotores*) represented the bishop, defending his interests and initiating in his name the repression of crimes and delicts; in general, they corresponded to the gens du roi, or king's officers, in French secular courts. In addition to all these personages there were the representatives of the parties: the barristers, or advocates (advocati), and the procurators (procuratores). The notaries (notarii) were charged with the preparation of all documentary acts involved in the conduct of a case, including those acts which were passed under the seal by the *sigillator*. Finally, there were the executors (executores, missi, bedelli, apparitores), empowered to summon persons, to deal with the contumacious, to insure the execution of judgments.

In the system of appeals a mediaeval development tended to a diminution of the bishops' and the archbishops' courts alike. The papal courts acquired a jurisdiction which was concurrent with that of the lower tribunals, with the result that many cases were taken directly to the pope for decision without being first heard by the lower courts. The reform councils of the fifteenth century sought to end or at least to limit and modify this practise, declaring that the normal appellate system should be maintained and that, moreover, appeals to the pope should not be heard at Rome but should be brought before local judges invested with jurisdictio delegata (so-called judices in partibus). The Council of Trent at last gave effect, although in modified form, to these proposals. There thus

grew up a system of local papal appeal courts, the so-called *judices synodales*, *judices prosynodales*. In more recent times this system has been extended, as in the German and Austrian dioceses of the Roman church; and where it prevails the pope delegates his appellate jurisdiction to bishops and archbishops, who in turn subdelegate it to their courts.

With respect to jurisdictio delegata the principle prevails that appeals from the decisions of a judex as delegate are heard by that judex ordinarius who has delegated the power. Where, however, a papal delegate has subdelegated, the appeal from a decision of the subdelegate is not heard, as a rule, by the delegate but is taken at once to the pope; but if the subdelegation concerns merely an interlocutory matter, the appeal from the subdelegate is heard by the delegate himself.

The papal courts that form part of the Curia Romana naturally play a prominent role in the system of appeals. The most important of these are the Sacra Romana Rota, the Camera Apostolica and the Court of Signatura Justitiae; the first is a most imposing court. In the Middle Ages the Sacra Romana Rota, which had developed out of the earlier papal system of auditores, became totius christiani orbis supremum tribunale. While the establishment by Sixtus v in 1588 of standing congregationes, some of which were given extensive judicial powers, caused the decline of the Rota, it has been revived, as a result of the reform of the Curia by Pius x in 1908, and is now a court of appeal in both civil and criminal causes. The judicial bodies of the Curia should be sharply distinguished from its other organs, such as those organs of grace known as the Signatura Gratiae and the Dataria Apostolica.

For although, as has been said, administratio embraces in its widest sense all the varied aspects of *jurisdictio* except legislation, the church in its courts achieved the gradual separation of judicial from general administrative functions. The process has been accompanied by the slow formation of that vast body of law enshrined in the Corpus juris canonici. Not only the scholarly study of the law by the canonists, many of whom were also legists, but in addition the introduction of members of the lawyer class into the ecclesiastical courts as officials, assessors, sealers and advocates tended to emphasize the part played by the law in church life and thus to give to the judicial function a purely legal as distinct from an administrative character. On the

civil side the ecclesiastical courts gave to the judicial system of western Europe the famous Romano-canonical procedure. On the criminal side, although the accusatory system prevailed in the ecclesiastical courts in the early Middle Ages, the church later developed an inquisitorial procedure which not only had far reaching influence upon the lay tribunals but also received a special and drastic application in the so-called Holy Inquisition (see Canon Law).

The church courts were highly important instruments of ecclesiastical discipline. In its origins the criminal and disciplinary system of the church, as gradually authenticated by incorporation in the canon law, was based on Christian ideas of morality and sin; and although other elements, some of which were derived from Roman and Germanic conceptions and institutions, were also adopted, the system has always been dominated by its original Christian features. The wide scope of the jurisdiction of mediaeval ecclesiastical courts, a jurisdiction which not only embraced clergy and laity alike but extended itself far into the secular sphere of law, enabled the courts by the application of the criminal and disciplinary system which they administered to act as a vast machinery for the establishment and maintenance of high moral standards in the social life of western communities. Religious and moral ideas also dominated in large measure that part of the canon law which was concerned with the civil as distinct from the criminal and disciplinary aspects of the legal life of the whole ecclesiastical body.

After the Reformation the authority of the Catholic hierarchy was gradually curtailed, and the originally wide jurisdiction of the ecclesiastical courts was ultimately restricted in practise as in principle to the matters that were purely spiritual as distinct from matters of a purely temporal character. Some of the earliest historical roots of the modern relations of the churches inter se and also of the relations of the states to the churches may perhaps be found in the conditions of the Frankish era. In the Frankish empire the ecclesiastical courts had had complete freedom to decide cases in accordance with canonical law, but at the same time the jurisdiction of the lay tribunals was not excluded where an ecclesiastical case could be properly regarded as falling within the province of secular law; thus, although marriage was a sacrament, the ecclesiastical courts did not possess, in accordance with Frankish law, an exclusive jurisdiction. As a reaction against Frankish conditions the church had sought not only to acquire an exclusive jurisdiction for its own tribunals in all spiritual matters but also to extend the jurisdiction of the ecclesiastical courts in purely civil and criminal cases and in this way to enter the realm of secular law. Thus there began that momentous struggle for jurisdiction between the ecclesiastical and lay courts which gave color to so large a part of the legal history of Europe in the later Middle Ages and which was not ended until the rise of territorial states.

In the period which immediately followed the Reformation the scope of the jurisdiction of ecclesiastical courts in Protestant countries with established state religions was very wide, reflecting the influence of the extensive jurisdiction of Roman Catholic ecclesiastical tribunals in the later Middle Ages; but the marked general tendency in modern times has been to curtail ecclesiastical jurisdiction and to restrict it to the sphere of church discipline and other purely ecclesiastical matters. Thus in England, which may be taken as a typical example, the jurisdiction of the ecclesiastical courts has been gradually reduced by the transfer of matters to the competence of the state courts.

Although in 1676 "all punishment by death in pursuance of any ecclesiastical censures" was abolished by statute (29 Chas. 11, c. 9), the act contained a proviso which left intact the jurisdiction of the ecclesiastical courts in cases of atheism, blasphemy, heresy, schism or "other damnable doctrines and opinions," allowing these offenses to be punished by excommunication, deprivation, degradation and "other ecclesiastical censures not extending to death." Although this jurisdiction still theoretically remains it has fallen into disuse. Again, the ecclesiastical courts in mediaeval England exercised a very wide disciplinary control over the morals of all the members of the church; and, proceeding in general by inquisition or denunciation, they punished a varied and numerous class of offenses which included adultery, procuration, incontinency, incest, defamation, sorcery, witchcraft, swearing, drunkenness, profaning the Sabbath and haunting taverns. This system of ecclesiastical criminal jurisdiction, in full vigor up to 1640, was abolished by Parliament in 1641 but was restored in 1661. Although the ecclesiastical courts still have jurisdiction to try cases of adultery and fornication, in general their jurisdiction over moral offenses has been greatly curtailed because of the jurisdiction of the temporal courts. Thus unnatural offenses,

witchcraft and bigamy were made felonies in 1533, 1541 and 1603 respectively; while certain forms of incest were made misdemeanors in 1908. In 1823 jurisdiction in cases of perjury, in 1855 defamation and in 1860 brawling by laymen in church were removed from the ecclesiastical courts. In theory the jurisdiction of the English ecclesiastical courts with respect to certain kinds of immorality still remains, but in practise these courts act only in the case of the clergy.

Turning to the civil side of the jurisdiction of the English ecclesiastical courts, it is to be noticed that their claim to hear cases of breach of faith (fidei laesio) and hence to exercise jurisdiction in contract did not ultimately prevail because of the issue of writs of prohibition by the common law courts. On the other hand, they had undisputed jurisdiction, certainly from the twelfth century onward, in matrimonial and divorce causes, and, similarly, they early acquired an extensive jurisdiction in testamentary causes; but in 1857 this jurisdiction both in matters testamentary and in divorce was taken from them and vested in the temporal courts. While the common law courts have always firmly maintained an exclusive jurisdiction over one kind of ecclesiastical property, the advowson, the ecclesiastical tribunals formerly exercised jurisdiction in many questions concerning tithes, church dues and dilapidations; but this aspect of their jurisdiction was greatly curtailed by nineteenth century legislation. In many matters that are purely ecclesiastical, such as ordination, discipline of clergy, doctrine and ritual, consecration, celebration of divine service and disputed applications for faculties, the English ecclesiastical courts of the present day appear to have an exclusive jurisdiction.

At the present day, even in countries where the Roman Catholic church is established, the state law of crimes and punishments prevails in general in respect of both clergy and laity; and in general the ecclesiastical courts have no civil jurisdiction, since cases respecting civil matters, such as contract, now fall within the domain of temporal law. Nevertheless, through consent and submission of its members the Roman Catholic church in all countries decides in foro conscientiae questions of betrothal, marriage and legitimacy; but except in Spain, Portugal and Peru, where the courts of the Roman Catholic church still have competence within certain limits in matrimonial causes, including divorce, no temporal consequences follow from such de-

cisions. As a matter of principle in all states, even in states where the Roman Catholic church is established, the only discipline exercised over the laity by ecclesiastical courts is penitential; and although in most countries, even in countries with established Protestant churches, such as England, discipline of the clergy, including ecclesiastical penalties, falls within the competence of the ecclesiastical courts, questions as to discipline are sometimes raised in the temporal courts. In non-episcopal religious communities, such as those established during the Reformation period in Holland and in the Protestant states of Germany and Switzerland, church courts in any true sense disappeared. Over ministers and other holders of office discipline was exercised by administrative methods, which took the form of trials before consistories or synods, and to this extent ecclesiastical jurisdiction is still in force in these countries. Penitential discipline over the laity has also been exercised in these countries by consistories and synods. but in more recent times censures of this kind have ceased in general to have any temporal consequences. Speaking in the most general terms it may be said that since the Reformation the discipline of members of churches has been the concern of both church and state. Ecclesiastical discipline has been and still is exercised in many countries over both clergy and laity; but discipline of the clergy has held and still holds a greater prominence than discipline over the lay members of churches.

While the Roman Catholic church has steadily adhered to the principle that only the ordained clergy are entitled to govern the church as legislators, administrators or judges, the Protestant churches have admitted laymen to a large share in ecclesiastical governance. Striking illustrations of this post-Reformation tendency may be observed also in the Church of England; notably the position of parochial lay officers such as church wardens, the existence of the House of Laity in addition to the House of Bishops and the House of Clergy in the National Assembly and the introduction of lay judges in the ecclesiastical courts. The practise of appointing lay judges rests historically on the mediaeval system of officials in the courts of the Roman Catholic church. While the history of officials in tile several ecclesiastical courts of England is a matter of much interest, it must suffice to remark that for a long time the office of official principal of the archbishop of Canterbury has been united with that of dean of the Arches; and

that, moreover, the considerable jurisdiction now exercised in ecclesiastical matters by the dean of the Arches is exercised by him as official principal, since his jurisdiction is restricted to the peculiars of the archbishop. For a long time this combined office has been held by a lay member of the Church of England who is a barrister of ten years' standing or a person who had been a judge of one of the superior temporal courts. The older ecclesiastical tribunals such as the archidiaconal, episcopal and archi-episcopal courts still perserve many of their pre-Reformation characteristics. The highest ecclesiastical court of appeal is the Judicial Committee of the Privy Council, a tribunal which is composed of laymen but is assisted by assessors belonging to the clergy.

It is worthy of special notice that disestablished or unestablished churches are comparatively modern. The basic legal principle applied to these churches is that the relations of their bishops, priests or other ministers and the lay officeholders one to another are regulated by contract, as are the relations of the governing persons or bodies to the laity in general; and hence a consensual jurisdiction, which to this extent possesses temporal sanction, has been created. Thus in the United States at the present time churches have no position recognized by the state; they are bodies of believers whose constitutional and legal relations are governed by contract and whose ecclesiastical jurisdiction also rests on a consensual basis. If it becomes necessary for a temporal court to pass on a question of theology, it is treated purely as a question of legal interpretation.

In Germany the Reformation produced a Staatskirchenrecht, an ecclesiastical law of the state, with the result that churches have been regarded quite differently. They hold a special place in public law as distinct from private law as privileged corporations (öffentlich-rechtliche privilegierte Korporationen). In the evangelical system of ecclesiastical law in pre-war Germany administration of the discipline of the members of the church (Kirchenzucht) belonged to the congregations (Gemeinden) and their councils (Gemeindekirchenräte), while from their decisions an appeal lay to the Kreissynodalvorstand. For wrongs committed in the conduct of their office the clergy were subject to the disciplinary law of wrongs (Disziplinarstrafrecht); and while in general punishment was in the hands of the ordinary ecclesiastical authorities (in Prussia the Konsistorien, with appeal to the Oberkirchenrat

or the Kulturminister), in cases of deviation from doctrine the Konsistorien in Prussia were assisted by the Provinzialausschuss and the appeal judges by the Generalsynodalvorstand. In some of the other states of Germany there prevailed a somewhat different system of courts for the administration of Disziplinarstrafrecht. Since the constitution of 1919 ecclesiastical organization in the German states has undergone many changes in the direction of democratization.

Indeed, it is interesting to observe that the political constitutions of the states are reflected to a certain extent in contemporary religious disciplinary institutions within their territories. Thus in monarchical and autocratic states the religious disciplinary institutions have tended to display like characteristics; in states with marked democratic political tendencies the disciplinary religious institutions are generally based, in part at least, on democratic lines. Naturally the Roman Catholic church, jealously maintaining its mediaeval monarchical hierarchy, has not been subject in this respect to democratic influences although it has yielded somewhat within the sphere of social activities. Not only in states with an autocratic tradition but also in democratic communities, as, for example, Quebec, the Roman Catholic church has administered, within the limits fixed by the temporal power, its traditional system of discipline. Protestant churches, on the other hand, have shown a marked tendency even in monarchical states to adapt their constitutions, including their disciplinary systems, to the ideas of democracy; but naturally the degree of democratization achieved has not everywhere been the same.

H. D. HAZELTINE

See: Religious Institutions; Canon Law; Papacy; Benefit of Clergy.

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ECHEVERRIA, JOSÉ ESTEBAN ANTONIO (1805-51), Argentine sociologist and revolutionist. Echeverria attended the Colegio de Ciencias Morales of Buenos Aires and from 1825 to 1830 studied in Paris, where he became interested in the social philosophies of Montesquieu, Sismondi, Lerminier and others. After his return to Argentina he came under the influence of the theories of Saint-Simon as propagated by Leroux and in 1837 became president of the Asociación de Mayo, a secret patriotic organization of young literary men formed for the discussion of national and philosophic questions and opposed to the tyrannical rule of Rosas. Echeverria drew up the credo of the society, which was based almost entirely upon Saint-Simonian doctrine. Exiled by Rosas, Echeverria took refuge in Montevideo, where he remained from 1840 until his death. There he published Dogma socialista (Montevideo 1846; republished, La Cultura Argentina edition, Buenos Aires 1915), his chief theoretical work, which was an amplification of the social theories of the Asociación de Mayo.

Echeverria is recognized as the forerunner of the social science movement in Argentina. He formulated the first economic interpretation of Argentine history, an interpretation which has dominated sociological thought in Argentina until very recent times. He argued, together with Alberdi, that courses in social philosophy should be introduced into the university curricula. Among Echeverria's important works are Ojeada retrospectiva (Montevideo 1846), a review of the political and social history of Argentina from 1837; Filosofía social, a discussion of the philosophic movement which preceded the French revolution of 1848, and Plan económico (both of which are included in La Cultura Argentina edition of Dogma socialista).

L. L. Bernard

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ECOLOGY, HUMAN. Human ecology deals with the spatial aspects of the symbiotic relations of human beings and human institutions. It aims to discover the principles and factors involved in the changing patterns of spatial arrangement of population and institutions resulting from the interplay of living beings in a continuously changing culture. It has but little in common with plant and animal ecology, for while the symbiotic processes are essentially alike for all organisms, their mode of operation in the human community is hardly comparable with the food chains and environmental controls existing in plant and lower animal communities. Man is a cultural animal and is able therefore to modify his natural environment and to create within limitations his own habitat. The division of labor that he effects with members of his own species determines the basic elements of his communal mode of living, and since this is fundamentally a cultural rather than a biological phenomenon it is subject to continuous change in form. Hence the sequences in the human community are not comparable with those in the plant or animal community.

The subject matter of human ecology can be classified under three general categories: ecological organization, which represents the spatial arrangements of population and institutions at any given time either within a local community or within a larger constellation of communities; ecological dominance, which represents the dynamic or functional aspects of spatial relationship; and ecological succession, which describes temporal changes in the human community.

The research in the field of human ecology has been done largely by geographers, students of population and economic historians. The geographers have focused their attention for the most part on the environmental factors determining the location, size and general contour of the community without giving much consideration to the spatial aspects of division of labor resulting from cultural change. Students of population have contributed data on distribution, migration and density. The chief limitation of their research from an ecological standpoint lies in the fact that they tend to regard the political area, usually the state, as the territorial unit of aggregation rather than the area which arises out of conditions of competitive cooperation. They also tend to consider equilibrium as fundamentally a relation between gross numbers and natural resources rather than as a phenomenon of a hierarchical structure of division of

labor; hence their emphasis on mass migration rather than on individual mobility. Economic historians have contributed to human ecology by tracing the growth of economic institutions from a spatial as well as a temporal standpoint.

Human ecology offers many important problems for research, such as the distribution and composition of populations; the delimitation of natural territorial groupings and zones of communal influence; the spatial arrangement of institutions and services under different conditions of density and mobility; and the nature of the interdependence of centers both within the local area and within the larger constellation.

Knowledge of ecological processes is basic to all social sciences, as social and political institutions have a spatial base and arise and function in response to changing conditions of movement and competition. Institutional stability is largely dependent upon stability of space relations. The constantly changing patterns of division of labor and of population distribution necessitate a

continuous process of institutional adjustment.

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See: Geography; Population; Sociology.

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ECONOMIC COUNCILS. See National Economic Councils.

ECONOMIC CYCLES. See Business Cycles ECONOMIC GEOGRAPHY. See GEOGRAPHY.

ECONOMIC HISTORY

Survey of Development to the Twentieth CENTURY. Historians have never ignored economic considerations, but early in modern times many of them acted as though the economic field were not worthy of their attention. Fleetwood, the first exact student of price history, thought that most people would despise "the Pains that are taken in making Collection of so mean things as the Price of Wheat and Oats" (Chronicon preciosum, 1707). "Mean things," however, had assumed dignity as they increasingly contributed to the power of the state. The best minds of the seventeenth century had been almost all worshipers of Leviathan and were universally curious, so they valued all facts bearing on the state's power and wealth. Descriptions of national resources and organization were not a new thing; but in Germany Hermann Conring made a university discipline of them ("university statistics"), while in England William Petty gave such studies a fresh turn with his conception of political arithmetic, defined by Davenant as "the art of reasoning by figures upon things pertaining to government." Carried on for a generation or two such "reasoning" might have produced a quantitative economic history. But conditions were not favorable. Until late in the eighteenth century few statistics were collected in Europe, and still fewer were made available.

The current fashion of comparing national resources and a mercantilist interest in commerce and its relation to national power had produced such a book as William Temple's Observations upon the United Provinces (1672), but this and others of its kind were hardly economic history as now understood, although they paved the way for it. Nor were the History and Antiquities of the Exchequer (1711) and the Firma burgi (1726) of Thomas Madox, although they too paved the way. Their point of view is legal and institutional, but their concern is primarily with fiscal institutions. They initiated an alliance between economic and institutional studies which was to prove fruitful.

Eighteenth century statistics in Germany gave no help to the growth of a quantitative economic history. Its leading representatives, Achenwall and Schlözer, made little or no use of even the few figures that existed. Their statistics was a kind of historical and descriptive politics. As figures became more numerous and accessible toward the end of the century, members of this school spoke with some contempt of the "common" arithmetical statisticians, whom they affected to treat as uninspired computers. But one of these "slaves of tables," Pastor Süssmilch, had carried forward with success the demographic studies initiated by Graunt and Petty, part of the raw material for exact social and economic history.

Meanwhile interest in special aspects of economic history and affairs had produced commercial histories, studies of taxation and currency, and commercial dictionaries and annals. Such were John Smith's Chronicon rusticum-commerciale; or Memoirs of Wool (1747), an exhaustive chronologically arranged compilation of printed matter bearing on wool and the woolen industry; James Postlethwayt's History of the Public Revenue from 1688 to 1758 (1759); Adam Anderson's comprehensive Historical and Chronological Deduction of the Origins of Commerce (2 vols., 1764), a chronological account of commerce from creation to the end of the Seven Years' War; Dupré de Saint-Maur's Essai sur les monnoies (1746); Raynal's Histoire . . . des établissements et du commerce des européens dans les deux Indes (1770); the early histories of the American colonies; the various editions of the Savary des Bruslons' Dictionnaire universel de commerce . . . et des arts et métiers (1st ed. 1723), on which was based Malachy Postlethwayt's Universal Dictionary of Trade and Commerce (2 vols., 1751-55).

Some of these studies supplied material for the historical sections of Adam Smith's Wealth of Nations (1776). It was only in his avowed digressions and particularly in the great digression in which he used and improved on Fleetwood's account of the changes in the purchasing power of the precious metals that Adam Smith wrote pure economic history, although there is much of it in the chapters on colonies and the growth of towns; but his writing is informed throughout with the historical knowledge of his day and he always considers economic affairs as in a state of growth and motion.

Within a few years of Smith's death there appeared Sir Frederick Eden's State of the Poor: or an History of the Labouring Classes in England from the Conquest to the Present Period (1797); although not very satisfactory as social history,

resembling too much Burn's History of the Poor Laws (1764), this work is the earliest avowed chronicle of the laboring classes in any language. Malthus' Essay on Population (1798), which appeared in the following year, was as first printed more dogmatic than historical; but in five succeeding editions he heaped historical and statistical material about the argument which dominated the thought of English economists for half a century. It was not until some time after Darwin had drawn inspiration from it that its relevance to social and economic history was fully appreciated.

In this period German historical writing was inspired by an attachment to local culture and an interest in tracing indigenous cultural elements back to the early Middle Ages. Möser's Osnabrückische Geschichte (2 vols., 1768), an outstanding example of German local history, stressed early agrarian conditions as a key to historical understanding, and Anton's Geschichte der teutschen Landwirtschaft (3 vols., 1799–1802), the first agricultural history, explained many peculiarites of later agrarian organization as survivals of an early state of freedom and communal land ownership. Preoccupation with classical antiquity inherited from the eighteenth century is reflected in Heeren's Ideen über die Politik, den Verkehr und den Handel der vornehmsten Völker der alten Welt (3 vols., 1793-1812), which marks an epoch in the writing of commercial history, and in the far more scholarly and critical Die Staatshaushaltung der Athener (2 vols., 1817) by August Böckh, who laid the foundation for an economic and social history of Athens.

The political, legal and economic revolutions of the period from 1789 to 1848 raised historical problems and stirred historical imagination. There were revolutionary agrarian changes all over western Europe which aroused curiosity about agrarian history. Machine industry was spreading from England to the continent and developing on its own lines in America. The German national revival and reaction from the unhistorical attitude of eighteenth century philosophy inspired the legal and institutional history of Eichhorn and Savigny, which in its turn inspired the historical economics of Roscher, whose Staatswirthschaft nach geschichtlicher Methode (1843) is not a great book but which combined with his later writings had great influence. Through the historical school in economics and through encouraging research into the legal history of institutions, many of which had impor-

cant economic bearings, the historical school in jurisprudence has been responsible for a very large amount of work on economic history in Germany and for its emphasis on origins and structure rather than on function. German nationalism and the knowledge of American protectionist thought inspired Das nationale System der politischen Okonomie (1841) by Friedrich List. Although List was an anti-free-trade propagandist and a political genius rather than a professed historian, his contentions led the economist straight into history; for they asked him to study problems of wealth not at a point in time and all on one plane but to think of live changing nations on different and shifting planes and of the growth of their productive powers.

In France Saint-Simon, who like List was no historian and knew something of America, had taught to a group of able and influential disciples the absolute primacy of industry, i.e. economic activity, in human affairs. He was mainly interested in the future but his influence, direct or indirect, tended to make economic historians out of those interested in the past.

In England practical men early wrote of the new industries which they understood. There was a considerable historical literature about cotton before the appearance of Baines' standard History of the Cotton Manufacture (1835). Scrivenor's Comprehensive History of the Iron Trade appeared in 1841. The history of wool was carried forward by Bischoff of Leeds in his Comprehensive History of the Woolen and Worsted Manufactures (1842). More important for the future of economic history was the natural preoccupation of men of affairs with the war and post-war price vicissitudes of the period and with the policy of governments toward them. The monument of this is Tooke's History of Prices . . . from 1793 to 1837: Preceded by a Brief Sketch of the State of the Corn Trade in the Last Two Centuries (2 vols., 1838), which has a free trade orientation. It was carried forward in successive volumes by Tooke (4 additional vols., 1840-57), on the last two of which he was assisted by Newmarch.

During the nineteenth century all civilized nations adopted regular censuses. The need for statistics of every kind was urged by reforming philosophers (in England, especially by Jeremy Bentham), by government officials, who needed exact materials, and by men of affairs, who wished to gauge national economic policy and progress. The result was a steady increase of statistical material, but until 1850 and in some

fields until much later the gaps were immense. Results of this first spell of statistical activity were put together for the United Kingdom by G. R. Porter in his *Progress of the Nation...* from the Beginning of the Nineteenth Century... (3 vols., 1836–43) and for Prussia by Dieterici, Der Volkswohlstand im preussischen Staate (1846). Although most writers of this class lacked wide vision they carried out work of which Petty had dreamed, and prepared for the quantitative treatment of modern economic history.

The transformation of agrarian conditions connected with the emancipation of the peasantry in many parts of Europe produced much descriptive literature, especially in German, and some work on agrarian history of outstanding historical value. The greatest name is that of Hanssen, whose writings on north German agrarian conditions and history began to appear in 1832. His study of peasant emancipation in Schleswig-Holstein was crowned by the St. Petersburg Academy of Sciences in 1860 just before emancipation was decreed in Russia. Hanssen began the investigation of early forms of agricultural settlement and distribution of landholdings which half a century later led Meitzen to publish the monumental Siedelung und Agrarwesen der Westgermanen, Ostgermanen, der Kelten, Römer, Finnen und Slawen (3 vols., 1806); it attempts to establish racial types of village formation and makes extensive use of village maps and field plans. Equally important was a parallel line of inquiry regarding the early mark and its connection with the two forms of manorial organization in Germany, the Grundherrschaft and the Gutsherrschaft. In this field the most influential and scholarly book was Maurer's Geschichte der Markenverfassung in Deutschland (1856), which together with his later book, Geschichte der Dorfverfassung in Deutschland (2 vols., 1865-66), profoundly influenced the writing of English constitutional history. In addition, many semilearned histories of commerce appeared in German in this period, but most of this work was of second rate quality.

In France the outstanding contribution to economic history produced in this period was Levasseur's Histoire des classes ouvrières... jusqu'à la Révolution (1859); it did for France with far more learning what Eden had attempted sixty years earlier for England. At the same time critical and editorial work of original authorities was being done by scholars not always primarily interested in economics. Guérard edited chartularies of the great abbeys, while his pupil Delisle,

perhaps the greatest archivist of the century, published in 1851 his Études sur la . . . classe agricole et . . . l'agriculture en Normandie au moyen âge, an early classic of exact documentary research.

Guérard, in the language of later controversy, was a Romanist, one who stressed the Roman and minimized the Teutonic elements in the legal, institutional and economic life of the Middle Ages. This controversy, which went on through the greater part of the nineteenth century, exacerbated by Franco-German political tension and conflict, was really more concerned with legal and institutional than with strictly economic issues: with town, guild and manor origins and history of agrarian tenures rather than with guild function, urban economic policy, agricultural output or prices. Its importance in the development of economic history lies partly in the immense stimulus which it gave to research and partly in the way in which it sometimes not only diverted those who might have been economic historians to institutional tracks but also led them to pay more attention to the uncertainties of origins than to the ascertainable facts of function.

In England also an undue prominence was given to institutional aspects of economic history, in part because of the success and high ability with which institutional and more particularly constitutional history was studied after 1870, the date of the first appearance of Stubbs' Select Charters of Constitutional History. This does not apply to Stubbs' Oxford contemporary, Thorold Rogers, who had begun in 1866 to issue his History of Agriculture and Prices (6 vols., 1866–87). As a history of agriculture it was very deficient, and as a history of prices not perfect. Rogers was an active politician and a historian with marked bias. But the prices, nearly all taken from manuscript sources, showed how mediaeval economic history might be studied quantitatively; and the results, although they now require revision, have served ever since as a basis for price history in England and as a stimulus to its production in other countries.

Stubbs' "Germanist" reading of Anglo-Saxon history, based on Maurer, led him to overrate the free Teutonic element in early English society. His conclusions, shared by all the leading English historians of the time, were challenged, with an abundant agrarian knowledge which Stubbs did not possess, in Seebohm's English Village Community (1883). This book first made the mediaeval village live for English speaking

students, but it has long been recognized that it overemphasized the servile element in early society.

By this time even in England economic history had ceased to be an adjunct to economics or a battlefield for fiscal policies. Levi's meritorious work of 1872, the first general survey of the period since 1760, had been called in the old style A History of British Commerce, and Cunningham's wider enterprise of 1882, The Growth of English Industry and Commerce. Seebohm's was the first important English book the title page of which carried the cognomen "An Essay in Economic History." Yet economic history in its comprehensive and independent modern form and with its modern title had first grown in the German speaking countries, where modern synthesis began in 1879 with Inama-Sternegg's Deutsche Wirthschaftsgeschichte (3 vols., 1879–99), which was limited, however, to the Middle Ages. It was at this time also that Schmoller's influence began to be felt in Germany. His collection of essays Zur Geschichte der deutschen Kleingewerbe im 10. Jahrhundert (1870) impressed alike German and foreign students of economic history, and Die Strassburger Tucher- und Weberzunft (1879), based in part on Stieda's researches, served as a model for a host of monographs on guilds in other German cities. In his "Studien über die wirtschaftliche Politik Friedrich des Grossen . . . " (in Schmollers Jahrbuch, vol. viii, 1884, p. 1-61, 345-421, 999-1091), the first part of which was translated by Ashley as The Mercantile System (1896), Schmoller succeeded virtually for the first time in placing the mercantilist policies of the seventeenth and eighteenth centuries in a historical setting; in this work he developed also his conception of the evolutionary growth of economic society, but in this stage scheme his chief concern was with the transition from the Middle Ages to modern times. At the same time Karl Bücher published Die Bevölkerung von Frankfurt am Main im XIV. und XV. Jahrhundert (1886), a work which constitutes an important contribution to the social statistics of mediaeval cities and which has provided the occasion for a considerable literature of criticism and comment. Another important influence was that of G. F. Knapp. The studies of his seminar at Strasbourg of the agrarian history of various German territories were intended to throw light on conditions immediately preceding the emancipation of the peasants, but they helped also to clarify the problem of manorial origins. In France attention

in this period was focused on Fustel de Coulanges, who led the Romanist attack on Maurer's theory of manorial origins and whose La cité antique (1864) is a valuable if oversimplified interpretation of the institutional history of Roman antiquity. Cunningham, whose magnum opus has even in its revised form too prominent a political framework, Schmoller and Knapp in Germany and Fustel de Coulanges in France illustrate the varying but in all cases rather close alliance of economic history with institutional and political history. Another interesting feature of this period is that most of the best work in all countries was done on classical, mediaeval or very early modern times, because the best preparatory work by general historians on sources and method had been in these periods.

Meanwhile in the first two editions of the first volume of *Das Kapital* (1867 and 1873) Karl Marx had thrown down his challenge to economists and historians, calling them into the modern world but at the same time making suggestions about the course of economic evolution in earlier ages—and indeed about the whole nature of history and the place of economics in human affairs -which must be either accepted or disproved. Even before that there had from time to time been a good deal of writing in general terms about stages in economic evolution. The revived interest in primitive societies and the rise of prehistoric studies had also stimulated speculation. Curiosity about the growth of large scale industry and machine industry had not slackened since the early years of the century. But beginning with the seventies the Marxian conception of capitalism slowly acquired a prominent place in historical thought. Historians and economists became increasingly concerned with such questions as the origins of capitalism, its forms and relations to other types of economic organization, its spread and influence in various societies and at various dates, its relations with the problems of money and the vicissitudes of prices, its connections with the early and later history of the New World.

Such discussions, however, entered their contemporary phase only with the appearance in 1902 of the first two volumes of Sombart's *Der moderne Kapitalismus*, a more frankly historical and academic, less partisan but not less challenging, work than *Das Kapital*. Its conclusions have been disputed by specialists at almost every point and modified by its author at several; but it furnished and in its revised form (3 vols., 1927) still furnishes a perpetual stimulus to in-

quiry. Sombart's distinction, based on Marx, between early and "high" capitalism, with a dividing line at the great mechanical inventions, has been fruitful; and so have his suggestive if incomplete and overemphasized accounts of the part played by war and luxury in promoting large scale industry and standardization of output.

Marx went to history to prove a thesis and find material for a forecast. Others equally interested in the social problems of their day went to it for guidance in social reform. Prominent among these in England was Toynbee, whose Lectures on the Industrial Revolution (1884), published posthumously, exerted an influence quite out of proportion to its size and unfinished workmanship. A decade later Sidney and Beatrice Webb, standing much further to the political Left, dealt with the same problem in their History of Trade Unionism, which with only very slight traces of political bias applied strict methods of research to the most recent and most controversial history. In the same period Ashley, a younger Oxford contemporary of Toynbee and the incumbent of the first chair of economic history in the English speaking world at Harvard, produced in his Introduction to English Economic History and Theory (2 vols., 1888-93) a strictly scientific synthesis; since the work never got beyond the sixteenth century it did not reveal in any direct way its author's spiritual debt to Toynbee.

Special aspects of recent British history were also handled thoroughly by Buxton in Finance and Politics, 1783–1885 (1888) and Prothero in The Pioneers and Progress of English Farming (1888; expanded into English Farming, Past and Present, 1912). About the same time the output of industrial histories by men engaged in industry or closely connected with it, a characteristic British activity of the period from 1825 to 1875, tended to slacken. Notable exceptions are offered by Ellison's history of The Cotton Trade of Great Britain (1886) and Burnley's History of Wool and Woolcombing (1889).

During the decade from 1890 to 1900 the legal, institutional and economic history of the Middle Ages in England and elsewhere was illuminated by the towering personality, intellect and scholarship of Maitland. Although economic history proper was not his main interest, his History of English Law (in conjunction with Sir Frederick Pollock, 1895), Township and Borough (1898) and Domesday Book and Beyond (1897) did more for the comprehension of mediaeval economic life than many volumes of more spe-

cialized writing without genius behind it. The decade was also marked by the first outstanding contributions of American and Russian scholars to English economic history; Gross in *The Gild Merchant* (1890) and Vinogradoff in *Villainage in England* (1892) both worked from the legal and institutional side and with a German mediaeval background.

England had early attracted the attention of German scholars. The relative completeness of English records offered the opportunity of studying the peculiarities of early Teutonic settlements in so far as they survived on British soil, and for the modern period England was thought to present the classic picture of the agrarian, commercial and industrial revolutions. Nasse's study of the mediaeval village community and sixteenth century enclosures (1869) was translated into English two years after its appearance in Germany, and Brentano's essay on The History and the Development of Gilds (1870) was prepared and published in England. Gustav Cohn, an inductive economist by training, produced the still unequaled Untersuchungen über die englische Eisenbahnpolitik (2 vols., 1874-75) based on a close study of bluebooks and business records. Held's posthumous Zwei Bücher zur sozialen Geschichte Englands (1881) is a notable but uncompleted study of English industrial development from 1750 to 1850 by a German socialist of the chair. A quarter of a century later the Frenchman Mantoux produced an equally important study of the industrial revolution in England.

By the end of the nineteenth century economic history had not only acquired a definite territory and independence but it was coming to be recognized as a foundation study in the history of civilization. No student of prices needed to apologize for the supposed "meanness" of his subject after d'Avenel had illustrated in his Histoire . . . de tous les prix . . . depuis l'an 1200 jusqu'en l'an 1800 (4 vols., 1894–98) the class making and class destroying power of price changes and Bonn had studied the effect of the price revolution on the decline of Spain in the sixteenth century (1896). It was not necessary to accept Marx' materialistic interpretation of history in all its crudity in order to agree with some part at least of what Engels called his great discovery: "that everywhere and always political conditions and events find their explanation in the corresponding economic conditions." The economic achievements and tragedies of the nineteenth century had made the writing of eco-

nomic history inevitable. "Things are in the saddle, and ride mankind." Detached study of how this came about had superseded the resort to history for the defense of policy or the illustration of preconceived philosophic doctrine. Not that a study so closely linked, to its very great advantage, with everyday things is likely to attain complete detachment from contemporary economic and social policies and contemporary philosophic conceptions. Ages read and write history by the light of their own knowledge and ideals, and they interpret it by their own experience. Although no conscientious scholar would deliberately write either "proletarian" or "bourgeois" economic history, only the most technical and therefore the least human history will fail to show some stamp not merely of the historian's age and philosophy but of his country and class or of the country and class to which his sympathies principally go out.

J. H. СLАРНАМ

STUDY AND RESEARCH IN THE TWENTIETH CENTURY. Great Britain. Economic history had a place in Oxford and Cambridge historical curricula before 1880. With the death of Toynbee and Rogers and the passage of Ashley from Oxford to America, Cambridge became more prominent. Cunningham was teaching there and Marshall was at that time giving much attention to history. The foundation of the London School of Economics in 1895 as well as the establishment of economic curricula and increased attention to economic and social history in historical curricula at Cambridge, Oxford and other British universities tended to give wider scope to the study of economic history in Great Britain during the twentieth century. There was no professorship of economic history until 1910, when a chair was founded for George Unwin at Manchester, but there were many readerships and lectureships. A chair was founded at Cambridge in 1928 and at Oxford in 1931.

Monographs on social and industrial history began to appear from the London School soon after its foundation; and in close association with it were issued the volumes of Sidney and Beatrice Webb's great history, the English Local Government, of which the most strictly economic are those on The King's Highway (1913) and on the poor law (1927-29). Research work at the school was largely inspired by Mrs. Knowles until her death in 1926. Her Industrial and Commercial Revolutions in Great Britain during the Nineteenth Century (1921) and her Economic De-

velopment of the British Overseas Empire (1924) indicated the lines along which she had worked. She was assisted and has been succeeded by Tawney, the author of numerous works of which the most important are The Agrarian Problem in the Sixteenth Century (1912) and Religion and the Rise of Capitalism (1926), the latter traversing in a different fashion the ground covered earlier by Max Weber. A younger colleague of Mrs. Knowles, and now holder of the chair named after her, is Eileen Power, author of the Medieval English Numeries (1922) and compiler of the critical bibliography of The Industrial Revolution 1750–1850 (1927), published by the Economic History Society.

At Oxford Vinogradoff illuminated social history from the legal side in his Growth of the Manor (1905) and other works and inspired the monographs of the Oxford Studies in Social and Legal History (begun 1909). Oxford also supplied Lipson's Introduction to the Economic History of England (1915), which was limited to the Middle Ages. G. N. Clark, who was appointed to the newly created chair, has not been primarily an economic historian, but there is valuable economic work in his The Dutch Alliance and the War against French Trade, 1688–1697 (1923) and The Seventeenth Century (1929).

At Cambridge Cunningham abandoned teaching early in the present century but worked over his Growth of English Industry and Commerce until 1910 (5th ed. in 3 vols.). Various teachers divided his work after his death. Of these Clapham, after the issue of his Economic Development of France and Germany (1921) and the first volume of his Economic History of Modern Britain (1926), was appointed to the new chair of economic history in 1928.

Unwin's professorship at Manchester was most fruitful. His knowledge of sources, mediaeval and modern, was unique (see Studies in Economic History, 1927); in his last book, Samuel Oldknow and the Arkwrights (1924), he began that rewriting of the history of the industrial revolution with the aid of business documents which is being carried on by his colleagues and pupils in Manchester and elsewhere. The staffs of the younger British universities in the industrial centers and in Wales have all contributed to economic history and are acting as promoters of regional economic research. From Birmingham, until his retirement in 1925, Ashley encouraged this work. His own historical work had been laid aside since 1913, but his Bread of Our Forefathers (1928) was in the press when he died.

Under the leadership of W. R. Scott, formerly of St. Andrews, where he wrote the learned treatise on the early history of English, Scottish and Irish joint stock companies (3 vols., 1910-12), and now Adam Smith professor of political economy at Glasgow, work on Scottish agrarian and industrial history has been taken up. Earlier Cunningham had inspired similar work, some of the results of which were published in the Scottish Historical Review (quarterly, 1903–28). Miss Grant's Social and Economic Development of Scotland before 1603 (1930) is a contribution to synthesis from a non-academic source. Valuable, widely read and controversial non-academic contributions to the history of the industrial revolution have been made continuously since 1911 by J. L. and B. Hammond; these include among others The Village Labourer (1911), The Town Labourer (1917), The Skilled Labourer (1919) and The Rise of Modern Industry (1925).

The stimulus given to local economic history by the issue of the Victoria County Histories (beginning in 1901) was checked by the difficulties of that enterprise during the war years. The work accomplished was unequal but some was of first rate quality. In every case the articles of this series form a starting point for further local research. The publications of local antiquarian and archaeological societies and of the Camden, Selden, Pipe-Roll, Year Book and other societies are constantly adding to the mass of printed sources without greatly reducing that of the unprinted. The volumes of the English Place-Name Society (published since 1924 under the editorship of Mawer and Stenton) are supplying important material for early history. Their publication is aided by the British Academy, which is also responsible for such volumes of its own as Stenton's Documents . . . of the Danelaw (1920). Among publications of the government of special interest to the economic historian the inventories of the Royal Commission on the Ancient and Historical Monuments (begun in 1910) and the archaeological work of the Ordnance Survey Office claim notice. The latter published Crawford's Air Survey and Archaeology (1928), which illuminated Celtic Roman and Saxon field history and has since issued remarkable maps of Roman Britain and seventeenth century England.

Recent activity in the field of economic history in Britain is reflected in the appearance since 1926 of an annual historical supplement of the *Economic Journal* and the foundation in 1927 of the *Economic History Review* edited by Lipson and Tawney. In addition to these fresh

outlets, original work in economic history continues to appear in the *English Historical Review*, in the *Transactions* of the Royal Historical Society and in the *Cambridge Historical Journal* published since 1923.

I. H. CLAPHAM

Continental Europe. On the continent economic history has reached its highest development and is most eagerly studied in Germany. In his books and papers on mediaeval town and agrarian history (Territorium und Stadt, 1900; Der deutsche Staat des Mittelalters, 1914) Below brought an acutely critical intelligence to the clarification of many puzzling problems. Although in general inclined to pay more attention to the legal and constitutional aspects of mediaeval institutions Below emphasized the primacy of economic factors in the origins of guilds and towns. Max Weber also dealt with Roman and early German agrarian organization, but his greatest contribution to economic history consisted in stressing the importance of the religious factor in various economic systems and thereby opening up a wholly new field of inquiry. His posthumous Wirtschaftsgeschichte (1923) is not a work in economic history but a treatise in sociological economics; it utilizes historical material for the illustration of the basic thesis, the victory of rationalism over traditionalism. Brentano's collection of essays Der wirtschaftende Mensch in der Geschichte (1923) traces economic evolution in terms of the disintegration of the primary economic unit and the resulting permeation of economic life with competitive acquisitiveness; he also published his lecture course on the economic history of antiquity (1929).

With the recent death of many of the outstanding figures in the field the stimulating effect of the works of Sombart and Dopsch has come more clearly to the foreground. Sombart's theories of the origin and development of capitalism have inspired a large number of important if controversial works. Both Below and Brentano attacked Sombart's generalizations on the subject, but perhaps the most telling attack was Strieder's Zur Genesis des modernen Kapitalismus (1904), a study of the accumulation of large fortunes at the close of the mediaeval period. Equally provocative was the thesis of the Austrian scholar Dopsch as to the persistence of the Roman agrarian institutions to the end of the Carolingian period, which he developed in Die Wirtschaftsentwicklung der Karolingerzeit (2 vols., 1912-13) and in Wirtschaftliche und soziale

Grundlagen der europäischen Kulturentwicklung aus der Zeit von Cäsar bis auf Karl den Grossen (2 vols., 1918–20).

Special and local historical studies have in this period been less concerned with agriculture and agrarian conditions and more with commerce and industry; the best of them deal with the Middle Ages and early modern times. This is doubtless due to the great importance of the towns in the history of Germany and to the decadence of the country in the seventeenth and eighteenth centuries; the great industrial and commercial development of Germany in the twentieth century has also contributed to this orientation of studies. Early in the century the publication of Schulte's Geschichte des mittelalterlichen Handels und Verkehrs zwischen Westdeutschland und Italien (1900) marked an important turning point in commercial history. Schäfer, whose best known economic work was done in Hanseatic history, and more recently Häpke, who studied the economic history of northern Germany and Holland, have also been prominent in this branch of study. Ehrenberg's Das Zeitalter der Fugger (2 vols., 1896), a classic of commercial and financial history of early modern times, belongs to the nineteenth century, but his studies of the great German industrialists (Grosse Vermögen, ihre Entstehung und ihre Bedeutung, 2 vols., 1902-05) come within this period. More recently Strieder's studies of monopolistic tendencies during the period of early capitalism (Studien zur Geschichte kapitalistischer Organisations formen, 1914) and of the Fuggers (Jakob Fugger der Reiche, 1926) have claimed general notice. Ehrenberg's and Strieder's work is illustrative of a large number of studies published in Germany on the origin of large fortunes and on the history of individual families and business concerns which played a leading part in economic life. In another field is Theo Sommerlad's Die wirtschaftliche Tätigkeit der Kirche in Deutschland (2 vols., 1900-05); it drew attention to the significant role played by the church in mediaeval economic life.

This period was also rich in general treatises and comprehensive serial publications in economic history. A synthesis of universal economic history was recently completed by the anthropologist Cunow (4 vols., 1926-31). The very able summaries of mediaeval and modern economic history by Koetzschke (Allgemeine Wirtschaftsgeschichte des Mittelalters, 1924) and by the Russian scholar J. Kulischer (Allgemeine Wirtschaftsgeschichte des Mittelalters und der

Neuzeit, 2 vols., 1928–29; published originally in Russian in 1913), appearing as volumes of the general historical series edited by Below and Meinecke, bring together an enormous mass of monographic work on the subject mainly German in authorship. In 1918 Brodnitz began the publication of a Handbuch der Wirtschaftsgeschichte, which is to furnish manuals of economic history of the principal countries. The volumes so far published deal with England (1918), Russia (1925) and Holland (1927) and offer useful surveys.

The oldest scientific magazine in the field of economic history, Vierteljahrschrift für Sozialund Wirtschaftsgeschichte (founded in 1893), continues as one of the most alert and useful organs, although it has lost the genuinely international character and scope which distinguished it before the World War. The activity of the learned societies, such as the Vienna Academy of Sciences (publisher of the Oesterreichische Urbare, 1904–13) and the Hansischer Geschichtsverein, was only temporarily interrupted during the war years and the period of post-war disorganization; they continue to publish sources of economic history and to stimulate research on the subject.

In contrast with Germany economic history in France had been rather neglected before the war. It was but feebly represented in university faculties, and learned societies gave it no attention. Only the period of the French Revolution seemed to attract attention, and the government encouraged its study by creating in 1903 a commission for the publication of documents relating to the economic history of the revolution. The commission's series of cahiers and of documents bearing on the sale of public lands are accompanied by valuable notes and commentaries and illuminate the history of the entire eighteenth century. It is only since the war that a strong current of interest in economic history in general has become apparent in France. The success of geographic studies, carried on since the opening of the century under the direction of such men as Vidal de la Blache, Brunhet and Demangeon, has focused attention upon the role of geographic factors in national economic development and has indirectly stimulated an interest in economic history. The initiative of a few scholars such as Henri Sée, who works primarily in eighteenth and nineteenth century economic and social history, and Henri Hauser, who ranges over the entire field of French economic history, was also in part responsible for

this change. In 1913 the Revue d'histoire des doctrines économiques et sociales (founded in 1908) changed its title to Revue d'histoire économique et sociale; this was intended to emphasize the connection between the history of theories and the history of institutions and to open the pages of the magazine to factual studies. Of greater importance has been the establishment in 1929 by M. Bloch and L. Febvre of the Annales d'histoire économique et sociale, whose success is a good omen for the future of the discipline in France. At present there is being published in France a series of general surveys of economic history and prehistory by periods. The volumes of this Histoire universelle du travail, edited by Georges Renard, tend however to run over into institutional and social history and are rather popular in treatment. The general historical series, L'évolution de l'humanité, published under the direction of Henri Berr, also contains special volumes on economic history.

The monographic work in France tends to neglect economic for legal and constitutional history; the mediaeval period is studied less intensively than in Germany. Thus no definitive work has as yet been done on such important problems as the significance of viticulture for mediaeval economy or the role played by the fairs of Champagne and the commerce of Marseille. Valuable contributions to mediaeval history have been made, however, by Georges Espinas, who has studied the cloth industry of French Flanders (2 vols., 1923) and the finances of the town of Douai in northern France (1902 and 1913); by Coornaert, the author of a history of the cloth trade of Hondschoote (1930); and by Hauser in his collected essays, Travailleurs et marchands dans l'ancienne France (1920). The interest of the French historians still definitely centers about the period of Colbert and the century of the revolution. Thus Boissonade and Hauser have studied the economic policy of Colbert, Paul Masson the history of the French trade with northern Africa (1903) and the Levant (1806) and Léon Vignols colonial commerce (1925). The agrarian conditions of the prerevolutionary period and the changes effected by the revolution have been illuminated in the important studies (1911-13) of the Russian scholar Luchitsky and in the later work done by Georges Lefebvre (2 vols., 1924), while the general economic history of the revolution is being intensively studied by Mathiez. In his history of French public finance after 1715 (5 vols., 1914-28) Marcel Marion also devotes considerable

attention to the finances of the revolution. An important contribution to industrial history of the modern period, a field which has been rather neglected, is Ballot's L'introduction du machinisme dans l'industrie françuise (1923).

In Belgium the advantages of location favored the early development of commerce and industry; it is natural therefore that Belgian scholars came to pay increasing attention to the history of these subjects. They came to it by way of the history of mediaeval towns, the institutions and social struggles in which could be understood only in the light of contemporary economic developments. Among the documentary collections on Belgian economic history may be noted the collection on the Flemish cloth trade, the greatest export industry of the Middle Ages, published by H. Pirenne and G. Espinas (4 vols., 1906-24). Of the individual studies several are worthy of notice. G. des Marez treated colonization in the Frankish period (in Académie Royale des Sciences, des Lettres et des Beaux Arts, Mémoires, ser. 2, vol. ix, 1926, sect. 2) in a way which shed new light upon the subject; he has also a study of the organization of labor in Brussels in the fifteenth century (1903-04). The agrarian organization in the Middle Ages has been studied by Verriest, and mediaeval money lending and finance by Bigwood. Goris' Etude sur les colonies marchandes méridionales . . . à Anvers de 1488 à 1567 (1925) supplements and clarifies Ehrenberg's treatment in his Zeitalter der Fugger. Huber van Houtte produced several works on the economic history of Belgium under the ancien régime (Histoire économique . . . , 1920; Les occupations étrangères . . . , 2 vols., 1930) and compiled a series of documents on price history from 1381 to 1794 (1902). J. Cuvelier collected valuable materials on the statistics of population in the Middle Ages in his Les dénombrements de foyers en Brabant (XIVe-XVIe siècles) (1912).

While the Belgians are especially interested in the period comprising the Middle Ages and the sixteenth century, the Dutch historians are more attracted to the seventeenth and eighteenth centuries, during which the economic leadership of the world resided in Holland. Van Dillen's penetrating studies of Amsterdam exchange banks (1925) and of the Amsterdam guilds (1929) relate primarily to this period, while Posthumus' valuable history of the Leyden textile industry (1908) is limited to the Middle Ages, although the collection of documents on the subject compiled by him (6 vols., 1910–22) covers the years from 1333 to 1795. The popularity of the study

of economic history in the Netherlands is attested by the publication since 1916 of the Economisch-historisch jaarboek.

Although the economic development of mediaeval Italy was much in advance of all the other nations, the Italian historians have not as yet given adequate attention to the subject which comprises the eastward expansion of Italian commerce and the organization of commerce and finance in the different city-states. German historians like L. M. Hartmann (Geschichte Italiens im Mittelalter, 4 vols., 1897-1915), who has continued the work of Monimsen; Schaube, a student of the commercial history of the early Middle Ages (1906); and Davidsohn, the author of a monumental history of mediaeval Florence (4 vols., 1896-1927), are responsible for the beginning of a scientific study of these topics. An important French contribution in this field is that of Yver (Le commerce et les marchands dans l'Italie méridionale au XIIIe et au XIVe siècle, 1903). Recently an American scholar, E. Byrne, has drawn upon the rich notarial archives of Genoa for his valuable study Genoese Shipping in the Twelfth and Thirteenth Centuries (1930), and a Rumanian, G. J. Bratianu, has produced the instructive Recherches sur le commerce génois dans la Mer noire au XIII siècle (1929). There is no doubt, however, that in the future Italian investigators will pay increasing attention to the economic past of their country. Salvioli's study of capitalism in ancient Rome (1906), the work of Einaudi on the financial history of the eightcenth century and that of the late G. Prato on the financial and agrarian history of the seventeenth and eighteenth centuries indicate that an interest in economic history is not alien to Italian scholarship. The more recent publications of Sapori on the Florentine banking houses of the late Middle Ages (La crisi delle compagnie mercantili dei Bardi e dei Peruzzi, 1926) offer a most encouraging promise for the future.

This much too cursory survey has frequently mentioned the influence of the World War on the study of economic history. This influence must not, however, be overestimated; it is not at all comparable in importance to the profound changes which the war introduced into the study of general modern history. The economists have made and will continue to make the World War the object of their researches; the voluminous Economic and Social History of the World War, published under the direction of Shotwell by the Carnegie Endowment for International Peace, is an imposing example of such work. But for

economic historians the events growing out of the war are still too recent to be studied and understood in their true perspective. The war has not appreciably affected the viewpoints, trends of ideas or methods of work employed by economic historians, nor did it long disturb the actual prosecution of their work. Yet the time is ripe for a creative spirit to break new paths in research. Much can be gained in the future by emancipating economic history from limitation to the study of single nations and by adopting more frequently and more thoroughly the comparative method of research and systematization.

ECONOMIC HISTORY IN THE UNITED STATES. Economic history may be studied from three distinct points of view. First, economic events may be presented simply in their chronological sequence; this type of study, economic chronology, early became dominant in America. Secondly, the historian may attempt to establish a sequence of filiation in the unfolding of economic events, devise perhaps a series of stages of economic development. This genetic approach is illustrated occasionally in American economic history, as in the work of Richard T. Ely, J. R. Commons, Isaac Loos and Blanche Hazard, but it is not much emphasized, partly because the history of America is so brief that it does not present a very long or distinct succession of stages. The third type of study attempts a logical interpretation of economic developments in terms of the external factors which affect economic arrangements, of the relations between the various parts of the economic system and of the influence of economic changes on social and political history. This approach to economic history has existed in the United States more or less from the first, increasing in popularity after the disappearance of the frontier in the 1890's.

The history of most countries has to account for the rise of an interest in things economic. In the United States, however, there never was an all prevailing religion or a political prepossession that smothered the economic realities of life. In the earliest pamphlets describing Virginia and New England, contemporary with settlement itself, there was a good deal of economic matter set forth—how the natives secured a living and what settlers had to do to survive or to get rich. The histories of provinces and states which appeared later also contain much scattered economic description. The works of Robert

Beverly, Alexander Hewatt, Jeremy Belknap and John Drayton are illustrations. Later histories, both local and national, such as those of Mc-Master and Channing, maintained this emphasis on the description of economic conditions as a basis for the historical presentation of the changes that had occurred since early settlement.

Official statistics have long constituted one of the most important sources for the study of American economic history. There were the early colonial reports to the Lords of Trade, the reports of the Treasury Department from 1790 onward and the decennial census enumerations. In 1810 manufactures were included in the federal census, in 1820 occupations, in 1840 agriculture and fisheries and in 1850 transportation. A notable Statistical Table of the United States (1774-99) was published in 1799; and private compilers published convenient summaries of statistical data—Blodget in 1806, Pitkin in 1816 and Seybert in 1818.

In America as in England the first special branch of economic history to be developed was commercial. In 1783 Lord Sheffield had maintained in a book which attained great popularity (Observations on the Commerce of American States) that while the colonies had gained political independence they must remain economically dependent. This was exactly what those erstwhile colonies had come to fear. In 1791 Tench Coxe made a notable reply to Sheffield (published later as A View of the United States of America, 1704) in which he made a real effort to deal with commercial development, although the material, chiefly statistical, was scant and the period covered (approximately from 1783 to 1791) was short. The occasional early efforts at a connected presentation of commercial history, such as the articles of Enoch Hale in Hunt's Merchants' Magazine from 1853 to 1856, were not well developed.

The disastrous monetary and banking experiments in the first half of the century led to much controversial writing and induced Gouge to compile A Short History of Paper Money and Banking in the United States (1833). Other writers followed—Hildreth in 1837 and Dealtry in 1858. Toward the end of the century A. M. Davis published a number of works bearing on the history of colonial banking and currency; the same period marks the beginning of the literary activity of Davis R. Dewey, the author of numerous scholarly works on the history of American currency, banking and public finance.

The history of manufactures lagged behind

monetary and financial history except in so far as it was included in commercial, particularly mercantilistic, treatises. The first important treatment was J. Leander Bishop's A History of American Manufacture from 1608 to 1860 (2 vols., 1861-64), which provided a compendious survey that was at once comprehensive in chronological sweep and in the number of industries covered. It had the great merit of describing particular firms and factories. Later the work was done more systematically by Victor S. Clark under the auspices of the Carnegie Institution. Special phases were dealt with by Malcolm Keir (manufacturing) and R. M. Tryon (household manufactures, 1917), while histories of separate industries were done by Bagnall (early textile, 1893), M. T. Copeland (cotton, 1912), A. H. Cole (wool, 1926), Charles B. Kuhlmann (flour milling, 1929) and others. An early history of railroads and canals was done by Poor (1860) and illuminating insights into the history of American railroading were afforded by John Moody in his Railroad Builders (1919).

It is a curious fact that the history of agriculture, America's primary industry, received no separate treatment until very late. In the decade from 1916 to 1925, however, several books were written or edited—by Sanford (1916), Carrier (1923), L. B. Schmidt (1925), Gras (1925) and Bidwell and Falconer (1925). Only the last named authors aimed at exhaustive treatment and they dealt only with the north and stopped at 1860. Many more special studies must be made, particularly of significant regions, before anything like an adequate general story can be told of American agriculture. In 1919 the Agricultural History Society was formed, and since 1927 it has been publishing a quarterly called Agricultural History.

The general economic history of the United States was undertaken surprisingly early and, as was to be expected, with only partial success. In 1861 L. Stebbins, the publisher of popular books in Hartford, Connecticut, issued a sizable volume entitled Eighty Years' Progress of the United States. Various writers contributed the different chapters—on agriculture, the cultivation of cotton, the steam engine, trade, transportation and manufacture. The editor was aware that he was doing something new, but he was not peculiar in holding to the view that America's chief contribution up to his time had been economic. A neglected but notable general outline was A. S. Bolles' Industrial History of the United States (1879). It was intended originally as a cooperative

work, but only Bolles kept up his enthusiasm and eventually wrote the whole book. Although it is a fairly inclusive treatment this work is strongest on the side of manufactures and for the period after 1800. In 1905 Katherine Coman wrote the first adequate *Industrial History of the United States*; although meant as a general textbook it is really a scholarly work. In 1909 G. S. Callender edited a volume of selections on American economic history, for which he wrote a number of stimulating introductory essays.

A recent tendency is the regional division of general economic history for more effective treatment. Regional studies such as Weeden's on New England (1890), Hartsough's on the northwest (1925) and U. B. Phillips' on the old south (1929) promise a degree of reality and a wealth of detail not possible in a national presentation. In this connection it must be mentioned that the work done and encouraged by state and regional historical societies (Massachusetts, Illinois, Iowa, Mississippi Valley) is largely economic in character.

Interest has been added to economic history by the emphasis upon the economic factor in American civilization. In 1893 Turner pointed out the significance of the frontier for American life; Beard applied the economic interpretation to the establishment of the federal constitution (1913), to the origin of Jeffersonian democracy (1915) and indeed to American history generally. These points of view were also adopted by a number of scholars working on more detailed problems in general American history.

American economic history has not always sprung from native soil or home conditions. At Harvard, Dunbar, who had just returned from Europe, began in 1883 to give a course on the economic history of Europe and America since 1763. In 1892 Ashley, appointed to the first chair in economic history, brought English and German methods and points of view to Harvard. Since 1902, except for a period of about five years, Edwin F. Gay has lectured on the subject at Harvard and has come nearest to founding a school in America. His emphasis has been upon the quantitative method and upon minute careful research in selected fields. At Columbia, Edwin R. A. Seligman began in 1886 a course of lectures on the financial and industrial history of the United States, and in 1905 Simkhovitch, whose interests lie primarily in the field of European agrarian history, was appointed to the new chair of economic history. Following the lead of Harvard and Columbia three universities—Yale.

Minnesota and Buffalo—have established professorships of economic history. Recently Harvard has been fostering research in business history; a professorship in business history has been established and the *Journal of Economic and Business History* has appeared quarterly since 1928.

Historical economics came to America not only through Ashley and Gay at Harvard but through various scholars who had studied in Germany. Although they were not themselves economic historians Herbert Baxter Adams and Richard T. Ely at Johns Hopkins University and H. W. Farnam at Yale assisted in developing the economic point of view or in collecting economic historical data. Economists have frequently written their dissertations in economic history and have often sought historical backgrounds for their special theoretical interests, notably Taussig in tariff and Commons in labor study.

The outstanding effort to organize work in economic history on a large scale was made under the auspices of the Carnegie Institution. A great deal of money was spent in collecting material. The various volumes that have appeared on American commerce, transportation, manufactures, labor and agriculture display unequal merit. They are useful compilations of facts, however, and contain valuable suggestions as to source materials.

Economic history in America has had no leader to produce a monumental work upon which others might build their reputations either by following or by criticizing it. The universities have generally neglected the study of economic history, apparently regarding it as a very special subject. There has been a lack of controversy, even of intellectual resilience, in the field.

N. S. B. GRAS

ECONOMIC HISTORY AS A DISCIPLINE. Economic history is a branch of general institutional history, a study of the economic aspects of the social institutions of the past. Its methodological distinctiveness hinges primarily upon its marked quantitative interests; for this reason it is or should be the most exact branch of history. But it is often difficult or even impossible to introduce quantitative treatment into the institutional study of the subject. Thus for all but the most modern period the absence of statistical material may make only very rough and uncertain quantitative treatment possible. Even such simple questions as the membership of guilds

or early trade unions, the sizes of villages and towns and the ratio of wage earners to non-wage earners in industry at different dates often defy accurate answer.

It would not be difficult to give some simple aspects of institutional history a more quantitative and graphic treatment than they have generally received. Maps of England in 1300, 1400 and 1500, marking the principal towns at each date and indicating those which are known either to have had well developed craft guilds or not to have had them and those about which information is lacking, might prove most instructive. So might maps based on Domesday and the Hundred Rolls of Edward 1, indicating those villages which appear to have coincided with the manor and those which do not. Such elementary quantitative statements, which could be made more easily for mediaeval England than for most countries because of the relative perfection of the English records, can, however, only touch the externals of institutions and illustrate the frequency of institutional types. In the study of institutional organization and function quantitative methods are usually inapplicable and the method of economic history differs in no way from that of history in general.

Should the records happen to be abundant, quantitative treatment of the economic aspect may become possible and very fruitful. *Domes*day Book, a tax book with some of the features of a census, is primarily an economic and only incidentally a legal and institutional record. From the "valets" of *Domesday* an almost exact "business" statement has been worked out (see Corbett, in Cambridge Medieval History, vol. v, ch. xv) of how William of Normandy assigned the shares of England, taken over as a going concern. It was to the abundant business records of English landowners (bailiffs' accounts, etc.) that the quantitative method in mediaeval history was first applied on a large scale by Thorold Rogers; it provided series of price, wage, crop yield and other statistics over long periods. The quantitative method is still being applied and the records have still much to furnish. For some countries, e.g. Spain, the comprehensive study of price records has only recently begun.

For handling the records of the economic history of the ancient, mediaeval and early modern world the necessary training is mainly that of the general historian—the linguistic, epigraphic and palaeographic knowledge appropriate to the age and country studied. For the ancient world epigraphic knowledge is particu-

larly important because the literary sources contain little precise economic information. It is only to the study of the most recent history, that of the last century and a quarter and particularly of the last half century—the age of census and other official statistics-that methods requiring any but the most simple statistical knowledge can profitably be applied. But the study of price history for any period for which records are reasonably abundant, i.e. for any period since the twelfth century, requires familiarity with contemporary methods of price inquiry and with the elementary principles of index numbers. For the most recent period a fairly complete statistical equipment is necessary, because the abundance and variety of the statistical material permit the application of some of the more refined statistical methods. This work tends therefore to fall into the hands of the inductive economist, who is only secondarily a historian.

Every economic historian should, however, have acquired what might be called the statistical sense, the habit of asking in relation to any institution, policy, group or movement the questions: how large? how long? how often? how representative? The requirement seems obvious; but a good deal of the older politico-institutional economic history was less useful than it might have been through neglect of it. The latifundia were not so representative of Roman economic life in the early part of the first century B.C. as historians once supposed. Many theories of urban origins which have found support among continental scholars break on the question "how representative." The manorial map of England might put the manor village in its proper place. The political importance that has sometimes been assigned to the English trading companies of the sixteenth century has been greater than is warranted by their economic importance as understood at present. American scholarship has reduced the economic hardships inflicted by the old colonial system to their proper and rather limited size. Many accounts of the industrial revolution in Great Britain would hardly suggest that in 1830 only one person in eighty worked in a cotton mill: they omit to state clearly "how many."

Neglect of the question "how representative?" vitiates most of the schemes, made particularly by German scholars, for scheduling states in economic development. Such schemes besides concealing the variety of history may confuse logical with temporal succession. The most general of them was that of Bruno Hilde-

brand, which postulated the sequence of natural economy, money economy and credit economy ("Natural-, Geld- und Kreditwirtschaft" in Jahrbücher für Nationalökonomie und Statistik, vol. ii, 1864, p. 1-24). Its drawback when applied to history has been that the labeling of an age as one of natural economy may easily lead to neglect of evidence for the coexistence of other types of economy. Thus prolonged research and controversy have been required to establish the fact that the early Middle Ages in northern Europe were not ages of pure natural economy. Moreover, the term natural economy may cover both exceedingly simple and very complex economic systems. Exchange in ancient Egypt was predominantly that of goods for goods; but Egyptian civilization had little in common with that of primitive Germany or of primitive modern societies in which money is unknown. And since, except in prehistoric and in the earliest historic times, money using and non-money using societies have always existed side by side, since remnants of natural economy have long survived and still survive in money using communities, and since credit in some form appears at a very early stage in most civilizations and never completely dominates any, the assignment of a particular age or even of a particular society in that age to one or other of the stages becomes a delicate problem of fact and of degree scarcely worth attempting.

Similar but more destructive criticism applies to the stage scheme of Karl Bücher (Die Entstchung der Volkswirtschaft, 1893), based on that of Schönberg of 1867 ("Zur wirtschaftlichen Bedeutung des deutschen Zunftwesens im Mittelalter" in Jahrbücher für Nationalökonomie und Statistik, vol. ix, p. 1-72, 97-169), with its succession of self-sufficient domestic economy, in which there is no exchange but every household meets all its own needs; town economy, in which the goods pass directly from producer to consumer and from countryman to townsman; and national economy, in which intermediaries between producer and consumer appear. Bücher claimed that the whole course of economic development, at least for the peoples of central and western Europe, could be brought under this scheme. But it most certainly cannot. It is impossible to distinguish such stages with precision in the history of those peoples; and the first two are arbitrary conceptions not corresponding to any known group of historical facts, although it is easy to find places and periods in which most households have been comparatively selfsufficing or in which the simple intercourse between small towns and the surrounding country has been dominant. Although stage schemes have furnished convenient categories for the classification of economic phenomena and have provided scholars with Max Weber's "ideal types" with which the varied reality may be contrasted, they have done more harm than good to the study of economic history. They may be specially harmful when history is being summarized for the use of students.

The inevitable breaking up of economic history into periods for convenience of study and teaching has some of the dangers of the stage schemes, if period and stage are unduly identified or if the period specialist loses perspective through relative ignorance of what went before and came after the age of his choice and so is unable to select for special attention those of its features which are of the greatest general significance. These are the ordinary dangers of historical periodization and specialism. The tendency of economic history to take over ready made the conventional divisions of general history has at times produced unfortunate results but need not do so. Clear dividing lines purely economic in character do not exist or at least have not yet been generally agreed upon. If periods are recognized as simply slices of time, within which some particular economic phenomenon-slavery, economic feudalism, early capitalism, corporate capitalism-may be of special importance but not necessarily to the exclusion of phenomena of other types, their study has no serious drawback. It is, however, probably even more important in economic than in other branches of history that period study should be associated with adequate study of the contemporary world, the terminus ad quem.

Stage schemes in economic history were devised mostly by members of the German historical school of economists, who attempted to substitute, as it were, historical generalization for economic theory. Most scholars are now agreed that such an attempt failed even in the hands of Schmoller. The central problems of economic theory, although they may be stated in terms of some particular historic phase, are in essence independent of history. In theoretical discussion it is necessary to isolate forces and factors in a way which history does not permit. Even more important than this independence and the necessity for abstraction is the fact that the absence from all history, except that of the latest statistical age, of enough trustworthy se-

quences of ascertained facts makes impossible the exact treatment at which theoretical inductive economics aims. Even the statistical age has not yet supplied nearly enough tested sequences of facts for the economist's needs, and the necessarily defective historical record will scarcely satisfy him. For example, there can be no exact discussion of English unemployment before 1886, when certain trade union statistics were first issued. There are countries in which such exact discussion is hardly possible even yet. Generalizations about the unemployment complained of in Shakespeare's Henry VIII (act i, scene 2) or even about that in Lancashire at the time of the American Civil War will give the contemporary economist little help. The historian recognizes that except in price history and other quantitative sections of his work his results will be on a lower plane of truth than that to which the fully equipped inductive economist may conceivably attain. It remains true, however, that some parts of economic theory, such as the succession of industrial types, the evolution of money and the problem of population, are or purport to be generalizations from history.

The relation of economic history to social history is much closer. It is true that with certain aspects of social history the economist as such is not concerned, unless he is in a position to trace the play of economic forces upon them. For example, his interest in costumes, manners, recreation and non-economic ideals may be limited only to such aspects as the clothing of India in Lancashire cotton, the aping of the millionaire, the professionalizing of games and the commercializing of ideals. But as the main concerns of society are and always have been economic, by far the greater part of social history, it may be argued, is simply economic history. As a critic of particular social histories the economist's main question will tend to be "is this representative." The social historian may with fairness reply to such criticism that he deliberately studies society at leisure with more care than society at work, because in the spiritual history of mankind the important matter is the use made of time saved from the plow or the machine. To this there is no conclusive rejoinder; but plow and machine remain important and representative. The economic historian, on his side, can hardly afford to be ignorant either of non-economic social history or of general history. If he is, he will almost certainly mistake the importance of the economic factor

in any group of historical factors. It is unfortunate that the progress of specialization tends to increase rather than reduce this risk.

The links between economic history and human geography as now studied are similarly close. Although in the strict statistical or institutional treatment of economico-historical problems geographical considerations may be irrelevant, they obviously are relevant to the wider economic history which would trace the evolution of societies getting their living in particular environments and altering those environments in the process. How far and in how much detail geographical description should be introduced into economic histories depend on the scale of the work and the amount of knowledge which may reasonably be expected of the typical reader. The geographer must describe; the historian may often assume. But it should be said that economic history as hitherto written has much more often suffered from neglect not merely of geographical description but even of essential geographical considerations than it has erred by incorporating too much geography. It would be easy to cite agrarian histories which almost ignore climate and soil. The modern school of anthropogeographers, on the other hand, makes full use of the conclusions of economic history and sometimes even writes it, although with a geographical bias (e.g. Brunhes and Deffontaines' Géographie humaine de la France, 2 vols., 1920-26). It is much to be desired that there should be a closer union between the two studies. The inevitable overlap at this or any other margin is not dangerous: it is at the overlapping margins of disciplines and sciences that the most important discoveries are usually made.

J. H. CLAPHAM

See: HISTORY; ECONOMICS; GEOGRAPHY; EVOLUTION,

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ECONOMIC INCENTIVES. The discussion of economic incentives in the social sciences has thus far centered round the simplifying assumption of the "economic man" introduced by classical economics and combated both by socioethical and by historico-realist criticisms in Anglo-Saxon and continental countries. The recently growing belief that scientific adequacy lies not so much in rigid systems but rather in more flexible renderings of a changing reality has brought up the question whether that whole controversy has not been vitiated by the common presupposition of a too static character of economic incentives, and whether it is not time to reconcile the conflicting views by admitting the dynamic elements of a "verified" or "applied" theory without foregoing the advantages of functional analysis and systematic understanding.

A comparison of precapitalistic and capitalistic society discloses the merely relative validity of both positions—that of the upholders and that of the opponents of the concept of the economic man. Precapitalistic society, as it is seen preserved today not only in primitive or colonial surroundings but in farming districts and communities everywhere in the midst of capitalistic society, is by no means devoid of even strongly

prevalent acquisitive and commercial instincts. But there seem to be two differences between these and the normal economic attitudes of capitalistic man: the one psychological, the other institutional. First, the ways in which the acquisitive spirit is here mixed with and overlaid by non-economic incentives are perhaps not more prominent in degree but doubtless divergent in structure from those that have rightly been recognized in capitalistic systems. Secondly, and in close interaction with the first, the institutional medium of money and market economy appears to exercise a pervading influence on the texture of economic and noneconomic motives in social behavior. The slow breaking up of closed nuclei of household economy, such as the European peasant proprietor farm or the older forms of the small family household, shows very clearly, on the one hand, a rising dependence on markets for the sale and purchase of formerly non-marketed or unmarketable goods and services and, on the other hand, a corresponding increase of money reckoning and of degree of rationalization in the economic relations of the individual members of those communities to each other and to the nucleus as a whole. But of course this process in most instances means a transformation rather than a first emergence of economic incentives.

A critical study of the forms and transformations of economic incentives will therefore have to start from two fundamental considerations. One of them is that the conditioning of all social life by the need of providing the material instruments of physical and mental existence raises everywhere and at all times the question as to how economic incentives underlie social behavior and that it is unrealistic to think of any age or community as exempt from this economic predetermination. It is not less important, however, to inquire to what extent the specific transformation of economic incentives due to market economy and a rationalization of social relations generally results in actual isolations or accentuations of these incentives and thus justifies, at least for this development, the assumed psychology of the economic man as a reflex of an "economization" of society at large. Such a study of incentives does not rest content with the cheap solution given to the problem by most textbooks, viz. that the classical assumptions have to be interpreted as exclusively applicable to intermediate and instrumental motives, means toward other ends, and that these ends themselves are independent of a merely

rational, commercial or acquisitive motivation. Evidently in any realistic social psychology there is no possibility of such a mechanical separation between intermediate and final incentives. It is doubtful whether the character of an incentive as purely or even overwhelmingly "economic" is in empirical research capable of being very distinctly set off against non-economic spheres.

The aim of study must rather be the shape or structure of whole complexes of incentives present in a given economic situation or system. The question always is how far that structure is influenced by what we may term preexistent types of individuals or races approaching economic action from their own different angles, and how far such typical differences of attitude are in their turn to be traced to social and consequently economic developments. One might inquire in this connection how far the ascertainment of non-economic or extra-economic incentives might be only what Marxian socialists call an ideology, i.e. a fallacious interpretation of economic incentives as non-economic either by the illusions of observers or by the mistaken consciousness of the actors themselves. The search for such ideologies has proved increasingly a double edged tool, for the ideology of social class warfare itself has proved both how easily a purely economic motivation is transubstantiated into a partly unreal sentiment and, vice versa, how easily the economic interpretation of history is in its turn instigated by economic and social instead of scientific incentives.

So much the more urgent would become the construction of a typology of motives in economic life. This is sometimes attempted as a mere coordination of psychological constellations such as would correspond to recent German research into the systematic varieties of Lebensformen (Eduard Spranger) or Weltanschauungen (Karl Jaspers) or the numerous modern essays in "characterology." Thus an American writer on "non-commercial incentives" (P. H. Douglas in The Trend of Economics) distinguishes: the desire to benefit humanity; the fascination, or joy, of the work itself; the desire to project one's own personality into the work at hand; the desire to be esteemed by one's fellows in the same field of activity; the desire for the esteem and approval of the general public; the craving for notoriety; the desire for power over men and over things. But there can be hardly anything final or exhaustive in such enumerations, even if they are drawn from descriptions of actual situations and habits that may be much more

valuable. A chief difficulty seems to lie in the curious fact that, while the naturalistic doctrines of social development under pressure of material environment are in constant need of being supplemented by the study of relatively stable human types, the latter study must in its turn be wary of neglecting the influences of change and evolution, whether individual, racial or generally historical. It is significant that the psychology of social types has latterly been inspired and supplemented by psychological theories of the ages of man and of the alternation of generations. And even apart from this it might be asked, for example, whether the kind of "general public" or of "power over men and things" conceived of as the object of non-commercial incentives is not apt to differ so radically in different social systems as to leave scarcely more than a nominal clue for the realistic explorer.

All this leads at first sight very far from the inner field of economic theory where the discussion of incentives first cropped up. On closer inspection, however, the embarrassing wealth of the modern psychology of social motives will not have been fruitless for the restatement even of the "pure theory" of economics. In this respect research seems to advance on two main lines. For once, the emphasis of the concept of economic incentives has shifted from its older moral side, the gainful or hedonistic setting of social purposes that shocked the socio-ethicists and historians, over to its intellectual side, which in the beginning hardly used to be debated at all. The question now raised is whether the commercial incentive in a market and money economy could work on the basis of a complete knowledge both of the relevant data of the market and of the individual's most advantageous relation to these data. It is the thoroughgoing alterations in the structure of enterprise and competition due to "late capitalism" that have opened the debate on this second and perhaps more important aspect of economic motivation and renewed for it the question whether there is any reality corresponding to the concept of omniscient economic incentives. The negative answer to this question is one of the socialist strongholds in the battle for the displacement of competitive by planned economy. A possible affirmative would have to narrow down still further the theoretical concept of competition and the competitive or entrepreneurial unit.

In this dilemma a second methodological device has sometimes been considered. Just as marginal analysis has gradually left behind its

eggshells of individualist Robinson Crusoe psychology for new objective statements, general economic theory has tried to avoid the tedious quarrels regarding either the moral or the intellectual implications of the homo oeconomicus by simply neglecting incentives in the description and analysis of economic functions-much as behaviorism wanted to dispense with the equivocations of motive in general psychology and sociology. Economic behavior as the broadest and to a large extent unconscious or subconscious strata in the complexes of social action must appear particularly conducive to such an abstraction from subjective motives. This is especially true in modern standardized mass society, not only because of the "law of large numbers" asserting itself despite numerous individual deviations but also because of the objective force of economic institutions that act for man as well as through man. The modern form of the concept of the economic man and its counterpart, that of the complete individual, or the sociological man, are thus apt to fall into line with something like J. B. Clark's distinction between "functional" and "personal" distribution, in so far as the first stresses the automatic character of economic interplay, whereas the second stresses the range of actual social deviation from the mean, but within the limits of this interplay. Here too socialism has contributed largely to a refining of the primitive classical psychology of economic incentives, from the time when Marx in the famous foreword to the first edition of Das Kapital announced his intent to treat of capitalists and landlords not as persons but as "personifications of economic categories." On the other hand, it is socialist theory that reopens in full breadth the question of incentives by its doctrine that gradual or revolutionary changes of social institutions will necessarily entail new types of man and social action, replacing the acquisitive by the functional society and the exploitation of property by the "instinct of workmanship," the spirit of public service or even an "anarchy" of "love" after the model of religious sects.

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See: Economics; Organization, Economic; Social Process; Human Nature; Acquisition; Business; Capitalism; Entrepreneur; Scientific Management; National Economic Planning; Gosplan; Socialism.

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ECONOMIC ORGANIZATION. See Organization, Economic.

ECONOMIC POLICY. The term economic policy may be used broadly to comprehend all government action in the economic sphere—more or less deliberate government intervention in production, distribution and consumption. Economic policy in this sense is as old as are established governments; for no government however constituted can exist without civil and military functionaries whose service must be paid for in some way. The raising and spending of revenue is the most primitive and at the same time perhaps the most important branch of economic policy.

Economic policy is sometimes an end and sometimes an instrument of a government's general policy: it is dependent upon and must greatly influence such policy. Wealth as a particular kind of power is sometimes desired for power's sake, as by the mercantilist statesmen who favored foreign trade as a means of making their country rich and thereby powerful; on the other hand, power has been freely used to acquire and to preserve wealth as an object worthy in itself; colonial expansion as a "shopkeeper's" policy has been built on a display of military force; free trade depends for its undisturbed flow even in times of war either on naval supremacy or on international agreements.

No deliberate economic policy can arise be-

fore a clear comprehension of the working of economic forces has taken root in the minds of the groups constituting governments. Economic theory, however, is not the parent of economic policy; historically the converse has been true. Apart from mediaeval theories, which were byproducts of ethics and theology, the more important modern economic theories have developed out of violent discussions of the merits of rival economic policies. The theory of money owes more to controversies about the debasing of coins and about the control of the influx into Spain of the precious metals from the New World than to the early academic discussions about circulating medium. And the theory of international exchange was evolved by the mercantilist traders and statesmen in justification of the methods and purposes of their policy. Neither Friedrich List's theory of productive forces nor Karl Marx' construction of surplus value can be properly appreciated as abstract theoretical propositions. The former is a justification of a desired economic policy; while the latter, regarding the nature of things as stronger than government control or labor combinations, provides the argument for a policy of non-intervention.

But although theory develops late and although most actual economic policies have failed to conform to the tenets of pure economic theory, nevertheless the influence of economic thought on economic policy has been enormous. Statesmen and business men are much inclined to dispose of unpleasant and unanswerable arguments as "mere theories," but they have always been eager to justify measures they advocated by quoting theories or if necessary by manufacturing them. During the height of inflation in Germany after the World War the more learned advocates of inflation quoted Knapp's Staatliche Theorie des Geldes (1905); their less learned colleagues evolved their own theories.

Economic policy has assumed an increasingly dominant place in modern society as a result of the growing importance of wealth and, with the possibility of its acquisition by other than war-like activities, the greatly increased efforts of governments to control its flow. The difference between a tribal cattle raid and the modern spoils system, whether manifested in corrupt municipal government or in the logrolling of highly respectable business interests, is rather technical; but the important feature of the modern creation of wealth is that it no longer consists merely of transfer from one owner to another but results from a regular process of production. Its place

in the accepted moral order has moreover been completely reversed. In the classical world its possession was considered essential to the functions of full grown citizenship; its acquisition, on the other hand, was regarded as derogatory. Christian morality tolerated the possession of wealth if properly used but discouraged its acquisition in so far as commerce tied its practitioners to a material world instead of making them strive for the kingdom to come. As long as such views prevailed, economic policy remained limited to a repressive or police function, that of preventing people from cheating each other and from endangering their souls by indulging in luxuries.

With the growth of the modern state and modern economic organization the situation has completely changed. Expanding nationalism was dependent on power which could be achieved and organized only by the creation not by the mere transfer of wealth. But the state could not create wealth without encouraging and protecting its subjects in the pursuit of it. Economic policy thus ceased to be a by-product of ethical assertion; it became one of the main branches of government activity.

Economic policy involves more than reliance on strictly economic measures. Most economic policies depend for their success on some form of coercion, at times open, at times carefully veiled. Territories are occasionally bought by one government from the other, as in the case of the Alaska purchase, but most territorial expansion has been carried out by military force. Governments have sometimes avoided direct expropriation of property by offering attractive compensation, as in the case of the earlier stages of Irish land purchase or the abolition of slavery in the British Empire; but more often expropriation has been effected by direct seizure or by coercive legislation, as occurred in the abolition of slavery in the United States.

The growth of economic interests has not only influenced the relation of nations to each other, shaping in many ways their foreign policy; it has also affected internal political organization and functioning. The outstanding political issues of the western world before the modern era were religious and constitutional. The religious issue has been settled in most countries, as far as it can be settled, by legislation. Although its traces on institutions and ideas are still visible, religious conflict has ceased to be of dominant importance. Constitutional issues too seemed on the way toward settlement until they were revived and

complicated by the growth of economic interests and theories. The spread of parliamentary democracy had theoretically done away with the dualism between sovereign and people; the state when controlled by its citizens is identical with the nation and can safely be entrusted with national tasks. But it has everywhere become evident that this "monism" is purely formal. Although in most countries the people as a whole enjoy unfettered sovereignty, nations are split up into groups, classes, estates, interests. The vital issue has shifted from the division of power between the rulers and the ruled to the safeguarding of one part of the people against encroachments by the other parts. The function of government can therefore no longer be restricted to the maintenance of order and justice. The division of the national dividend and the ownership and control of the productive plants which yield it have become the main objects of political struggle, the real goals of political parties. Even those who do not accept the Marxian view that the forces of production are the main determinants of social organization, and groups to whom a commonwealth means more than the sum total of the economic activities of its members or of its governing body, no longer deny the preponderant importance of economic factors. It is therefore natural that economic policy should have taken the place of religious and of constitutional policy as the most important branch of statecraft.

Economic policy may be direct or indirect. A government which itself plans and organizes the production and distribution of goods and services among its citizens is engaged in direct economic policy. It runs economic institutions, as it runs its army and its navy, as direct concerns of the government. If such a policy embraces all economic activities, technical production as well as distribution, and centers them in the state, this is possible only under a system of complete regulation (*Planwirtschaft*), such as exists in a communistic form in Soviet Russia.

Where production and distribution are left entirely to private initiative, to individuals or groups who are either self-sustaining or engaged in supplementing one another's needs by barter or commerce, economic policy is indirect only. It consists mainly of some form of intervention by laws and regulations in the making and the disposing of commodities. The degree of such government intervention has varied greatly in different societies but has never been completely absent; for the social institutions indispensable to economic life, such as private property or

contract, are either created or maintained by government intervention. The absolute free play of economic forces in a given society always presupposes an established social order enjoying the protection of the law. Moreover, no government has completely refrained from direct intervention in economic activity, in so far as all governments raise taxes and spend their proceeds.

Where production and distribution are left to private enterprise, economic policy and economic activities are theoretically strictly separated. In actual practise, however, this is never true: even non-socialist governments indulge in a good many economic activities, such as the postal service or transportation. On the other hand, private units, like the chartered companies of the seventeenth century, have at times been entrusted with government functions and the execution of economic policy. Governments may carry out direct policies by delegation, as in the case of most central banks or the Russian trusts. Whenever a government shows signs of breaking up, private groups among its citizens are more than willing to take over its economic policy. Thus for several months after the German revolution of 1918 the country's economic policy was in the hands of a board composed in equal parts of representatives of labor organizations and employers' federations.

The economic activities of groups not entrusted with political control must not be confused with economic policy, although they often greatly influence it. The fixing of monopoly prices by a trust or cartel or the fixing of wages by collective bargaining may even be done in defiance of a government's economic policy. But the government's attitude toward such activities and the efforts of such groups to have some economic practises made legal and others illegal are among the important determinants of economic policy.

Despotic governments can be supposed at least in theory to be free from the pressure of economic groups and their interests—able to formulate conceptions of the common good in the economic field and to translate such ideas into action without fear of being called to account. But under a representative government it seems impossible to secure the adoption of an economic policy which has the general welfare as its main object and severely disregards sectional interests. When governments are formed or controlled by economic groups, the efforts of these groups become quite as much a part of economic politics as are the activities of political parties,

whose programmatic policy becomes practical policy only when they assume office. When, for instance, trade unions in Australia run a caucus, which forms and controls governments, or when such groups as the Reichsverband der Deutschen Industrie or the Landbund in Germany can secure cabinet posts for representatives who have never been in politics, their share in the formulation of economic policy cannot be ignored. It is out of the abuses inherent in such a situation that the demand for an omnipotent dictator derives its force.

The ultimate goal of economic policy has been the same in all ages and in all countries: the prevention of scarcity as a negative, the assurance of plenty as a positive, aim. In primitive societies direct methods are relied upon for the achievement of this goal: consumers' goods are carefully stored whenever a surplus is available, a situation illustrated by the story of Joseph in Egypt; or again control may be applied directly to consumption, as was attempted in mediaeval legislation against waste and luxury.

With increasing complexity of economic organization intermediate steps in the control of wealth become of greater importance. Before the development of modern productive techniques plenty could be assured only in the last analysis by control of land and of the people who worked it. Not infrequently, however, the possession of gold or silver, supposedly representing nonshrinkable purchasing power, has been considered the criterion of plenty Perhaps the most notable instance of the acceptance of such a belief and its practical elaboration is to be found in the mercantilism of sixteenth and seventeenth century Europe. The partial breakdown of the mercantilist system in France brought a return to older conceptions: to the physiocrats plenty seemed possible only in a properly organized self-sufficient commonwealth, where the land yielded regularly a net surplus over all costs. The mercantilist doctrine, however, has never entirely disappeared from economic theory nor lost its sway over economic policy.

In England Adam Smith and the classical economists combined the physiocratic emphasis on the necessity of a regular flow of consumers' goods with a doctrine based on an elaborate system of money values. Plenty to them became cheapness. Their ultimate aim was the satisfaction of human wants by ever increasing quantities and varieties of goods and services, with ever decreasing efforts. Low or rather falling prices became the final goal of liberal economists of the

nineteenth century. According to their own theories this was a goal difficult to attain in view of the law of diminishing returns and the supposed tendency toward too great an increase in population, which made scarcity rather than plenty the probable fate of mankind or of some at least of its less favored strata.

The policies advocated by this group did not stand unchallenged. An excessive agricultural population might secure cheapness in certain commodities by producing raw materials on a low standard of living and depending for its manufactured goods on imports from abroad. On the other hand, a protective tariff would give to that population employment in nascent industries and free it of foreign dependence. As Friedrich List, for instance, saw it, the development of productive powers for the production of plenty was more important than cheapness due to foreign imports. Objections came also from another angle. Since low prices depended on cheap labor and cheap labor was long supposed to be equivalent to low wages, the laboring groups did not care much for this sort of plenty; they preferred regular employment and high wages to technical progress, falling prices and an ever increasing volume of satisfaction for human wants, if these led to unemployment and falling wages. To an increasing number of theorists interested in the laboring class plenty seemed best assured by the accumulation of capital goods (plants) in the hands of the commonwealth, from which by a proper process of distribution an adequate supply of consumers' goods would automatically flow.

It is essentially this physical, non-monetary conception of plenty which lies at the base of the economic policy of Soviet Russia as well as of the economic order advocated by modern industrialists. But the paradox of modern capitalist society is that although modern technical progress has made the achievement of plenty easy and although low labor costs can be combined with high wages, the resulting cheapness is a danger to the business structure rather than a boon and attempts are continually made to prevent its occurrence. Although welfare and wealth no longer preclude each other and wealth can be increased without danger to health or the suppression of a part of the population, the full possibilities of plenty have not yet found expression in modern social organization.

A systematic survey of economic policy might be undertaken from many angles. Each country and each historical period has had its own eco-

nomic policy, modified by special circumstances. Moreover, each type of economic activity-agriculture, commerce, fishing, banking, manufacturing, insurance—may be an object of governmental control. A state will have a population policy and an income policy. Where such separate policies are not part of a general economic program they must produce in practise very unexpected results. There can be no agricultural policy which is not at the same time an industrial policy. The fixing of wages in industry is not merely industrial policy; for it may by withdrawing labor make agriculture unprofitable. No system of economic policy can be built upon such divisions. Each general system, however liberalism, state socialism, socialism—emanating from a principle of its own must include programs relevant to each of these aspects of economic life.

Economic policy has up to the present derived only from individual governments, each regulating the production and distribution of wealth in regard to its nationals. The regulation by any country of goods and services crossing its frontiers is bound, however, to affect their movements over a second frontier, and all really important national economic measures will be followed by international repercussions. Thus the splitting up of the large estates in southeastern Europe after the World War greatly reduced for some time agricultural exports from the countries involved and affected the world wheat market. Separate discussion of foreign and domestic economic policy is therefore probably not the most fruitful approach.

A systematic grouping might be attempted by dividing economic policy into direct policy and indirect policy, as defined above. All activities directly undertaken by the government, especially public expenditures, would be considered under the first heading, while indirect policy would embrace all government intervention in the activities of persons or groups engaged in economic occupations, including perhaps taxation.

The main field of indirect policy today is what may be called price policy; for in an economic system built upon exchange governments intervene most often by adjusting or regulating prices between the different groups exchanging their services at home and abroad. Tariff making, valorization and price fixing are forms of price policy in the commodity market. Usury laws and credit control in its various forms affect the price of capital; rent legislation is price policy applied

to land. In the field of labor factory legislation is an indirect price policy, while a compulsory eight-hour day or compulsory social insurance or the legal guaranty of a living wage is a direct price policy. Price policies may also be distinguished as special and general; the former is designed to affect one or more special groups of commodities, while the latter involves an attempt to shift the entire price level by monetary policy or centralized credit control.

Price policy does not, however, cover the whole field of governmental intervention. The transformation of social institutions, such as the abolition of certain forms of property or of private property in general, can scarcely be carried out quickly enough by mere price regulations, although money compensation or heavy taxation may facilitate such changes. Nor can colonial expansion be left entirely to the play of prices, although an example of marked success in this direction exists in the Wakefield system of colonization. Economic policy is largely directed toward the creation or destruction of institutions—peasant proprietorships, the proposed reorganization of the English coal mines, abolition of the guild system or of slavery. The totality of such efforts might be called institutional policy. It would embrace such very different actions as the annexation and settlement of land abroad and the creation of new legal institutions at home. It is the most important branch of economic policy whenever the final stage of transition from one social system to another, which must often be marked by governmental action, is necessary. The transformation, from 1570 to 1609, of the tribal system in Ireland into a system of feudal tenure could not have been accomplished without far reaching legal changes. And the transition from feudalism to modern property rights was brought about almost everywhere by legal intervention; where there was no such intervention, change was effected in time by agrarian revolutions.

Price policy and institutional policy account for most government actions in the economic sphere. But there is a large subject with which they deal only indirectly: population. The attempt of governments to increase or decrease the quantity or to improve or deteriorate the quality of population is only partially due to economic motives; it can rarely be carried out by economic means. Neither the increase of population favored by militaristic governments nor the expulsion of heretics, such as the Jews and the Moors from Spain or the Huguenots from France, was

advocated because of economic reasoning. On the other hand, the admission of the Huguenots into other lands was the result of a deliberate economic policy and did produce very important economic results. Motives are most often mixed: American or Australian immigration policy is the outcome partly of a desire for the creation of a biologically superior race and partly of the wish to maintain high wages. Since men and women are consumers of goods as well as sellers of labor, the character of a population will always influence and be influenced by economic policy. But neither quantitative nor qualitative population policy, including such subjects as eugenics and migration, can be treated exhaustively within the scope of institutional policy or price policy. The Malthusian endeavor to explain the growth of population by reference to the influence of falling or rising wages and to explain the reaction of wages to the fluctuations of population as a special case of supply and demand was not very satisfactory. Therefore it would be well to add population policy to institutional policy and price policy as a third important branch of economic policy.

One of the main causes of the rise of systems of economic policy has been the existence of various states enjoying more or less favorable geographical positions, possessing varying economic strength and facing each other as rivals and opponents. For plenty has but a relative meaning when the needs of the citizens of one country are contemplated; its real significance is brought out by comparison with neighboring or rival states.

Throughout primitive and early times no people or state could consider itself safe from hostile pressure or from the danger of scarcity if its natural resources were not sufficient for the satisfaction of the needs of its people. As a result a common and frequently recurring policy of governments has been the attempt to make their own country self-sufficient by developing its natural resources and by banning foreign imports. They have usually aimed at the same time to secure some sort of economic domination over foreign nations by making the latter dependent on goods imported from their own surplus resources. In its developed form this becomes the program of mercantilism—the effort to hamper imports while fostering exports, to raise and export a surplus of goods of prime necessity while reducing imports to mere luxuries.

Where a country did not possess sufficient natural resources for permanent self-sufficiency

it usually attempted to gain them by territorial expansion. For a very long period the main end of economic policy was land and its main weapon was war, although federations and purchase were sometimes resorted to. The economic policy of primitive tribes—the acquisition of lands, flocks and warriors by force of arms-does not differ greatly in essentials from the ways of the Norman knights who conquered and despoiled the Irish or of the colonial Boers who needed and took farms for their numerous progeny. Conquest, the main economic policy of tribal and feudal days, has retained its importance in modern times. The huge annexations of the past century have sometimes been caused by national aspirations or by the need of military security, but most of them have been closely connected with the desire for wealth and self-sufficiency. 'The policy of creating a completely self-sufficient empire by forceful territorial expansion has been tried by many nations; as a complete policy it has failed conspicuously, for population and resources have never and nowhere balanced so nicely as to do away with the need for exports or imports.

A fairly complex network of trading relations was early built up by the nations surrounding the Mediterranean basin, many of which, such as the Ninevites and Phoenicians, gained almost their entire wealth through their position as commercial intermediaries. The later Roman Empire was dependent on international trade for its food supply and consequently directed its economic policy toward the fostering of stable commercial relationships throughout the territory under its control. With the breaking of these ties in the Middle Ages governmental effort was directed toward the avoidance of scarcity rather than the procuring of plenty; getting rich even by trade became a rather one-sided transaction, generally consummated by superior force or superior skill and closely related to fraud. In a feudal society stability of status and income was desirable, change and increase of wealth were dangerous; trade was admissible only between nations where nature apparently made it unavoidable. The growth of the large colonial empires of the early modern period did force the less favored countries to resort to a regular system of trade with them. Indeed, the belief that international trade was a proper method for enriching a country was the indirect outcome of these grandiose efforts to create self-sufficient empires.

Colonial expansion was the concrete expres-

sion of the feudal theory of wealth; the foreign trade policy of the mercantilists, on the other hand, reflected the views on wealth of the commercial classes coming into power in Holland and England. Although governments and governing classes might prefer territorial expansion to trade expansion, the natural limitations of the former soon made the fostering of international trade the popular, almost universal object of economic policy. Territorial acquisition has been, however, an important means of enrichment until very recent times, when the revolt of subject nationalities has checked political colonization, the place of which has largely been taken by capitalistic colonization, the penetration of foreign capital into backward countries.

But the theory of domination has left its imprint on the opposite policy of getting rich by trade. Even if trade is mutually beneficial it may be so regulated politically as to make one party gain more than the other. The mercantilist merchants, regarding gold and silver as the most important objects of exchange, favored the semimonopolistic organization of trade by governments in order to insure the scarcity of commodities the supply of which they controlled and thus to establish the dependence of foreign customers and their contribution to the wealth of the monopolizing country. This method of economic control has survived into modern times. The Stevenson scheme for restricting rubber production is closely related to the Dutch corner in cloves. And the more or less monopolistic control of capital markets has often enabled the richer countries to make the poorer countries subservient to their policy economically as well as politically. Economic pressure, based on the more or less monopolistic control of wealth, is as coercive as conquest. Even the conduct of trade on the basis of equality and reciprocity does not preclude some sort of regulation. A free trade tariff raised for revenue purposes only still considerably influences the flow of goods between countries.

Deliberate purposeful regulation of foreign trade has taken various forms. The early schemes of organization under which governments or agencies created by governments directly exchanged with each other fixed quantities of specified commodities disappeared as a system long ago, although economic dislocation following the World War revived such variants of it as the quota system as well as the use of embargoes and prohibitions. By the middle of the nineteenth century the place of such direct controls had

been taken by more or less systematic tariff legislation, designed to enable governments to adjust the relations between foreign and domestic prices as well as between the prices of protected and unprotected domestic goods. Protection, whatever its motives may be, is a method of regulating prices by political control. Attempts have occasionally been made to fix or stabilize prices through tariff regulation. More frequently the purpose has been limited to the fixing of increments to be added to the unregulated fluctuating world market prices. Protection does not necessarily apply only to commodities; the flow of labor and of capital over international frontiers can be similarly affected by immigration or emigration legislation and by the control of foreign loans. Protection may also be achieved by more direct economic means, such as the payment of subsidies, the granting of assisted passages to immigrants or the guaranty of interest on loans.

Government control of trade, although it is not, like annexation of territory, open coercion, contains as does all government action some compulsory elements. Coercion has existed in domestic economic policy as well as in foreign relations. Governments have forced their subjects to produce certain goods and prevented them by force from the consumption of others. Physical force or the fear of it as the ultimate motive for obeying the law has at all times underlain economic policy, as it has other forms of government activity. The history of taxation alone is a proof of this fact.

The outstanding attempt to construct an economic policy based on the absence of government intervention and political coercion was that of the nineteenth century liberal school of economists, especially the group known as the Manchester school. This group advocated unhampered and unfettered private initiative as the best way of bringing about both an increase in the national dividend and its more equitable distribution. To them intelligent self-interest seemed a more effective economic motive than docile obedience to the plans of some benevolent but despotic government. To function safely such self-interest had to work under a system of free competition which could not be achieved before monopoly in all its different forms was destroyed. Free competition was regarded not so much as an end in itself but rather as a means to an end: plenty for all, decline in prices and in costs of labor but not necessarily in wages, and ultimately ever increasing satisfaction of such human wants as

are dependent on economic goods and activities. Once such a system was established, government control became according to its proponents superfluous, even injurious; since the system was the best which could be produced, its artificial correction would diminish the maximum satisfaction enjoyed by all the members of the commonwealth.

Non-intervention might be a legitimate policy—if abstention from action can be called policy—within a society whose institutions were adapted to function without such control. But such a society must itself first be created by institutional policy. As the physiocrats had not expected their system to work until "the rule of nature" was established, so the Manchester school demanded the repeal of the corn laws to destroy feudal monopoly and thus make room for the free play of economic forces and advocated the creation of peasant proprietors, by compulsion if necessary.

Liberalism did not succeed in establishing a commonwealth based on free competition, for nowhere did there exist ideal conditions to permit the working of such a system. They were most nearly approximated, perhaps, in the United States after the opening of the west. But although the monopoly of land was there to some extent broken, modern industrialism immediately created everywhere new quasi-monopolistic institutions. The preponderance of fixed capital has assimilated the structure of many industrial concerns to that of monopolistic landholdings. From a technical point of view systems of transportation or great power centers are worked best on non-competitive lines. Where monopoly is thus useful, it cannot be prevented; and where it exists, governmental non-intervention is impossible.

When monopoly prices are combined with competitive prices, a well balanced automatic adjustment of the economic mechanism can no longer be relied upon. Non-intervention where monopoly exists is equivalent to control by monopoly. Deliberate governmental price policy of some sort therefore becomes unavoidable. Such control has assumed various forms. Governments have in some cases taken over the monopoly plants, for example, railway systems, and run them either in such a way as to derive the maximum profit in the interest of the taxpayer or at cost prices in order to supply essential economic services as cheaply as possible. In other cases the ownership and management of monopoly have been left to private groups but the fixing of prices

has been made subject to government consent, as in the German coal and potash industry; regulation may take the form of limitation of profits in an inverse ratio to prices, as with many public utilities in the United States or the railways in Great Britain; or the monopoly may be forced to turn over all profits above a certain level to the public treasury, as must be done, for instance, by the German Reichsbank.

Several factors combined since the beginning of the nineteenth century to cause a revival of doctrines of economic control. Among the more important were the growth of population, the opportunities of employing the increased numbers offered by industrialization, and the rise of nationalism. One of the chief exponents of the new theories was Friedrich List, who not only formulated the theory of protection of nascent industries but also started that alliance between economic protection and sentimental nationalism which has recently spread to the new countries of eastern Europe as well as to colonies or former colonies striving for emancipation.

This "new protection" conciliated the business classes with the state or rather with the bureaucracy which they had formerly opposed, since the state was now to intervene, by the imposition of customs duties, in their interest and with their active cooperation. These business groups continued, however, to insist on a policy of non-intervention so far as labor conditions were concerned. They argued that no efforts should be made to shorten hours or to protect women and children; nor should the combination of workers to raise wages be permitted, since this would make labor a monopoly and endanger the accumulation of capital, the dearth of which would ultimately bring about unemployment or lower wages, outcomes the more serious since the artificially raised wages would unavoidably have led to the increase of population.

Such views might convince the working class in a free trade country where plenty was assured by low prices, but they lost their persuasiveness when the state intervened to give higher profits to selected industries. Moreover, while the trained bureaucracy of continental countries had occasionally advocated non-intervention, they had never meant to abolish themselves or the principles of control fo, which they stood. The growth of nationalism and democracy led to bitter conflicts between such bureaucratic organizations and the new economic groups, but the outcome was a strengthening of the principle of control. Patriarchal despots had always viewed

the struggle of the laboring class in another way than had governments which had been taught the gospel of non-intervention by religious and political revolution. They might oppose the political claims of laborers but were often willing to intervene to protect health as against mere wealth. A democratic government served by highly trained specialists may be similarly inclined to interfere to protect the workers whenever national welfare seems to demand such action.

Marxian socialism although radically revolutionary in its general principles was really quite as non-interventionist as was orthodox liberalism. For since the revolution and the ensuing expropriation of private property envisaged by Marx could come only at the end of a long period of evolution of the economic system, government intervention even in the interest of the working class must be regarded as rather useless. Working classes thoroughly imbued with this teaching might disbelieve in government intervention; but they can scarcely refuse it when offered in the shape of factory legislation or social insurance; and they demand it when their organizations become sufficiently strong. Trade unions which can make or mar governments, as in Australia, early insist on state intervention especially in the regulation of wages. When such regulations are assured, labor becomes an enthusiastic advocate of tariff protection. It is generally true that where wages are kept rigid by labor unions or where governmental wage fixing is not only tolerated but made compulsory, the working class does not object to intervention even if such action hampers production, increases the number of unemployed and throws a heavy burden on the taxpayer.

Instances of government intervention for social purposes can be found in all countries and all periods, but the modern theory of state control was developed in Germany. German philosophy had created the conception of a superstate in which all of the nation's activities could be comprehended. German romanticism and German historism combined in identifying this purely abstract state with the existing bureaucratic government. It remained for the younger members of the German historical school, especially some of the Kathedersozialisten, to invent the mythos of the bureaucracy: state socialism. This new program was put into practise on a huge scale through Bismarck's system of social insurance. It has since spread throughout the world, taking the form of Fabianism in England,

of the Wisconsin idea in the United States and, finally, when combined with the mediaeval idea of the corporate commonwealth, of Fascism.

What was really state socialism became almost universal during the World War and the subsequent period of dislocation. Throughout the course of the war the scarcity of goods compelled most belligerent governments to put into effect a policy of price fixing accompanied where successful by rationing. Military leaders, business men, trade union officials and civil servants combined to feed and clothe their nations according to more or less systematic plans. For the first time in modern history governments really dominated economic life, partly because they controlled the centralized purchase of goods, partly because they could insist on unquestioned obedience. This war control was rapidly abandoned in most countries with the cessation of hostilities, but traces of it have survived everywhere, for example, in the housing policy of the German government.

The post-war period has seen the development of a wide variety of new economic programs. Throughout most of the world hopes of a kind of after war millennium had been raised; instead, people found themselves facing new dangers and dislocations. Inflation had demonstrated the ease of bringing about rapidly a complete redistribution of the national income; it had, on the other hand, destroyed the feeling of security on which pre-war societies were built. Concurrently the attitude of many people toward government radically changed. Parliamentary government on a democratic basis had become prevalent throughout most of the world, but now the faith in such government almost completely disappeared. It was seen that parliamentary majorities are in large part built up by sectional and usually conflicting economic interests joined in unholy alliance, to the cost of other groups; and that the loyal observance of their respective economic creeds by political parties had become rare, until the distinction between compromise and corruption appeared very hazy. Experience with the purely selfish intervention of such governments resulted in the revival of a spurious Manchester creed. Economic minority groups who are not strong enough to enforce government intervention in their own interest or who pay for the benefits of intervention accruing to other groups have in recent years been protesting loudly against state intervention in general and demanding a return to a policy of complete economic liberty.

This protest took in some quarters the form of a demand for what has been called self-government of industry; a similar system was advocated by workers under the slogan of "industrial democracy." The essence of this program was the organization of industries by collective arrangements between employers and employees and the placing on each industry of responsibility for settling its problems, wages as well as prices and in some schemes even taxation, without the intervention of the political government, which was to be reduced to its most primitive functions. Unfortunately in many of these schemes the welfare of consumers was ignored. It should be noted that this movement was not based on a demand for free competition or free trade. Rather the plan was to combine each industry in monopolistic organizations, if possible on an international basis similar to, but more far reaching than, the steel cartel. It was essentially freedom for, not from, monopoly that was demanded. The foundation of the Bank for International Settlements in 1931 was greatly influenced by such desires of important business interests to emancipate finance from government. In the labor world guild socialism played with similar ideas.

The war had shown how quickly economic issues could be decided, provided the executive was not hampered by parliamentary responsibilities. When it was over, social friction, class warfare, inflation and want seemed to have come to stay; nothing, so it seemed to a generation who had learned to obey orders, could be accomplished in that chaos of mutually destructive economic interests which was represented by modern parliamentary democracy. Careful planning had been done on an enormous scale during the war. Why not create a dictatorship in peace time which would appoint a sort of general economic manager of the nation's total economic life, budgeting for her wants and their satisfaction in a scientific way? From such more or less indistinct feelings several new conceptions of economic policy arose, all based on the conviction that action is primary, that there are no immanent economic laws which cannot be controlled by intelligent organization, that such economic organization is a technical problem and that coercion and obedience are better springs of human activity than self-interest and individual initiative.

The first of the new schemes based on these assumptions arose in Germany. Known as "economic planning" (*Planwirtschaft*), it was based on the German bureaucratic tradition and the

conviction of that bureaucracy that centralized administration was more efficient than individualistic production and distribution. The program of control was supported by business interests whose monopolistic organization had accustomed them to consider administration and business as identical, and it found strong advocates among the many socialists to whom expansion of government activity seemed to be a step toward socialism. It did not, however, get beyond the stage of planning. The general concept of planned control put its mark on large sections of German economic life-housing and coal mining, for example—but without the development of a general key plan, producing thus merely a jumble of free industries and of controlled industries.

Far more important has been the Fascist experiment. In place of bringing about that freedom from economic intervention which its original supporters greatly desired it has become the outstanding exponent of state socialism, somewhat in the line of the German Kathedersozialismus. The Fascist state has united the great groups of producers, employers and employees in compulsory organizations, building up a kind of social hierarchy. It has not abolished private property and money exchange, but it leaves the operation of neither to the influences of free competition. At every stage it regulates, interferes, controls. It represents a kind of combination of the mediaeval state, formed of an agglomeration of more or less stabilized corporations, with the absolute despotic government of the mercantilist era. Its ideal is a kind of socialism assuring stabilized if unequal incomes. Bismarck's policy of protection, social insurance, government enterprise and obedience resulted in a system really not very different from the Fascist achievement and was not even very remote from the Fascist theory.

The rise of the Soviet state has proved the greatest solvent of older conceptions of the possible scope of economic policy. For it can no longer be denied that economic activities can be carried out by a centralized government, which uses its subjects as employees with considerable efficiency. In Soviet Russia enthusiasm, fear and obedience have been used as motive power equivalent to the self-interest and the economic pressure on which the capitalistic world has relied. The Soviet system does not need private property as an incitement to work nor the power of the capitalist to squeeze a surplus value from the laborer nor his avarice for accumulating such

surplus to be applied to production. It does accumulate as ruthlessly as its greediest capitalist predecessors. Working with the modern techniques developed by the capitalistic world it has in a brief period shown remarkable economic development. Whether this is greater than that of capitalistic societies during similar periods of industrial revolution under favorable circumstances is doubtful. Apart from the vast institutional changes brought about by the abolition of private property the Soviets' economic policy is, however, not very original. It offers many parallels to the period of late mercantilism, when ruthless bureaucratic governments industrialized their countries by brutal force without consideration for the sufferings of the population, especially the agrarian population. Even the delegation of administrative authority from the central government to trusts has parallels: the mercantilist governments systematically applied their policies with the help of especially organized privileged chartered companies.

Even groups and countries which have not adopted any such radical and inclusive economic policies have been experimenting with partial forms of economic control. But these have not produced economic order. The piecemeal intervention practised has for one thing attracted capital to protected industries which have expanded far beyond existing demand. Where such industries are strongly organized, as in the case of the German cartels, they can make profits on the inflated capital by maintaining prices at home through curtailing output and dumping the surplus abroad. Their partial success may then lead to the advocacy of international cartels to raise in world markets the prices which have been lowered by such dumping. Valorization and import monopolies are expected to confer on agriculturists similar benefits not achieved by agricultural protection in its more simple forms. It is coming to be generally recognized that throughout the world a faulty distribution of capital has taken place, partly as a result of piecemeal intervention. The remedies most frequently proposed are increased intervention through increased protection, monopolization, valorization.

The main object of modern price policy is shifting from the provision of the public with cheap goods in order that they may satisfy their wants on an increasing scale to the guaranteeing to each group of a fixed price for the services it has to render, regardless of the cost of the ultimate output. Modern techniques and modern business organization are widely held to be ca-

pable of producing a national income sufficient to provide a comfortable standard of living for all. Concurrently there has been a revival of the mediaeval idea of a stabilized fixed income determined according to acknowledged hierarchical class standards. Price fixing carried out according to such a conception differs widely from the old protectionist policy; it has become absolute rather than relative. For the attempt to add a definite tariff increment to a fluctuating world market price there has been substituted the aim of fixing an absolute price with the help of indices and sliding scales. The income of the different classes of society, the price they receive for their services, is no longer to be determined by the price the finished product will fetch in the ultimate market; it has rather become a prior lien on that ultimate price which is supposed to cover the income costs of all contracting parties. When this conception eventuates in a policy of fixing wages regardless of yields it is pretty generally denounced by the employing class as "political" wage fixing. It is less frequently pointed out that tariff making to enable combinations to exploit the home market non-competitively is also political price fixing and not essentially different from the fixing of wages in a like manner.

None, however, of these methods of fixing prices, wages and profits or of eliminating risks can be used for the benefit of every economic group, nor can they be expected to yield the same results in all cases. Price policy so far has been a piecemeal affair, its main object discrimination. Indeed, if the various protected interests gained and lost equally by intervention, there would be no call for it. The fruits of intervention thus far have been a much greater range and diversity of prices than existed under a more nearly competitive system, and a very wasteful distribution of capital.

As special price policy has failed to achieve economic order, attention has shifted to the possibilities of a general price policy. Inflation and deflation have clearly shown that treasuries and central banks, which control the issue of money and credit, can easily raise or depress the price level of a country. It is true that in periods of inflation changes do not take place at the same time everywhere; there is considerable lag in the prices of different kinds of commodities; rigid incomes do not follow suit. Nevertheless, money and credit control makes possible a far more uniform and general price policy than the specialized measures embodied in tariff or wage regulations. It makes fairly easy a national redistribu-

tion of income, for during inflation creditors' claims are whittled down and debtors' burdens greatly eased. Many thoroughgoing interventionists advocate the manipulation of credit issues with the object of stabilizing or even raising prices a little whenever employment is slack.

Central banks, working in close cooperation with treasuries, control credit largely by the use of discount policies. The chief object of discount policy in most countries has been the stabilization of foreign exchange. The supporters of a general price policy suggest another aim: stabilization of the price level. As discount rates regulate the cost of short term credits they regulate too the flow of working capital and affect indirectly the valuation of fixed capital and its distribution, through the stock exchange, among various industries. They affect moreover foreign lending or borrowing and by their influence on the price level the volume of imports and exports. Interventionists have long realized that the control of the flow of capital is the problem most in need of solution. It has been attempted by means of tariffs or by control boards for public loans, such as the German Beratungsstelle für Auslandsanleihen or the Loan Council in Australia. There has been shamefaced control of foreign loans in the United States and quite unabashed control in France. Several governments have guaranteed their nationals against losses on loans to Russia. All such measures are more or less haphazard. But it is widely believed that the systematic manipulation of money and credit issues by the central banking authorities would overcome this difficulty and make possible a scientific general price policy by which employment would be increased, taxation eased and nations made rich and contented.

It is largely because the possibilities of such credit control are undoubtedly very great that the power has been so far removed from the sphere of politics. Most existing bank laws forbid banking authorities from embarking on arbitrary general price policies and limit their activity so far as possible to the anticipation of automatic price movements. It is very doubtful whether a widening of these activities is desirable. On the one hand, the possibilities of manipulation are probably overrated. Discount policy might achieve much where free competition was prevalent; it is, however, not so effective in a society where important groups cling tenaciously to rigid prices, whatever the general price trend may be. Moreover, such an extension of authority would involve great political danger.

The cry for cheap money has been raised in many places—by the extreme laborites in Australia as well as by the German Nazis. Such demands can be fought successfully only where rigid banking laws exist. It is perhaps wiser to maintain such guaranties against hasty action of central banking authorities or undue influence by sectional and temporary political pressure.

The time has passed when governmental intervention in economic affairs was considered a crime against immutable economic laws. But it is not so certain that the benefits of intervention, apart from institutional changes, are so great that any society should aspire to experience its maximum development. The automatic wisdom postulated by the liberal economist as resulting from natural equilibrium in a purely competitive world may well be doubted; but the terrible lack

of equilibrium which can result from centralized intervention must not be ignored. Intervention may be wise; but it can be wise only if those who exercise it are full of wisdom. And as this is by no means a certainty, intervention ought not to be made too easy.

MORITZ JULIUS BONN

See: Economics; Public Welfare; Organization, Economic; Commerce; Mercantilism; Laissez Faire; Industrialism; Imperialism; National Economic Planning; Socialization; Gosplan; Fascism; Socialism; Agricultural Policy; Agriculture, Government Services for; Business, Government Services for; Government Regulation of Industry; Government Ownership; Price Regulation; Price Stabilization; Central Banking; Taxation; Natural Resources; International Trade; Colonial Economic Policy; Protection; Free Trade; Export Dutiff; Valorization; Labor Legislation; Labor, Govfriment Services for; Forlign Policy.

ECONOMICS

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ECONOMICS

THE DISCIPLINE OF ECONOMICS. Economics deals with social phenomena centering about the provision for the material needs of the individual and of organized groups. It was once maintained that in order to claim the right to a separate existence an intellectual discipline must have a distinct subject matter and a specific methodology. As tested by this criterion the above definition is highly unsatisfactory: the line of demarcation between the subject matter of economics and that of other social scientific disciplines is very shadowy, and no mention is made of a special methodology. Yet to make this definition more specific would be to enter at once into the realm of controversy, to engage in a battle of words, in which slightly different nuances of definition disguise radical differences in approach and emphasis in the study of the subject. Economics, which has long been and will perhaps ever continue to be the battle ground of rationalizations

for group and class interests, has suffered more than any other discipline from the malaise of polemics about definition and method. Economics was defined as a science of wealth and as a science of welfare; it was spoken of as centering about the business enterprise and as including the entire range of economic behavior; it was declared to be essentially abstract and deductive or essentially empirical and descriptive; it was proclaimed by some as a science and by others as an art. The modern student regards these controversies not as dispassionate attempts to attain by logical means to eternal verities, but as the reflection in one field of changes in Zeitgeist and of shifts in the class structure of economic society. He is more frankly concerned with specific problems suggested by the thousand and one maladjustments in the functioning of the economic system; and he endeavors to bring his intelligence to bear upon their solution without concerning himself with the question whether the problems

are purely economic in character or whether the procedure employed is in line with the approved methodology of economics. For his purposes the broad definition of economics given above should be entirely adequate; it indicates that economics is a social scientific discipline and that it is concerned with the relations of man to man arising out of processes directed to the satisfaction of material needs.

The shift of emphasis and succession of points of view may be traced even in the history of the name of the discipline. The term economics is derived from the Greek oikonomike, denoting the management of the household (oikos), which became in application to the household of a free commonwealth (polis) political economy. At the close of the Middle Ages the Greek nomenclature was taken up by French writers. In 1569 Prudent le Choyselat published a Discours oeconomique, which dealt primarily with an agronomic question. In the meantime Aristotle's conception of politics had made headway and the term "police" began to be used for the science of government. In 1615 there appeared Montchrétien de Watteville's Traicté de l'oeconomie politique, in which he argued that, contrary to the Greek view, "economy" must not be separated from "police" because "the science of wealth acquisition is common to the state as well as to the family." He identified "political economy" with the public housekeeping (mesnagerie publique), which included not only government finance but also the bonne police, or regulation of agriculture, trade and industry. Montchrétien's example was, however, not at first followed. As late as 1745 Claude Dupin wrote his Oeconomiques; in 1750 the Oeconomische Nachrichten was started; and the physiocrats were soon called simply les économistes. In Italy Genovesi advocated the term civil economics and Ortes national economics; but they met with little success, although in Germany the term *Nationalökonomie* had considerable vogue in the ninetcenth cen-

In England Petty was the first to speak of "political economies" and of "oeconomicks" in the sense of "political arithmetick." It was not until the next century that police became common. Hutcheson in his System of Moral Philosophy (1755) speaks alternately of "oeconomics and politics" and "civil polity"; and Adam Smith devoted his lectures of 1763 to "justice, police, revenue and arms," including under police "cleanliness and security, cheapness and plenty, commerce and manners." Steuart's Inquiry into

the Principles of Political Oeconomy (1757), however, popularized the term political oeconomy, so that Adam Smith refers to it alternately "as a branch of the science of a statesman or legislator" and as a discipline dealing with "the nature and causes of the wealth of nations." By the beginning of the next century the new discipline was everywhere called political economy.

During the nineteenth century economics became a self-conscious discipline: much attention was paid to method, to the distinction between economics and related disciplines and to the divisions between various schools of economic thought. In this connection sporadic attempts were made to apply new names: Whately suggested catallactics, or the science of exchanges; Hearn used plutology, or the science of wealth; and Ingram insisted on chrematistics, or the science of money making. These were intended in almost every case not merely to indicate more clearly the content of classical economics but to prevent a complete identification of economic science with this system of economic thought. For this reason such attempts were bound to prove unsuccessful. A more important change came toward the end of the century, when economists became aware of the fact that political economy was too narrow a designation for a discipline which dealt with economic relationships and economic change in society, often without reference to political factors. The new name preferred was economics or social economics, the latter particularly in Germany. The pioneers in this respect were Mayo-Smith (Statistics and Economics, 1888), E. B. Andrews (Institutes of Economics, 1889), Pantaleoni (Principii di economia pura, 1889) and Dietzel (Theoretische Sozialökonomik, 1895); but perhaps most credit is due to Marshall, who in 1890 published the first Principles of Economics.

One reason for preferring economics to political economy is that the discipline had ceased to be a system of inquiries with a direct bearing on questions of economic policy as it had been in the eighteenth and early in the nineteenth century. After a certain point has been reached, the comprehensiveness of the body of principles and the abstractness of methods employed in establishing them have led to a clear cut separation of theory and practise. In England Senior's An Outline of Political Economy (1836) was probably the first to draw attention to the rigidly abstract and hypothetical character of economic theory and to distinguish theoretical economics from the art of economics serving the needs of the

statesman. In Germany such a separation was favored by the fact that the system of economic theory received from England was combined in general texts with a réchauffé of old cameralism under the name of applied, or "practical," economics. Later this division into theoretical and applied economics became crystallized into a separation of theory and policy. But even in German speaking countries this division was not universally accepted. In his Allgemeine Volkswirtschaftslehre (2 vols., 1900-04), for example, Schmoller included under each topic a historical introduction, a statement of principles and a discussion of policy. The collective Grundriss der Sozialökonomik, begun in 1914, breaks entirely with the old divisions. In other countries the distinction between pure and applied economics met with little favor; until the end of the nineteenth century general treatiscs have well nigh invariably included both fields. Since then, however, it has become common in the United States to divide textbooks into two parts with headings something like "economic principles" and "economic problems," the first including a discussion of value and distribution and the latter being devoted to such topics as money and banking, labor problems, transportation and the like.

The content of what at the present time constitutes economic principles is indicative of the development through which the systematization of economic theory passed in the course of a century. In 1811 D. Boileau (Introduction to the Study of Political Economy), basing himself partly on Jakob, divided the subject into the increase, the distribution and the consumption of wealth. In 1821 James Mill, the great systematizer of the classical school, divided theory into parts dealing with the production, the distribution, the interchange and the consumption of wealth. With the substitution of exchange or circulation for interchange this division remained typical for a long time. With the acceptance of the marginal utility approach the topic of value, originally treated under exchange, was given more prominence; the more practical topics originally found under exchange, such as money and credit, transportation and the like, were either constituted into semi-independent disciplines or relegated to a separate part; production was identified with the supply determinant of value and consumption with its demand aspect. As a result theory proper was reduced to a closely integrated analysis of the principles of value and distribution. Where the old fourfold division was kept, another part, the treatment of the economic system as a whole,

was usually added to it; this is concerned primarily with dynamics, or the study of economic cycles.

The differentiation of economics into separate teaching disciplines has been almost inevitable because of the complexity of the subject. Since fiscal problems are so largely distinct from general economic problems, it is only natural that fiscal science, or public finance, should have been erected at an early period into a separate subject. As early as 1729 Dithmar distinguished economics, which deals with the securing of industry, food and wealth, from cameral science, a study of the revenues and expenditures of the prince, and from the science of police concerned with the numbers, morals and prosperity of the people. In the course of time police and cameral science coalesced to form the science of finance, or fiscal science. Later other disciplines acquired separate existence: agricultural economics, business economics, money and banking, international trade, transportation, are all taught separately, have given rise to special research techniques and have developed an extensive literature of their own. Their dependence upon and interrelations with general theory are, however, much closer than in the case of fiscal science.

EDWIN R. A. SELIGMAN

HISTORY OF ECONOMIC THOUGHT. Introduction. The economic thought of early civilizations is reflected principally in the legal codes and in the religious writings. It was not until the beginnings of political and social science among the Greeks that an attempt was made to analyze economic phenomena. But even by the Greeks wealth was treated largely from the moral point of view and economic discussion was subordinated to political considerations. Among the more than one hundred and fifty works on economics which, according to J. Camerarius (De re rustica, 1577), were written by the Greeks only a few have survived. Xenophon devoted most of his work on Oeconomike to domestic economy. He defined wealth as the surplus of possessions over wants, emphasized the idea of utility, stressed the advantages of division of labor, regarded agriculture as the mother and nurse of all the arts and declared handicrafts objectionable as weakening the body and interfering with the leisure of the citizen. In another work he propounded the maxims of just taxation and discussed the influence of demand and supply, the relation between the quantity and the value of money and the law of diminishing returns. Plato divided

commodities into productive and acquisitive, analyzed the benefits of exchange and pointed out the function of money in uniting incommensurable goods. Even in Aristotle the economic discussion is incidental, yet he is responsible for some of the most fertile ideas of later discussion, such as the distinction between utility and value; the definition of wealth as goods capable of accumulation, possessing utility and limited in quantity; and a clear exposition of the function of money.

In Rome systematic discussion was virtually limited to the treatises on agronomy. Cato, Varro, Columella and Palladius, basing their work on that of Mago the Carthaginian, discoursed on the relative advantages of large and small farms, on the drawbacks of absenteeism and on the economic shortcomings of slavery.

The advent of Christianity with its insistence on individual salvation exerted a potent influence on the current attitude to charity, poor relief, the dignity of labor, the position of women, the treatment of slavery and the limits of private property. But the chief economic discussion of the church fathers, as in Augustine, Tertullian and Jerome, related to the legitimacy of trade and the criticism of the profit motive. With the rise of commerce and industry in the twelfth century it became necessary to deal more fully with business conditions. The theologians, the canonists and the legists became therefore increasingly engaged in discussing the problems of usury, fair price, money and banking, interlocal finance and public credit. Along with this went incidental analyses of the influence of cost of production on value and of demand and supply on price, of the relation of individual to social utility, of the nature of interest and the growing evasions of the usury prohibition, of the attributes of money and the formulation of Gresham's law, of the limitation of credit and of the principles of taxation. But the main emphasis continued to be put on the ethical significance of the economic action of the individual, whether subject or prince.

With the beginning of capitalism in the sixteenth century attention was shifted from the individual to the community and the questions of group welfare were pushed into the foreground. The opening up of the through sea route to the East, the discovery of America, the revolution of prices, the growth of wholesale trade and the infiltration of capital into industry were responsible for the disappearance of feudalism, the passing of the village economy, the decay of the

guilds, the consolidation of peoples and the concept of national wealth. The humanists, the reformers, the radicals and the utopians began to consider existing problems in a new light. Hales, Bodin and Davanzati attacked economic questions in a non-mediaeval way and the bullionists, particularly Malynes and Milles, frankly raised the question of national prosperity.

The concept of national wealth as affected by state control was stressed by the mercantilists. Their leading objectives were an increase of population, the protection of agriculture and industry, the economy of low wages, a favorable balance of trade, the development of a colonial system, the accumulation of capital with a resulting low rate of interest and a reform of the revenue system. In the following century the increasing importance of capital in industry and the growth of the foreign market engendered a closer analysis of national wealth and the formulation of general principles, the philosophical basis of which had already been laid by Pufendorf and further developed by Hutcheson and Christian Wolff. When the next stage of capitalism was reached by the advent of la grande industrie in France and the triumph of the domestic system in England, a closer study of capital and its various modes of employment led to the formulation of universal economic laws by the physiocrats and Adam Smith.

From this point on the movement of economic thought is best traced by following the succession of schools. It is not to be inferred that all writers on economics can be easily classified by schools, that the various schools exhibit an equal degree of cohesion or that there has been a clear succession of schools for the discipline as a whole. Nevertheless, an exposition of the theories of the various schools, an account of the leading factors in their development and a statement of their residual contribution to science is the only possible way of presenting the history of a subject in which the interest and Weltanschauung of the student count for so much in the final result. The first and probably the only school in the true sense of the term was that of the physiocrats, but it dominated economic thought only for a short period and its influence was almost entirely limited to France. The classical school which followed it has left an impress on the science clearly discernible to this date; it had an enormous vogue in England, on the continent and in the United States, and for nearly a century economics was virtually identical with its doctrines. In influence only the later school of

marginal utility is at all to be compared with it. At the present time marginalism together with its variant known as mathematical economics has probably the largest following among economists. Apart from the two central schools, between which the neoclassical school occupies an intermediate position, there must be mentioned the varieties of dissidence from abstract economic theory. Of these the best known are the historical school, whose influence has been strongest in Germany, and the institutional school, whose following is even at present virtually limited to American economists. Socialist economics represents a reinterpretation of classical doctrines in terms of a social philosophy which emphasizes the historical character and the class structure of the capitalist society. Socio-ethical dissent from the teachings of the "dismal science" paralleled the development of the latter almost from the beginning, but its theory was never elaborated in great detail or well organized about a single unifying principle. Finally, the present day German school of universalist economics, the achievements of which have really been sociological rather than economic in the narrowest sense, embodies dissent from the main classical-marginalist tendency by emphasizing the aspect of the whole, the organic and spiritual rather than the mechanical and materialistic nexus between men in society.

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The Physiocrats. In the middle of the eighteenth century France was still primarily agricultural. It possessed the largest area of naturally fertile land to be found in western and central Europe and its richest inhabitants were generally those who owned landed estates. The preeminence of agriculture as a form of labor and of wealth was there still taken for granted. If the first scientific doctrine of economics was to be formulated in France, it was natural to base it upon the principle of the primacy of agriculture. Important contributory circumstances were that throughout the first third of the century industry and commerce had remained stationary and that in the same year in which the founder of the school published his first economic work the Seven Years' War broke out, cutting France's foreign trade in half, ruining its merchant marine and compromising its colonial future but leaving its fields and pastures intact.

At this date the example of the other great western power, England, could not appreciably weaken the validity of the French traditional

viewpoint which in the past had been shared by most of the great states: it was easy to regard English agriculture, the most efficient and the most prosperous in Europe, as one of the principal foundations of British prosperity. The tradition of agricultural primacy was even less contestable in application to the English colonies which were growing up in North America. Holland, on the contrary, was declining; its greatness had been founded merely upon the ruin of Antwerp, and the development of its rural economy had simply kept pace with that of its commerce. As for Spain, it could be argued that it lost the rank of a great power because it attempted to develop its marine at the expense of its agriculture.

Quesnay was not unaware that France had become, in his own words, un pays de fortune, and the role that money played there could not have escaped his attention. What he and his followers called for was that the better part of this liquid capital should be devoted to agriculture in such a way as to increase its yield, an increase particularly necessary for the relief of the growing fiscal distress; for the notion that the tax on land constituted the least contestable and the surest source of revenue of the royal fisc was also current in France at the time.

On the other hand, the regime of regulation, protection and prohibition in the administration of industry and commerce had steadily lost favor; liberal tendencies, represented notably by d'Argenson and Gournay, had gradually come to the fore. If economic freedom appears in the physiocratic doctrine as a secondary rather than a primary principle, this "preestablished harmony? of the theories with the general tendencies of the period undoubtedly fortified the belief in their validity at the same time that it more or less consciously inspired their formulation. The revival of the spirit of liberty, in this as in other fields, in opposition to the authoritarian traditions of the preceding age was but a manifestation of the critical spirit that had been gathering force since the beginning of the century.

Yet even while it profited by the heritage of critique and analysis bequeathed by the preceding epoch, the physiocratic system represented a return to synthesis and as such was clearly positive and constructive. Montesquieu's L'esprit des lois (1748) marked a transition in this respect. The new doctrine was closely related to the great intellectual enterprise of the period, the Encyclopédie, and to the work of such men as J. J. Rousseau and Buffon. Similarly, it may be re-

garded as a revival of one of the most characteristic traits of the French genius following a period when Anglomania had reigned supreme in all fields.

Indeed, the économistes used and abused Cartesian evidence and the rigor of mathematics, and in their writings the geometric mode of reasoning sometimes impaired its finesse. Disdainful of history and even of a patient study of the contemporary world, they too easily believed that they had ascertained a priori absolute laws, to which they ascribed a universality of application matched only by the simplicity of the underlying principles. And if to one of them credit is due for coining the phrase "moral and political sciences," they did not suspect that those new sciences were to resemble the natural sciences and were, like the latter, to proceed more by induction than by deduction.

The originality of their social philosophy, upon which their economic doctrine implicitly rested, consisted in placing above everything else private property, especially property in land. Property in movable goods approached the same status, because the cultivation of land would yield only insignificant returns were it not accompanied by the assurance of a free disposal of the produce as well as of the necessary working capital. A similar status was attributed to property in one's own person, so that everyone could freely place his services at the disposal of the landed proprietors.

The various liberties which they advocated are really mere corollaries of the right of private property. Thus free trade is primarily unquestioned freedom of the agriculturist to produce whatever he pleases and to dispose of his product without any restrictions. Not even political frontiers should prove an obstacle, for the inalienable rights of the producer-seller par excellence have precedence over international conventions; absolute individualism leads logically to frank cosmopolitanism. Inequality inherent in liberal societies is also the logical consequence of private property as well as one of the prerequisites for its productive utilization: the labor of the poor is no less useful than the money of the rich for the advantageous exploitation of the soil. Society is governed by private self-interest, which is the "born servant of the general interest." Free competition, "the mainspring of human perfectibility," brings about the reign of justice, a legal equality among individuals which may and even should in the general interest allow for the existence of great factual inequalities.

Ex natura jus—such is the great mystery of physiocracy, the government of nature.

Political organization as envisaged by the physiocrats is simply to be modeled after the economic and social. Any government is good if it respects private property and the liberties bound up with it. The best government would doubtless be that of a monarch whose title is hereditary like that of every landed proprietor, and who would enjoy a sort of universal but strictly defined property right in the lands of his kingdom, coexisting with the right of the private proprietors. The monarch would be preserved from every excess of absolutism by the constant surveillance of a free and enlightened public opinion and by the very consciousness of his own interest. The body politic would naturally comprise as full fledged citizens only the possessors of landed property and the large scale farmers who direct its cultivation.

In the elaboration of their doctrinal system the physiocrats start with the axiom that agriculture alone is truly productive. This means not only that agriculture furnishes the raw materials and provisions which are essential for industry and trade and in the last resort for the survival of mankind. Much more important is the fact that it yields in addition to the subsistence of its laborers and the remuneration of its entrepreneurs, whether independent farmers or métayers, a surplus profit for the owner of the land (Cantillon's "third rent"), a part of which could be appropriated by the state without hindering the success of the agricultural enterprise. Trade and industry appeared sterile because the physiocrats could not discover that they yielded a regular surplus profit similar to the agricultural net product. Indeed, at the time there was no group in commercial or industrial pursuits which occupied the same privileged position as the landed proprietors in the field of agriculture.

The productivity of agriculture is conditioned upon capital advances of various types. The avances annuelles for seed and expenses of cultivation are indispensable. If they are not merely to reproduce themselves but are to be at least doubled, it is necessary that in addition to the avances foncières, such as land clearing and buildings, furnished by the proprietor at the inception of the agricultural enterprise, the avances primitives, livestock and agricultural implements, should be of considerable magnitude, indeed should almost equal in value the land itself. It is important therefore not only to encourage the development of a class of rich agricultural entre-

preneurs or large scale farmers who would lease large areas of land for long terms but also to facilitate a general flow of capital to agriculture. Although the landed nobility could provide a part of the capital, it is particularly important to seek the aid of moneyed capital and therefore guard against its investment in the endless series of government loans at high interest, in useless and onerous commercial enterprises, such as a great number of retail establishments, or in risky ventures, such as overseas shipping.

In order to make possible the large scale agriculture extolled by the physiocrats it was necessary to dispose of the commons by alienating it as a single parcel or in large lots; to abolish feudal servitudes like vaine pâture and parcours which proved obstacles to progressive methods of cultivation; to do away with hunting privileges, a veritable legalized devastation; and to provide appropriate remedies for the plague of vagabondage. The large scale farmer too must be secure in the management of his property against all administrative interference, freed of the corvée on the roads and of service in the militia and guaranteed against such taxes as the inequitable dîme or the arbitrary and disastrous personal taille. The transfer of every land tax from the farmer to the proprietor would be the best solution if such taxes were assessed on a percentage basis on the net rent accruing from the lease of the land.

Yet the entire edifice of agricultural prosperity rests in the last analysis on the "good price" (le bon prix). The price of grains and other agricultural produce must be considerably in excess of their cost of production. Therefore domestic consumption by both the rich and the poor must be stimulated; tolls and local prohibitions on traffic in agricultural commodities must be abolished; an equalization of market prices between provinces and from year to year, which is advantageous to the producers and detrimental solely to middlemen, must be insured by free competition; monopolies enjoyed by retail dealers and especially by the large government contractors, as well as the traditional regulation of markets whose only aim is to degrade the country produce to the sole profit of the urban merchants and manufacturers, are to be suppressed; finally commercial routes are to be improved and the number of canals increased. The export of agricultural commodities should at all times be perfectly free; even if the quantity exported is very small the domestic producers will benefit by the opportunity to sell at the price prevailing in

the world market, which, it should be noted, happened to be at that time high enough to assure a fair return. Certainly after a succession of good harvests, such as occurred in 1763 and 1764, export outlets must be thrown wide open in order to avoid a crisis. Everything that may raise the prices of industrial products and thus increase the expenses of agricultural production must be avoided. Therefore there should be no attempt to impose taxes on industrial enterprises or products; such taxation would prove illusory and onerous, for the burden, heavier than ever, would in the last resort be shifted to the primary producer, the agriculturist. Finally, no unfair protection against the legitimate competition of foreign producers must be allowed to industry and active competition must be fostered among the domestic manufacturers, in order that the prices of industrial products be forced down to the fairest level.

The legacy bequeathed by the physiocratic school to posterity was a new science of economics, emancipated from politics and destined as much as the latter to inspire henceforth the researches of historians and the polyties of statesmen. When the physiocrats turned their attention from the phenomena of commerce which preoccupied the bullionists and mercantilists to the initial problem, the analysis of production, they transformed the study of wealth into a science. But the analysis could not be based on the largely subjective notion of use value, because it was not tangible and simple enough for a discipline in its infancy. A solid foundation could at the time be provided only by the conception of exchange value from which all psychological elements explaining the preferences governing individual exchanges had been climinated. It retained only the element of social value, which in a given market offers a common measure for all purchases and sales. The neomercantilists and the populationists, who focused their attention on industry, regarded labor as forming the major share of the substance of this objective and intrinsic value. The physiocrats succeeded in grasping the decisive role of capital, because they were concerned primarily with agriculture where that essential factor of modern production appeared very distinctly in the form of improvements on land, livestock and agricultural implements. Because of an exaggeration reversing that of their forerunners they erred in failing to appreciate the value of human labor; and an excess of logic resting on a half truth led them to a stillborn paradox of the sterility of industry and trade. But it must be remembered that if the apologists of manufacture and commerce are correct in exposing the erroneousness of physiocratic axioms and the socialist theorists the inhumanity of their corollaries, it still remains true that both Adam Smith and a century later Karl Marx belong among the intellectual offspring of physiocracy.

G. WEULERSSE

The Classical School is that orientation of English economic thought which began with Adam Smith's Inquiry into the Nature and Causes of the Wealth of Nations (1776) and which numbers among its major representatives Smith, Ricardo, Malthus, James Mill, John Stuart Mill and Cairnes, whose The Character and Logical Method of Political Economy (1857) marks the close of the classical epoch. In the same group must be included the French economist Jean Baptiste Say, author of Traité d'économie politique, ou simple exposition de la manière dont se forment, se distribuent et se consomment les richesses (1803), who not only popularized and commented upon the English classics but also made original contributions. Although the chief writers in the classical tradition were English, the school was by no means limited to England; in the first half of the nineteenth century it dominated economic thought in all civilized countries. It still exercises a considerable influence upon economic science; while its doctrines and methods have often been disputed, rejected or modified, its formulation of problems is still so significant that present day economists must begin where the classical school left off or refute the classical statement of the subject.

The classical economists did not constitute a school in the sense of "an alliance of persons, a community of ideas, an acknowledged authority and a combination in purpose" (Higgs, Henry, The Physiocrats, London 1897, p. 3). Although they had in common a number of fundamental ideas, there was no single leader among them to whose authority they all paid unqualified homage nor did they profess a unity of purpose except that implicit in a search for the fundamental principles which are manifest in economic life. Smith is considered the founder of the school because he was the first to envisage the economic world in its entirety and to set forth the uniformities and sequences obtaining in it. But Smith was a man of essentially realistic talents, and the chief significance of his work lies not so much in the purely theoretical doctrines

which he developed as in the systematization and attractive presentation of a great mass of empirical material. It was Ricardo who more than anyone else left the stamp of his intellectual personality upon the body of classical theory. Because of his great acumen and intellectual grasp of the whole range of economic doctrine he cast the formulation of a great many problems into a mold which was rarely abandoned by classical writers. Yet not even in his own day was his authority unquestioned. Many of his important contentions were disputed, these controversies becoming embodied in a most interesting and illuminating literature of pamphlets and personal correspondence. Perhaps his most formidable opponent was Malthus, a person of a realistic bent of mind and therefore fundamentally at variance with Ricardo's abstractness; of Malthus' contributions, however, little has survived except the doctrine of population, which became an integral part of classical theory. The Mills made explicit the Benthamite substructure of a great deal of economic theorizing and John Stuart Mill is responsible for the final synthesis of all essential contributions to classical theory from the time of Smith to his own day.

The most general of the conceptions underlying the theories of all classical economists are the postulates that liberty and property are the keystones of every rational economic order and the claim that political economy resembles a natural science in the universal applicability of its laws. In this, classical economics is scarcely different from physiocratic theory, which preceded it, but the sources from which these ideas derived were not the same. Smith was under the influence of the physiocrats; like them he held that the economic life of society rests upon certain natural principles of which the most important is that economic freedom may be expected to yield greater and more beneficial returns to society than any form of government intervention in economic affairs. But for his social philosophy, explicitly stated in *The Theory* of Moral Sentiments (1759) and in his Lectures on Justice, Police, Revenue and Arms (edited from notes taken by a student in 1763, Oxford 1896), he was more indebted to a succession of English and Scottish moral philosophers-Locke, Shaftesbury, Ferguson and above all his teacher Hutcheson. They inspired his faith in a divinely ordained harmony of egoistic and altruistic impulses in man. In accord with them he believed that self-love will always find itself circumscribed by love for one's fellows and urged that

the individual should strain every nerve and muscle to outrun his rival for external advantage but should never check or hinder that rival by unfair means.

Ricardo and the post-Ricardian economists borrowed their social philosophy from Bentham, for whom the greatest happiness of the greatest number was the true goal of every government. From the psychological fact that every individual is most intent upon his own advantage Bentham inferred that the legislator should further this striving to the utmost. He held that there is no conflict between one's own advantage and the welfare of others, because every man feels that the best security for his own happiness consists in having regard for the happiness of his neighbor. The task of statesmen and moralists is to spread a knowledge of true morals; that is, a conception of wisely circumscribed self-interest which will promote the common weal at the same time that it furthers private interest. Since everyone knows best what profits him most the lawgiver should leave individuals as free and unhampered as possible.

Although this individualistic and liberal social philosophy permeated the economic writings of the classicists it was never expounded in them at great length. For this reason the classical school was accused of neglecting ethical considerations and of exalting material individual advantage to the ruling principle of economic science. These critics overlooked the fact that the classicists shared with their contemporaries a number of assumptions about human nature and the best or most natural social order. In the light of these assumptions it becomes clear that the promotion of self-interest and a regime of unlimited competition were regarded by the classicists not as ends in themselves but as instrumentalities for maximizing social welfare.

Equally unjustified were the criticisms directed against the allegedly unhistorical character of classical doctrines, the universal validity which was claimed for the precepts of the classicists. In the course of his inaugural lecture at the University of Vienna in 1888 Brentano made the following statement: "Classical economics has created a man free from all the peculiarities of occupation, class, nation and cultural-historical stage. It makes no distinction between peasant and merchant, between the instincts of the uneducated laborer and those of the cultivated intellectual, not to speak of its overlooking the great differences within the working classes. It knows no difference of race, religion or epoch"

(reprinted in his collection, Der wirtschaftende Mensch in der Geschichte, Leipsic 1923, p. 3). This description applies neither to Smith nor to Ricardo nor indeed to any of their more important followers. It is inconceivable that men like Smith, who broadened his experience by travel and close associations with men of affairs, or Ricardo, a London stockbroker by profession, were so innocent of all knowledge of the world and of life. This criticism is based on a misunderstanding of the methodology of classical economics and reveals a failure to distinguish clearly two different approaches found in the writings of the classicists. They were well aware of the influence of forces other than self-interest -ethical, social, national, religious-upon economic life; but they deliberately followed the method of isolating abstraction and set out to formulate doctrines which would apply in a situation where men are guided solely by self-interest, the most important driving force in a capitalistic economy. The phenomena traceable to drives other than self-interest were also taken account of but as temporary deviations from the "natural" or posited state of affairs, as modifications or disturbing accompaniments, which do not affect the truth of the fundamental laws. Thus Ricardo often speaks of the "permanent state of things" as distinguished from the "immediate and temporary effect" and finds that "temporary causes" do not touch the principle but only "disturb it in its progress." Similarly John Stuart Mill contrasts the "truths of the pure science" with the "practical modifications" and denotes as "disturbing causes" the circumstances by which the "fundamental laws" of economics are modified.

The classical writers were well aware of the differences between their abstractly deduced laws and the whole of economic reality. But in their time conditions were simpler and economic processes fitted more readily into the rigid molds of deductive generalizations; inferences resting on the assumptions of the economic man and of the economic principle were then closer to reality than they would be at present. In defending Ricardo against adverse criticism Cairnes made a penetrating observation: "In employing the method of reasoning on hypothetical cases, Ricardo, in effect, employed, as far as the nature of his problem and the circumstances of the case permitted, that experimental method which those who would disparage his great achievements affect to extol, but the real nature of which, as their criticisms show, they so little

understand" (The Character and Logical Method ..., 2nd ed., p. 93).

The common fund of the more purely economic doctrines of the classical school may be described very briefly. Unlike the physiocrats, who stressed the primacy of agriculture and of the landed gentry, the classical economists made labor in general the alpha and omega of their speculations. Thus Smith begins his treatise with the proposition that "the annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes." It follows that the topics really worthy of consideration are the factors conditioning the productivity of labor; hence Smith's emphasis on the division of labor, which is declared to have been responsible for "the greatest improvement in the productive powers of labour and the greater part of the skill, dexterity, and judgment with which it is anywhere directed or applied . . . " (bk. i, ch. i). Division of labor gives rise to exchange and with it to the problem of value. Despite important disagreements on the subject all classical economists held fast to an objective conception of value, the ultimate source and common measure of which they saw either in labor or in cost of production. In a characteristic fashion the processes of the distribution of wealth were brought into direct relation to the processes of production, and by a theory of imputation income shares were related directly to factors of production.

There is less agreement among the classical writers on specific doctrines, even on such important theories as those of value and rent. Yet it would be safe to assume that the doctrines of Ricardo would be considered in virtually every case as representative of the classical tradition. Thus Ricardo may be regarded as the real originator of the labor theory of value, which is in a sense the foundation of the entire body of classical theory. Smith taught that "the real price of everything, what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it" (bk. i, ch. v) but that, on the other hand, "the value of any commodity ... to the person who possesses it, and who means . . . to exchange it for other commodities, is equal to the quantity of labour which it enables him to purchase or command" (bk. i, ch. v). Smith thus fluctuates between the labor-cost and labor-command theories of value. Ricardo objected to the latter and set forth in the first chapter of his Principles of Political Economy and

Taxation (1817) the proposition that the exchange relations of all goods "which can be increased in quantity by the exertion of human industry and on the production of which competition operates without restraint" are regulated in the long run by the amount of labor expended in producing them. Yet Ricardo is not a consistent supporter of the labor theory of value. In his *Principles* he introduced an essential modification by maintaining that, since the amounts of fixed and circulating capital employed in different enterprises and the duration of the production process vary, the rate of profit also plays a part in the determination of value. In his correspondence the original doctrine of value was modified even more extensively, until in a letter to McCulloch dated June 13, 1820, he wrote: "I sometimes think that if I were to write the chapter on value again which is in my book, I should acknowledge that the relative value of commodities was regulated by two causes instead of by one, namely, by the relative quantity of labour necessary to produce the commodities in question, and by the rate of profit for the time that the capital remained dormant and until the commodities were brought to market" (Letters of David Ricardo to John Ramsay McCulloch, 1816-1823, ed. by J. H. Hollander, New York 1895, p. 71). It is to be noted also that Ricardo was concerned not with real value but with relative value, i.e. the relation between the values of two commodities or between the values of the same commodity at different periods of time. For this reason he could pass the problem of reducing labor of different skill or intensity to a common standard by remarking that the relation between different types of labor "has long ago been adjusted" and is not subject to much variation. In a sense therefore Ricardo is nearer to a cost of production explanation of value which post-Ricardian classicists such as John Stuart Mill supported than to a strict labor theory of the type later developed by Karl Marx.

The wage theories of the classical economists show a tendency to become increasingly rigid, to narrow more and more the range within which wages may fluctuate. By referring back to "that original state of things, which precedes both the appropriation of land and the accumulation of stock," Smith concluded that wages are regulated by the deductions made from the full product of labor for rent and "profit"; these deductions are determined by the comparative bargaining power of the parties concerned. But ordinary wages have a minimum in the amount

necessary to maintain the laborer and to rear a family of such numbers as will in the long run provide a sufficient supply of labor to satisfy the demand for it. Moreover "the demand for those who live by wages . . . necessarily increases with the increase of revenue and stock of every country, and cannot possibly increase without it" (bk. i, ch. viii). But just as "the liberal reward of labour . . . is the effect of increasing wealth, so it is the cause of increasing population." Basing himself on these rather confused statements of Smith and making use of Malthus' doctrine of population propounded in the meantime Ricardo developed a theory called later "the iron law of wages." He maintained that "the natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race without either increase or diminution" (ch. v). The market price of labor, determined by the demand for it (i.e. the amount of capital) and the supply of it, must in the long run conform to the natural rate. The reason for it is that since the tendency of population to propagate is virtually unlimited and is always greater than the possibility of increasing the food supply, an excess of the market rate over the natural rate will result in such an increase in the supply of labor as will wipe out this excess and will by reaction depress the market rate below the natural rate. When the latter situation obtains, the privations of the laborers will reduce their numbers. It may be noted that the Malthusian doctrine of population has no necessary logical connection with a wage theory such as Ricardo's: there may be other reasons why wages tend to be depressed to the subsistence minimum, nor is it clear why the tendency of population to unlimited propagation should display itself most forcefully among the laboring classes. Indeed, Malthus himself dissented from Ricardo's theory of wages.

Yet Ricardo's theory was not completely rigid. He maintained that the natural price of labor estimated in food and necessaries is not absolutely fixed and constant but depends essentially on the habits and customs of the people. He wrote further that "the friends of humanity cannot but wish that in all countries the labouring classes should have a taste for comfort and enjoyments, and that they should be stimulated by all legal means in their exertions to procure them" (ch. v). Moreover, he believed that by developing "prudential habits" workmen may succeed in raising the level of wages. A more rigid theory is that of the wages fund, which is

implicit in Smith and even more clearly suggested by Ricardo; it was first explicitly formulated by James Mill (Elements of Political Economy, 1821). According to this theory wages are determined by that part of the capital fund which is set aside for the payment of wages, this wages fund being fixed for each production period. It was on the basis of this theory that classical economists, including John Stuart Mill, took a position hostile to organized labor: trade unions could achieve higher wages for their membership only at the expense of the unorganized labor groups. Workers could hope for an improvement in their lot only if they reduced their numbers by refraining from the rearing of families or if the wages fund were increased. Later, under pressure from Longe and Thornton, J. S. Mill materially modified his views and finally gave up the theory altogether, but his disciple Cairnes, the last stalwart of classical economics, still held fast to it.

The most important and enduring of the specific achievements of the classical school is the Ricardian rent theory, which was anticipated in part in James Anderson's eighteenth century writings and which was stated simultaneously with Ricardo by West in An Essay on the Application of Capital to Land (1815) and by Malthus in his Inquiry into the Nature and Progress of Rent (1815). In opposition to the physiocratic conception, which was shared by Smith, that rent represents a surplus product of the soil due to its fertility, Ricardo pointed out that, on the contrary, when the soil is very fertile no rent ensues. Rent first makes its appearance when with the increasing settlement of a country less fertile soils which have to be worked with higher costs of production are brought under cultivation in competition with the most fertile soils first tilled. The differences between the production costs on the less fertile soils and those on the soil of maximum fertility give rise to a differential income for the owners of the more fertile soils, or to differential rent. Ricardo also envisaged the formation of absolute rent, when all available land is brought under cultivation and an absolute scarcity of land ensues (ch. xxiv); but he maintained that absolute rent is governed by the same principle as differential rent, that is, it is a price determined rather than a price determining factor.

The theory of differential rent is intimately bound up with the law of diminishing returns of land. The reason why farmers are forced to have recourse to less fertile soils is that the employment of additional capital and labor on the more fertile soils first cultivated would yield progressively diminishing returns. This law was first clearly recognized and stated by Turgot in 1768 and was later given an exact formulation by Senior.

The observations of the founders of classical economics regarding interest and profits are unsatisfactory. Smith had no developed theory of interest and Ricardo had from the very outset placed the whole problem on very shaky ground by treating interest and profit together under the name profit. Ricardo sheds virtually no light on the conditions which give rise to interest. In discussing the difference in the values of commodities whose production requires capital investments for periods of different length he remarks: "The difference in value arises in both cases from the profits being accumulated as capital, and is only a just compensation for the time that the profits were withheld" (ch. i). In his chapter "On Profits" he observes that "no one accumulated but with a view to make his accumulation productive, and it is only when so employed that it operates on profits. Without a motive there could be no accumulation. . . . The farmer and manufacturer can no more live without profit than the labourer without wages." More important is his theory of the average rate of profit. He maintained that in view of the mobility of capital the rates of profit in different employments must in the long run gravitate to an average level. While with Ricardo this theory is only one of the many consequences of the leveling effect of competition, Karl Marx found. in it the binding link and the capstone of his theories of value and of surplus value.

Important contributions to the theory of interest were made by classical economists other than Smith and Ricardo. Especially significant for the later development was Jean Baptiste Say's theory of productive services applied equally to labor, capital and land; interest was by this theory explained as due to the productivity of capital. In a form considerably modified from its original naïve statement this doctrine was later incorporated into the productivity theory of interest which is still current. Senior explained interest as the compensation for the pain and trouble of the saver's abstinence. As compensation for waiting (Marshall) or as the greater value of present goods as compared with future, Senior's abstinence still figures in modern interest theories as one of the supply factors of capital.

On profits proper the contribution of classical economists is limited to the theory of the wages of management. Passages suggesting this explanation of profit may be found in the Wealth of Nations, but it was more explicitly stated by James Mill and McCulloch. In his Principles John Stuart Mill distinguished three component parts of profit: interest explained by abstinence, compensation for exposing capital to risk and the wages of superintendence.

The theory of international trade as developed by the classical school is the best evidence of the fact that the classical economists were ready on occasion to take account of important deviations from rational economic behavior. This theory is a modification of the doctrine of domestic exchanges made necessary by the fact that the international mobility of capital is imperfect. The reasons for it are, as stated by Ricardo, the fancied or real insecurity of capital when not under the immediate control of its owner and the natural disinclination of every man to shift his residence to a country with foreign customs and laws, a feeling which Ricardo "should be sorry to see weakened." Since the international migration of capital does not eliminate inequalities between countries arising from the unequal distribution of natural advantages and the specialization resulting therefrom, the cost of production of the same commodity may vary from country to country. In international trade price cannot therefore be determined by the absolute cost of production. It is regulated by the comparative costs in the two or more countries involved. This doctrine of comparative cost was first formulated by Ricardo, its former attribution to Torrens not being accepted by modern scholarship; it was further developed by J. S. Mill, who added demand as a factor in the determination of international values. He stated the law thus: "The produce of a country exchanges for the produce of other countries, at such values as are required in order that the whole of her exports may exactly pay for the whole of her imports." He declared that "this law . . . is but an extension of the general law of Value which we called the Equation of Supply and Demand" (bk. iii, ch. xviii, sect. 5).

The classical economists made many more specific contributions to theory—Ricardo developed a refined quantity theory of money, Say propounded a theory of markets and defended it against Malthus who believed in the possibility of general overproduction, and all the classical writers devoted considerable attention to taxa-

tion, particularly its shifting and incidence. But these doctrines are not as closely integrated with the general body of classical theory as those described above; they must be regarded as the contributions of individual economists rather than as the heritage of a school.

The economic policy of the classical school, its insistence upon economic freedom, which took such forms as the advocacy of international free trade, of the sweeping away of the survivals of the feudal and guild systems, of the prohibition of combinations among the employers of labor, constitutes an essential part of its theory. The principle of free competition is at once an important corollary of the fundamental classical preconception, the belief in liberty and private property as the foundation of a rational social order, and an indispensable heuristic device in the deductive construction of a general conception of an articulated economic system. Yet it is not quite true that the classical economists advocated absolute economic freedom without any qualifications. In the theoretical part of his work Smith recommended the utmost liberty as a general maxim for the statesman, but when he comes to consider practical problems he allows for many exceptions to this principle; thus in the second half of the fourth book of the Wealth of Nations he lists a number of cases in which a protective duty might be necessary. Malthus, who won considerable notoriety as the man most responsible for the abolition of the system based on Elizabethan poor laws, was at the same time an advocate of agricultural protection. Ricardo likewise expressed himself in Parliament in favor of duties on wheat to save England from becoming an exclusively manufacturing nation. He supported the repeal of the law prohibiting trade union organization and pleaded for the nationalization of the Bank of England. J. S. Mill allowed for many more restrictions on the principle of free competition, urging among many other things land reform, producers' cooperation, child labor laws.

The economic policy of the classical school must be distinguished from the tendency represented by the Manchester school in England and Bastiat and liberal economics in France. The Manchester school was a radical political group which derived its name from the city of Manchester, where the Anti-Corn Law League was established in 1839. Writers of this affiliation demanded radical elimination of all government interference with economic life, denouncing not only the commercial policy of protection but

also public care of the poor, legislation for the protection of labor, compulsory education and similar measures. This school borrowed a great deal of its theoretical argumentation from the arsenal of the classical school and could cite the authority of classical economics in support of a number of its specific proposals, such as the abolition of corn laws. Yet it would be erroneous to identify Manchester with classical economics. This unfortunate association earned the classical school the ill fame of a capitalistic bias. It lent the color of verisimilitude to assertions that the postulate of economic freedom was laid down by the classical school in the interests of the rising capitalist class and that its economic laws are but an expression of class relationships in a capitalist society.

In judging the economic policy of the classicists it must be remembered that a great many of its precepts were formulated before the development of industrialism with all its attendant evils. When Smith advocated the abolition of feudal and guild restrictions he believed that the lower classes would benefit therefrom by being allowed greater freedom of participation in economic and social progress. And the repeal in 1814 of the apprenticeship law of 1562 has actually redounded to the benefit of the working men. It is true, however, that the classical writers were too optimistic as to the possible benefits which might accrue from a greater degree of economic freedom and were not aware of the offsetting disadvantages that grew up with it.

Classical economics did not become securely established in England until the triumph of philosophical radicalism in the late 1820's. It is true that the Wealth of Nations was accorded an impressive reception immediately upon its appearance, was widely quoted in public debates and led to a host of commentaries as well as refutations on specific points. But with the outbreak of the French Revolution its popularity was checked; and the doctrines of the new economic liberalism came to be identified with radicalism and the French revolutionary spirit. During and immediately after the Napoleonic wars popular discussion of economic topics was revived; the difficulties facing England and the measures for their alleviation formed the subject of numerous pamphlets and tracts, some of which contributed ideas to Ricardo's Principles. At first this extremely compact and in places almost unreadable book was discussed and accepted only by a narrow circle. It was popularized in James Mill's Elements of Political Economy and by the Political Economy Club established in 1821. The later wide acceptance of Ricardian doctrines is connected with the activity of John Stuart Mill, who published the methodological Essays on Some Unsettled Questions of Political Economy (1844) and four years later his Principles.

While the dominance of classical economics in England lasted until the late 1870's, when its hold upon the academic and popular mind was weakened by the attacks of Jevons and the rising tide of historical economics, in France it persisted in a somewhat distorted form for a much longer time. At the beginning of the nineteenth century Say effectively scotched the incubus of physiocracy and made room for the acceptance of the classical doctrines, which he systematized and enriched by original contributions. Later Guillaumin's Collection des principaux économistes (15 vols., 1843-48) provided a further stimulus for the acclimatization of classical theory in France. By the middle of the century, however, Bastiat produced in his Harmonies économiques (1850) a superficial vulgarization of classical doctrine and set going a strongly individualistic current which has since played an important part in French economic thinking and teaching. Effective dissent dates only from the 1880's with the beginning of Charles Gide's activity.

In Germany the doctrines of the classical economists, particularly Smith and Ricardo, were enthusiastically received. In a sense German economic science of the first quarter of the nineteenth century was virtually identical with classical theory. Schlözer in his Anfangsgründe der Staatswirthschaft (2 vols. 1805-07) adopted with some change in terminology Smith's doctrine of value and prices, and C. J. Kraus declared that Smith's conception of labor as the measure of value ranks in importance with Galileo's discovery of the measure of velocity. As late as 1843 Eiselen's Die Lehre von der Volkswirtschaft expounded the theory of value and prices in essentially the same way as it was taught by Smith. But German authors soon began to pay attention to demand factors and in general to the subjective elements of value and price. In his well known Staatswirtschaftliche Untersuchungen (1832) Hermann still followed in the main classical teaching, but he also pointed out many of its defects. The importance of psychological factors which he already emphasized was brought out more fully and forcefully by K. Thomas in his Theorie des Verkehres (1841) and in a masterly fashion by Gossen in 1854.

Classical economics found its rebirth in Marshallian theory, offering a synthesis of the doctrines of the classical and marginal utility schools. With the increasing popularity of neoclassical teachings, at least among the academic economists in English speaking countries, the virulence of opposition to classical economics which marked the closing years of the nineteenth century has gradually subsided. The hundred and fiftieth anniversary of the publication of the Wealth of Nations was celebrated in all quarters. Instead of general denunciation of Ricardo for shunting the car of economics on to wrong tracks voices are heard here and there calling back to Ricardo as the grand master of economic science.

KARL DIEHL

Marginal Utility Economics. The founders of modern utility theory are generally recognized to be W. Stanley Jevons, author of The Theory of Political Economy (1871), Karl Menger, author of Grundsätze der Volkswirtschaftslehre (1871), and Léon Walras, the first instalment of whose Eléments d'économie politique pure appeared in 1874. These three men, working independently and belonging to different branches of European culture, came practically at the same time to the same position. Yet the central doctrine of marginal utility, now one of the most familiar in economic theory, was not a new discovery made by them or by any other writer usually associated with the marginal utility or Austrian school. After the work of the founders received general recognition, numerous statements of similar doctrine, varying in clearness and elaboration, were found scattered through the earlier literature. Some were by men who had been recognized in their day on other grounds, others by men who had died unheard of. If the most pathetic case is that of Gossen, the strangest is that of the famous economist Senior. This thinker, characterized by brilliant insights and inability to build upon them, not only stated the utility principle but especially emphasized its main consequence, namely, that cost affects price only indirectly through supply; yet he worked out his value theory as a whole on the Ricardian principle of subjective cost, without incorporating this premise. The utility theory had apparently to wait for the "fulness of time" and to be stillborn many times before it could

At the present time marginal utility analysis, in one or another of its numerous variants, is firmly established in the economic thought of

all important countries. The country where utility theory first rose to dominance is Austria, hence the identification of "Austrian school" with marginal utility doctrine. The great triumvirate of Vienna, Menger, Böhm-Bawerk and Wieser, were the first to sketch in the main outlines of the new theory; they enlisted an imposing array of followers including Sax, Philippovich and Zuckerkandl, and trained a number of younger economists of whom Schumpeter and Hans Mayer are probably the best known. In Germany utility theory encountered opposition from the historical school, which was rapidly attaining prominence after the middle of the nineteenth century. Menger found himself therefore fighting the battle not merely of marginal utility but of the "exact" deductive method in social science; and allied with him was Dietzel, an economist who was nearer to the classical theory than to the Austrian school. The opposition in Germany was overcome only very slowly; not until after the war did marginal utility receive its full share of academic recognition in that country. In France the ground for utility theory was prepared by the writings of Condillac and J. B. Say. Although the mathematical performances of Walras met with disfavor, the theory was not forced to fight for survival; yet except for Walras French economics made no significant contribution to the theoretical exploitation of the utility principle. Italian economists, led by Pantaleoni and Pareto, took up particularly the mathematical variant of the new theory. Among other continental writers of the marginal utility orientation must be specifically mentioned Wicksell in Sweden, Pierson in Holland, Birck in Denmark and Bilimovič in Russia.

In the English speaking countries the acceptance of marginal utility was a reaction from the theories of the classical school, which had dominated economic thought since the publication of Adam Smith's Wealth of Nations (1776). In England the new theory was popularized by William Smart, the translator of Wieser and Böhm-Bawerk, and P. H. Wicksteed, a follower of Jevons. Despite an obvious reverence for the classical tradition and no less pronounced coolness toward Jevons, Marshall was even more responsible for the acclimatization of a modified form of marginal analysis in England. In the United States, where classical doctrines were not as strongly entrenched, Carey's influence was on the wane when utility theory found a thoughtful and original exponent in J. B. Clark.

The other American writers with marginal utility leanings are Patten, Fetter and Irving Fisher, all of whom made original contributions on specific problems.

It has always been recognized—it could not fail to be, as soon as the phenomena came under scrutiny at all—that a thing must be desirable in order to have power to command value in exchange. But the Smith-Ricardo school considered desirability only a condition of exchange value; they rejected it as a determinant of value on the empirical ground that there seems to be the widest discrepancy in fact between the usefulness of commodities and their prices. Smith cited the example of water and diamonds. previously used by Locke and Law; Ricardo, that of gold and iron. Dismissing utility as a cause of price, they fell back upon cost, which likewise had necessarily been recognized as a factor from the beginning of speculation on the subject. Smith believed that in a primitive state commodities might be expected to exchange on the basis of labor costs, and that in a developed exchange economy the cost which determines price consists of the money payments made by producers for the labor, capital and land necessary to produce a commodity. Ricardo's highly abstract mind disliked the pluralism of Smith's treatment and his failure to integrate arguments proceeding from different standpoints. He conceived the idea that the theory of value could be made simple and unitary on the basis of labor cost alone. Several difficulties stood in the way, of which the most important were the roles of land and capital in production. The surplus theory of land rent, which had been stated by Smith, Hume and Anderson and was getting recognition through West and Malthus and according to which rent is the effect and not a cause of price, seemed to Ricardo to remove the difficulty in the matter of land and was therefore used by him as the corner stone of a new system. If Ricardo was dissatisfied with the assumption of uniform capital outlays in various branches of production, the device by which he got rid of capital as a major cause of price differences, Senior's concept of abstinence, reduced capital cost to homogeneity with labor cost in terms of subjective sacrifice. After him the formulation of value theory on the basis of sacrifice cost remained unshakable down to the "revolution" inaugurated by the marginal utility theorists. Yet the recognition of "non-competing" strata of laborers by Mill and Cairnes

made it impossible longer to take the labor cost theory literally. At the same time the classical theory of distribution, also built around the surplus theory of rent, was placing an increasing strain on every mind free from prepossession and was virtually abandoned in J. S. Mill's overhauling of the classical system. When Mill also recanted on the wages fund theory, the wreck was so complete that a new start became inevitable.

In formal statement the new doctrine of Jevons and Menger seemed revolutionary indeed. It explained price in terms of utility, summarily rejected by the writers of the old school, and squarely inverted the accepted relation between cost and price by holding cost to be derived from price and not its cause. The key to the change of view was the recognition of the homely fact that commodities are esteemed not in accordance with their significance in general, but with that of any small unit of the available supply. All the units of any commodity being alike, that unit which is employed for the most important use can be replaced by the unit in the least important employment, and an equal value must attach to both. Hence the effective use value of any good decreases rapidly as the supply increases, and the paradoxes seen by the earlier writers vanish. The use value of a unit of either water or iron is very small, because it is so abundant that it is available for trivial uses; but it would increase almost indefinitely if the supply were reduced, while gold and diamonds would be little esteemed if abundant.

This conception of the use value of the single unit of a commodity, determined by the importance of the "last" unit, or the unit in the least important use, is now generally called "marginal utility," Smart's rendering of the German Grenznutzen of Wieser (in his translation of Wieser's Der natürliche Werth in 1893). The term was not used by any of the founders of the theory. In his paper delivered before section F of the British Association in 1862 (reprinted in 4th ed. of the Theory, p. 303-14) Jevons called it "coefficient of utility" and in the book of 1871 "final degree of utility." Menger's term was simply "importance," that of Walras, "rarity." Jevons and Walras defined the notion with quantitative precision, using the mathematical theory of infinitesimals; Menger spoke only of units or portions as understood in everyday usage.

In attempting to explain price in terms of

marginal utility the Austrian theorists encountered considerable difficulty when they found that the utilities of articles of the same price must be very different to rich and poor buyers. The difficulty was really imaginary and was due to reasoning in terms of absolute rather than relative utilities. Jevons saw and emphasized the truth that the doctrine of utility determining price involves only comparisons by each individual buyer for himself of the different uses for his purchasing power large or small; no comparison as between one individual and another, whether of utilities or disutilities, is called for.

From explaining price on the basis of use value as in turn dependent on scarcity, it seemed a natural step to reason that where goods come into existence through production, as most of them do, the means of production, or cost goods, will be valued to the same extent as the products to which they give rise and on the same principles. Any one unit of a productive resource will be valued in accordance with the least important unit of product for which it is available, i.e. according to the satisfaction actually dependent on its use. It is due primarily to Menger that the foundation was laid for a new approach to the valuation of "indirect goods," "goods of higher order" or productive resources. Jevons had a deeper insight at some points but did not break away from the influence of the older British approach completely enough to develop his theory of supply systematically, and the later Austrian writers became confused over side issues. The values of production goods constitute at the same time the money costs of production and the incomes through which product is distributed. The fruits of the new viewpoint were ultimately greater in the field of distribution than in that of the explanation of price.

As regards price theory, critical reflection soon revealed that the revolution was by no means so great as it appeared to be from the change in form of statement. On the one hand, men found a great deal of utility theory implicit in the treatment of the classical economists; and, on the other, there was much cost theory in Jevons and Menger. Smith argued that if in a primitive community it costs twice as many days' labor to kill a beaver as to kill a deer, then one beaver will exchange for two deer. With reference to this statement two observations must be made. The first is that if the labor is not of the same kind, freely trans-

ferable from one occupation to the other, the reasoning loses all force and meaning. The second is that the reasoning is valid not only for labor but also for any other cost good, such as an acre of ground, which is freely transferable from one employment to another. If the society for any reason has its choice between definitely limited amounts of two commodities, the above reasoning will still hold without any cost being involved. The real argument, not stated by Smith but necessarily implied, is that value depends on amount produced, producers being supposed to employ the resources in the production of the more valuable product. Far from being opposed to the utility principle, the cost theory presupposes its operation at every moment of the adjustment. It is clear also that Ricardo and his successors were fully aware of the role of demand. On the other hand, both Menger and Jevons saw, the latter the more clearly, that if price depends on utility as determined by scarcity, then scarcity in turn is generally the result of the high cost of production. Jevons gave the utmost typographical prominence to the words (Theory, 2nd ed. p. 179):

"Cost of production determines supply; Supply determines final degree of utility; Final degree of utility determines value."

Final degree of utility determines value." The essential achievement of marginal utility in price theory was that of forcing a new realistic approach to the problem as a whole, centering attention upon the behavior of actual human beings in competitive relations, each attempting to make the best of his situation in the buying-and-selling economic system. In this marginal utility theory was really following the example set by Adam Smith. Ricardian economics ran in terms of a sort of metaphysical necessity; the actual workings of competitive processes in bringing about the results contended for were assumed rather than clearly expressed, and for this reason much error as well as misplaced emphasis crept into the state-

The greatest improvement introduced by the marginal utility viewpoint came in the field of distribution theory as a by-product of the changed view of cost. The classical Ricardo-Senior-Mill theory of distribution was utterly unrealistic. It did not consider the problem as one of the valuation of services furnished to production, under competition or monopoly, but as a matter of the successive slicing off of the social income by the three main economic classes found in the society of postfeudal Eu-

rope. Smith and Malthus, basing themselves upon an entrepreneur cost theory of price, afforded clear intimations of a realistic approach, but the building of a pain-cost theory of value around the pillar of the residual theory of rent threw all into the discard. It was the truly revolutionary contribution of the utility approach to force consideration of costs and distributive payments as integral parts of one general valuation problem, which has been gradually recognized as that of explaining economic organization under the influence of price facts and motives of individual self-interest.

In the formulation of explicit laws of price the utility theorists were no nearer the truth than the classical economists. The case of the deer and the beaver itself proves that the classicists were wrong in so far as they held that pain-cost has anything essential to do with price fixing. But prices are no more determined by psychological utilities than psychological disutilities. The essential principle is that producers choose the larger return from any productive activity irrespective of its being painful, pleasant or indifferent and that amount produced in relation to demand fixes prices. When any two commodities can be produced with the aid of the same resources of whatever sort, freely transferable from the one use to the other, the prices of those commodities must in equilibrium be such that the alternative products of the same or equal units of resources exchange for each other. Price is determined by cost rather than utility but by cost in a physical, technical sense, not that of pain or sacrifice.

Comparisons of sacrifice, however, may be and commonly are involved in greater or less degree, and the operation of the utility principle is the basis of the whole process of adjustment. This is the alternative cost theory which is definitely the product of the utility approach. But alternative cost requires much explanation and qualification to fit it accurately to the facts of economic life. The reasoning assumes that all productive resources are freely and continuously transferable from one use to another, so that, as more of one good and less of its alternative are produced, the amount of the latter given up in increasing the output of the former by one unit remains unchanged. But this condition of constant cost rarely describes the situation exactly. In general, some of the resources are freely transferable, others not; and frequently some factors are available only

in very large blocks, so that the most efficient organization requires very large scale production. The first condition will give rise to increasing cost, and the latter to decreasing cost in the earlier stages of expansion of an industry. Given an indefinitely long time for readjustment, including changes in form of capital, retraining of labor, and whatever else may be involved, the law of constant cost is not far from the truth. Under such circumstances utility determines quantities produced but cannot affect the final equilibrium price. On the other hand, the factors of production are hardly transferable instantly in any degree; for a very short period the condition approximates that of fixed supply. In so far as this is the case, price is determined by the relative utilities of the supplies as they stand, cost exerting no influence at all. Problems actually encountered fall between these two limits; the longer the period over which one looks ahead, the greater the extent to which prices at the end of it will correspond to physical cost conditions and the less the role of utility. For ordinary producers' calculations the role of cost is certainly far the greater, but the actual quoted price at any moment, the price at which consumers buy from dealers, reflects rather the demand conditions, supply being "given." The influence of relative utility as compared with that of relative cost depends on the comparative elasticities of the two curves. In the short run, supply is highly inelastic and demand conditions predominate; in the long run, supply generally has practically infinite elasticity and predominates over demand, the latter being always of intermediate elasticity.

Where increasing cost is due to the more intensive exploitation of the non-transferable factors with increasing proportions of factors drawn in from without, utility and cost work together in determining price, the relative influence of each depending on the elasticities of the two curves. Where increasing cost is due to the fact that production depends on cost goods of special qualities, the supply of which is actually an increasing function of price, the price may be said to depend on the effects of both utility and cost, the latter in the sense of disutility. In general, however, the supply of labor is little dependent on disutility considerations; nor is the supply of capital for short periods, since it is an accumulating good. Moreover, labor and capital are employed so generally over the field of production that

changes in the supply of either have to be very extensive to exert much influence on the relative supply of different commodities and hence on their prices.

The Austrians admitted the effect of cost on price through control of amount produced but held that cost is finally measured by the value of cost goods, which is derived from the value of products, and hence that utility finally controls price. The premise may be accepted as true, but the conclusion is fallacious. In so far as the costs of two commodities consist of different quantities of the same cost goods, these costs are relative physical magnitudes and are not measured by utility; this condition is much more typical for costs generally than that of distinct factors producing distinct products.

Similarly in the field of distribution the utility theorists gave the correct approach but in formulating the general principle fell into confusion. It is true that the distributive shares are simply the values of the productive services and that these are derived from product values. But in the effort to make utility the sole explanation these writers tended to argue as though different cost goods have different products or groups of products. In so far as that is true, the values of the cost goods may be said to reflect the relative utilities of the products. But the general situation is rather that ultimately all the productive resources cooperate in making each product. Hence the relative "utilities" of units of different resources depend on the relative physical quantities which they respectively contribute to each product. This sets the problem of imputation (Zurechnung), the division of a joint effect among cooperating causes.

Imputation was discussed by the Austrians at great length, but they reached no agreement among themselves and did not arrive at a clear and sound analysis. Here the first attempt was the best. Menger gave a fairly clear, if brief, sketch of the process of competitive imputation based on the essential fact that, while the factors almost always have to cooperate in production, any single one being practically ineffective alone, the proportions in which they are employed are variable; this makes it possible to divide the product of their joint activity among them by finding the effect of substituting a small quantity of one factor for a small quantity of another. Most of the school failed to see that the proportions are in fact variable almost without physical limit and that the pro-

ducer's problem is precisely that of deciding upon the correct proportions of factors along with the problem of fixing the output for the enterprise. The main difficulty was that economists as a class had remained ignorant of the fundamental logic of quantitative variation applicable to problems of joint causation, which had been worked out in connection with physical mechanics a century or more before. The way out was pointed especially by Marshall in England and J. B. Clark in America. The purchase of productive services by entrepreneurs follows exactly the same principles as the purchase of final products by consumers. The complementary relationship may be present or absent in either case. Buyers substitute small quantities of one productive service (or commodity) for small quantities of any other until they arrive at such proportions—varying from buyer to buyer that they obtain from the last unit of each productive service (or commodity) equal additions to the final product (or to "total satisfaction"); competition sets all the prices in such a way as to clear the market.

The problem of interest presents a special difficulty in distribution theory, because the payment takes the form of an abstract arithmetical rate and not of a specific sum for the use of a concrete productive instrument. Ricardian economics had discussed the share of capital in the social income but had done nothing significant toward explaining the return as a rate, and the problem became a favorite one with the utility school. While Jevons made a brilliant attack on it, which was never adequately appreciated, Menger's work was very weak at this point. Böhm-Bawerk made it his main life work (Kapital und Kapitalzins, 2 vols., 1884-89) and under his influence and stimulation notable work has been produced in America (Fetter, Fisher and others). As Böhm-Bawerk interpreted the problem of developing a theory of interest in harmony with marginal utility principles, it involved refuting productivity and use theories as well as Senior's abstinence doctrine (which Senior unaccountably never employed to explain the rate of interest but only the role of capital in connection with the prices of goods) and explaining the phenomenon in terms of a difference in subjective appreciation of present and future goods. Some critical students think this is what Böhm-Bawerk actually achieved. Undoubtedly a more general view is that, after almost a thousand pages of prolix argumentation, he gave in a few pages a none too clear but reasonably correct

statement of the productivity theory, somewhat vitiated by the admixture of the wages fund view of the relation between capital and wages. The utility approach does not necessarily call for a psychological explanation of interest, in such terms, for instance, as the discount of future satisfactions; the simple theory that interest is a ratio between the net value product of capital goods and their money cost, as held by Wieser, would seem to be quite adequate.

It is generally claimed that the marginal utility doctrine and movement is responsible for two contributions of great scientific value. First, it focused attention on demand, which had been passed over and taken for granted by the Ricardians. In this connection the importance of its contribution cannot be overestimated. Demand has ever since been recognized as the driving power behind economic activity and economic organization, although generally physical cost relations exercise a much greater control over the superficial fact of exchange ratios. In the second place, it is claimed that utility theory carries the analysis of demand beyond the surface facts of quantity and price, that it "explains" demand. On this issue there is wide disagreement and the keenest controversy. On the one hand, some form of marginal utility theory is almost universally presented in textbooks, and it seems impossible to discuss economic behavior in a utilitarian civilization without using utility concepts. On the other hand, the theory is not merely rejected by able critics as unreal and preposterous; it is in fact a favorite point of attack for the enemies of abstract theoretical economics as such.

The issue involves all the philosophical problems connected with the concepts and methodology not merely of economics but of all the sciences dealing with man. The utility theory should be seen as the culmination, historically and logically, of the rationalistic and individualistic intellectual movement of which the competitive economic system itself is one aspect and modern science and technology are others. To its admirers it comes near to being the fulfilment of the eighteenth century craving for a principle which would do for human conduct and society what Newton's mechanics had done for the solar system. It introduces simplicity and order, even to the extent of making it possible to state the problems in the form of mathematical functions dealt with by the methods of infinitesimal calculus. Moreover, in harmony with eighteenth century cravings, it claims to furnish a guide for social policy; it can be harnessed to the very practical purpose of proving that if only the state will limit itself to the negative function of defense against violence and predation and leave men free to pursue their own interests, individual self-seeking directed by market competition will bring about a simultaneous maximum of want-satisfaction for all concerned, which in this world view is the desideratum back of all thought and activity. The utility theorists were contemporary with Herbert Spencer and were philosophically his comrades in arms.

The reaction against utility theory is in part the natural reaction against the view of the world and of man which it embodies, in favor either of a more spiritual or less mechanistic view or one less apologetic and more radical; but in part also it is a reaction in precisely the opposite direction, toward more "scientific" conceptions. Under the first banner march those critics to whom the "economic man" is a caricature or a calumny or both. Some insist on treatment in terms of organic social purpose, historical forces or culture patterns. Others insist on a degree of freedom and spontaneity or of realism in detail that would exclude any treatment except the recording of events as they happen and their imaginative interpretation. Of some of these protesters it must be said briefly that they do not understand either the logic or the purpose of the utility analysis. As a matter of course, the utility description of behavior as an affair of comparing and choosing is valid only in so far as men compare and choose; no one in his senses has thought of it as the exclusive form of all activity in all historic time. More specifically, the "patterning" of interests does not invalidate the principles of utility analysis at all, so long as substitution is possible through varying proportions; and that is clearly the fact over a considerable field, whatever its precise extent may be.

In the more rigorous versions of the theory, however, there is an element of paradox and unrealism. The notion of increments of satisfaction undoubtedly implies that the value of life as a whole is some definite increasing function of the quantities of the various means of satisfactions available, which hardly agrees with common sense. It also implies the well known consumers' surplus, a quantity of free satisfaction representing the difference between what is paid for goods at the uniform market price

per unit and what an omniscient monopolist could theoretically make the consumer pay by selling to him successive small portions at the maximum price for each separately. It would be hard to locate this free satisfaction in the consciousness of a typical consumer. It is necessary at least to distinguish sharply between valuing goods as increments to a supply of goods and valuing them as increments to a total satisfaction. In fact, the entire theory is much more convincing in the loose, common sense formulation of Menger than it is in the more refined mathematical version of Jevons and Walras.

Critics of utility theory from the opposite direction contend that it is subjective and unscientific and advocate a treatment of economic phenomena by statistical methods using only physical magnitudes, quantities and prices. They deny that utility explains demand or adds anything to the demand curve or schedule taken as a fact. Logically, they can put up a strong case. The analogy of utility theory with Newtonian principles does not stand up well under examination. In mechanics, if the forces are not directly accessible, at least the conditions under which they act and the effects are measurable and do repeat themselves accurately from one case to another. In economic behavior the opposite is the case. Under no real circumstances can the behaving subject himself, not to mention any outside observer, ever know even afterward whether or not he actually performed in such a way as to realize maximum possible total satisfaction; and it is even less possible to repeat the choice experimentally with controlled variations. Indeed, on the basis of knowledge gathered from one's own experience and intercourse with others it seems that men do not balance alternatives correctly. All that can be claimed is that there is an effort to do so, with more or less approximation to this result; but the introduction of error into the reaction puts the whole relation on a categorically different basis from cause and effect in nature. On the other hand, the advocates of a purely statistical science do not seem to realize that economics, if it is to have any relation to human problems of means and ends, must be concerned with goods and services not in themselves, but as representing values or sacrifices. These cannot be treated as physical things but must be defined in the same vague and shifting terms as the human impulses, successes and failures which the scientific mind finds such unsatisfactory material.

Frank H. Knight

Mathematical Economics is a set of economic propositions and arguments presented with the aid of mathematical symbols. It may be considered a school of economic thought only in the sense that there is a division of opinion among economists as to the applicability of mathematics to economic reasoning. It is a distinction in method used rather than in subject matter and approach that differentiates mathematical economists from others, for the differences of approach among mathematical economists are almost as great as between recognized economic schools.

The most cogent reason for the use of mathematics in economic theory is that mathematics is a method of reasoning, a branch of logic. The relation of mathematics to any science which happens to employ it has been correctly described by Ludwig Wittgenstein. He states that "mathematics is a logical method. The propositions of mathematics are equations, and therefore pseudo-propositions. . . . In life it is never a mathematical proposition which we need, but we use mathematical propositions only in order to infer from propositions which do not belong to mathematics to others which equally do not belong to mathematics" (Tractatus logico-philosophicus, London 1922, p. 169). To provide a raison d'être for mathematical economics it would be necessary to prove that mathematical methods can be applied to economic reasoning and that their application is indispensable or at least useful. As to the former, there is no a priori reason why it should not be possible to use mathematics in the social sciences in general and in economics in particular. The inappropriateness of mathematics, if such be the case, can be established only if it is shown that the character of specific economic problems is such that there exists no adequate mathematical technique for dealing with them. The objections to mathematics in this connection are that mathematics deals with quantities which vary continuously from positive infinity to negative infinity and presupposes a "mechanical" relation between such quantities, whereas economics is not entirely limited to quantities, economic quantities are finite and discrete and the relationships among them are not "mechanical." These objections tend to identify mathematics with infinitesimal calculus and overlook the existence of such branches of mathematics as are adapted to dealing with qualities and discrete quantities; moreover, mathematics is no more to be identified with the "mechanical" than ordinary logic.

If economic theorists are interested in getting

an insight into concrete phenomena, if they start with premises bearing on economic realities and end up with conclusions relevant to the understanding of the concrete phenomena, then the specific variety of logical method used in passing from the premises to the inferences is irrelevant to the value of the conclusions. The problem that presents itself in connection with the mathematical method, so long as the question of its applicability is settled, is one of preference: is it of greater utility than other methods, and are there cases in which it is the only method possible? So far there have been found very few instances in which mathematics is absolutely necessary, but there are more examples in which the application of mathematics facilitates the prosecution of the argument. In this connection several forms of the application of mathematical methods and formulae to economic theory may be distinguished.

The simplest and least far reaching use of mathematics is the employment of mathematical symbols and graphs for purposes of exposition. It facilitates the presentation of complex and abstract conclusions; graphs particularly are found useful for didactic purposes. Although this type of mathematics is often resorted to in a subordinate capacity by many eminent mathematical economists it does not yield a genuinely mathematical economics. The mere translation of propositions established by other means into mathematical symbols is quite different from the use of mathematics as an important or even indispensable tool in reasoning. In the latter case the translation of the reasoning into non-mathematical terms often encounters serious difficulties, whereas the reverse procedure should always prove possible. This is not to say that it is always advantageous: the outstanding example of a scarcely profitable rendering of literary theory into mathematical terms is that of Whewell, who translated the doctrines of the classical economists into a rather clumsy algebra (in Cambridge Philosophical Society, Transactions, vol. iii, 1830, p. 191-230).

A more important and fruitful use of mathematics is the application of mathematical methods of reasoning to specific economic problems selected because of their particular susceptibility to mathematical treatment. The problems so selected are too complicated to be treated by ordinary means; their translation into mathematical terms at once simplifies the premises and permits the achievement of a higher degree of precision in the solution. The undisputed master

of the mathematical treatment of separate problems was Alfred Marshall, who maintained that "the most helpful applications of mathematics to economics are those which are short and simple, which employ few symbols, and which aim at throwing a bright light on some small part of the great economic movement rather than at representing its endless complexities" (Memorials of Alfred Marshall, ed. by A. C. Pigou, London 1925, p. 313). The outstanding example of this type of mathematical economics is the theory of partial equilibria, but it is to be borne in mind that the problem of partial equilibria can be also treated without recourse to mathematics.

The most far reaching use of mathematics in economics is that in which the whole body of economic theory is organized into an interdependent set of propositions stated in mathematical terms. The only example of this type of mathematical economics is the theory of the Lausanne school, or the theory of general equilibrium, whose outstanding representatives are Walras and Pareto. They start with the notion of the mutual interdependence of all economic quantities, which is represented, in apparent analogy to certain conditions in physics, by means of a set of simultaneous equations. The problem is determined when there can be obtained as many equations as there are unknowns. In contrast to the mathematics of the kind which Marshall employed, simplicity is here sacrificed for the sake of completeness.

The first example of the application of mathematics to economics is Giovanni Ceva's De re numeraria, quoad fieri potuit geometrice tractata (1711). A mathematician and hydraulic engineer by profession, he was characterized by Pantaleoni as the first clear sighted mathematical economist. Half a century later his countryman Cesare Beccaria employed algebra effectively in an essay on the hazards and profits of smuggling ("Tentativo analytico sui contrabbandi" in Il caffe, 1765). Later two works employing mathematical methods were published anonymously: An Essay on the Theory of Money (1771), the authorship of which is imputed to Henry Lloyd, and Traité des richesses (1781) by A. N. Isnard. The latter is particularly interesting; it deals primarily with monetary theory and does not venture beyond first degree equations, but it anticipates the idea of interdependence developed a century later by Walras. Although N. F. Canard's Principes d'économie politique (1801) was crowned by the French Academy of Sciences

it presents merely a translation of literary theory into algebraic symbols and is worthless because of many mathematical errors. The first German contribution to mathematical economics is von Thünen's *Der isolierte Staat* (2 pts., 1826-63), containing a number of mathematical formulae of which the best known is the expression \sqrt{ap} for the natural wage, where a stands for the subsistence minimum and p for the full product of labor.

Cournot's Recherches sur les principes mathématiques de la théorie des richesses (1838) passed unnoticed until Walras called attention to it in 1872. It has since exercised an enormous influence and is even at present considered a masterpiece of mathematical economic reasoning. In it infinitesimal calculus is applied for the first time to an analysis of economic problems; the results are particularly telling in the discussion of monopoly. Beginning with the determination of monopoly price as that value of p which will maximize the monopolist's net revenue, or $p.F(p)-\phi(D)$, where F(p), or D, is the amount demanded and $\phi(D)$ the cost of producing this amount, Cournot shows that price is determinate also in the case of imperfect monopoly; from that he passes to the condition of perfect competition. Cournot's propositions regarding prices under conditions of duopoly were later attacked by Bertrand, Edgeworth, Pareto and others, but more recently economists like Wicksell and Amoroso have come to their defense. Cournot also gave the first exact formulation to the theory of cost; thus if y is the cost of x or y = f(x), then the laws of increasing, constant and diminishing costs may be briefly stated as follows: $y'' \ge 0$ Cournot had also some inkling of the ideas of integral interdependence of economic quantities and of marginal analysis, but he did not attempt to develop them.

In his "De la mesure de l'utilité des travaux publics" and "De l'influence des péages sur l'utilité des voies de communication" (in Annales des ponts et chaussées, 2nd ser., vol. viii, 1844, p. 332-75, and vol. xvii, 1849, p. 170-248) the French engineer E. J. Dupuit worked out independently of Cournot both the analytic expressions and the graphs for demand and supply functions. Although he offered no systematic theory, the concepts of diminishing utility and consumers' rent were quite clearly stated by him and presented in graphical form. His definition of utility is almost as formal as that of Pareto's ophelimity. Dupuit also maintained that the price of one commodity depends upon the prices

of other goods. The presentation in quite a modern fashion of the demand and supply graphs and the assignment of market price to the point of their intersection were found later in the works of the economist Mangoldt (Grundriss der Volkswirthschaftslehre, 1863) in Germany and of the engineer 11. C. Fleming Jenkin (The Graphic Representation of the Laws of Supply and Demand and Their Application to Labour, 1868) in England, but their mathematical contributions attracted little notice.

Even less attention was given at the time to Gossen's Entwickelung der Gesetze des menschlichen Verkehrs . . . (1854), a work containing a symbolic and graphic statement of diminishing utility with increasing consumption and of the equalization for single individuals of the utilities of different commodities at the margin. Gossen was a vigorous proponent of the mathematical treatment of economic problems, but the mathematical apparatus employed by him is extremely simple; thus in his graphs he consistently limits himself to straight lines. Although he may be considered a forerunner of both the marginal utility and the integral mathematical orientations in economics, he founded no school.

In 1871 the principle which underlay Gossen's work was independently rediscovered by three scholars. W. Stanley Jevons coined the phrase final utility, Carl Menger spoke of marginal utility and Léon Walras used the term rarity, but all of them were dealing with the same concept. Although Menger did not employ mathematical symbols he is listed by Irving Fisher in his bibliography of mathematical economics and quite properly so, for Menger resorts to mathematical methods of reasoning. This is true also of many later representatives of the Austrian school. The emphasis on subjective processes of valuation opened a new chapter in the history of economic thought. It offered a starting point for the systematic development of mathematical economics in an increasingly close relation to the generally accepted doctrines of economic theory.

The great advantage of the concept of marginal utility is that it makes it possible not only to explain the economic behavior of single individuals but also to uncover such behavior at the basis of the complex phenomena of prices, wages, interest and the like. From the fact that the total utility of a commodity is such a function of its quantity that its second derivative is negative may be deduced the negatively inclined demand curves, and these in their turn serve as a basis for the theory of exchange. The ratio of ex-

change of two commodities held by two individuals is presented by Jevons as follows: $\frac{x}{y} = \frac{\phi_1(a-x)}{\psi_1(y)} = \frac{\phi_2(x)}{\psi_2(b-y)}, \text{ where } x \text{ and } y \text{ stand}$ for the quantities of the two different commodities that change hands as a result of the exchange transaction, a and b for the quantities of the two commodities held by the individuals 1 and 2 prior to the exchange, ϕ_1 and ψ_1 for the utility functions of individual 1 for the two commodities and ϕ_2 and ψ_2 for the utility functions of individual 2 for the same commodities. The law of exchange is formulated verbally thus: ". . . whenever two commodities are exchanged for each other, and more or less can be given or received in indefinitely small quantities . . . the ratio of exchange . . . will be inversely as the final degrees of utility of the quantities of commodity available for consumption after the exchange is effected" (The Theory of Political Economy, 1871, p. 95-96, 101). This formulation by Jevons is identical with Walras' solution of the same problem.

From this point Walras proceeded to develop the theory of general equilibrium which represents his major contribution to economics. The problem is one of determining prices and quantities in which commodities $a, b, c \dots$ to the total number of m will exchange among themselves on the assumption that the exchange relation between a and b, for example, is influenced by the exchange relation not only of a with commodities other than b but also by each and every exchange relation existing among commodities b, $c, d \dots$ This condition is designated as one of general equilibrium because it posits a condition of equilibrium not only in the exchange relations of a and b, a and c and the like but also in the relations between the separate markets, such as those where a exchanges for b, b for c and the like. For each of the m commodities equations of two different types may be set up: one stating the demand for it in terms of one other commodity and having the form, $D_{ba} = F(P_{ba}, P_{ca},$ P_{da} . . .); the other stating the equality of the value of that quantity of it which exchanges for one other commodity with the value of that quantity of the other commodity which is given in exchange. Since each commodity exchanges for m-1 other commodities, the number of simultaneous equations that it is possible to set up for each commodity is equal to 2(m-1) and the total number of equations thus obtained would be 2m(m-1). The number of unknowns is also 2m(m-1), one half of the unknowns being

the prices of each commodity in terms of every other commodity and the other half being the quantities of each commodity given in exchange for every other commodity. Since the number of unknowns is equal to the number of simultaneous equations, it follows that the problem of general equilibrium is capable of a theoretical solution. The theory of general equilibrium Walras extended also to producers' goods; in so doing he made use of constant coefficients of production, that is, he assumed that the proportions in which factors are combined in a process of production remain constant. Pareto dropped this important limitation when he substituted variable for constant coefficients.

In his Manuale di economia politica (1906) Pareto brought the theory of general equilibrium to the point of highest perfection. He introduced into it the concept of indifference curves adapted from Edgeworth and Irving Fisher. If an individual attaches equal ophelimity to different combinations of a number of goods-for example, if he has no preference between combinations of 1 of x, 0.9 of y and 0.8 of z on the one hand and of 1.1 of x, 0.8 of y and 0.7 of z on the other-then the equation of the line of indifference is $I = F(x, y, z, ...) = F(\psi)$, where ψ stands for the ophelimity function of the individual. If I is constant then the first derivative of this expression will be $o = \psi_x dx + \psi_y dy + \psi_z dz + \dots$; it is an equation expressing the equalization of the utilities of different commodities at the margin. The advantage of the method of indifference curves is that it presupposes merely the comparability and not the exact measurability of value and that it makes possible a more exact study of the relations of complementarism among commodities.

The Lausanne school, whose leaders have been Walras and Pareto, counts among its followers such scholars as Amoroso, Antonelli, Barone, Boninsegni, Furlan, Pietri-Tonelli, Ricci and others. They have all made original contributions without, however, introducing fundamental modifications into Pareto's system. Amoroso has studied particularly the theory of monopoly and the problem of dynamics; some of his contributions are incorporated in his textbook, Lezioni di economia matematica (1921). Barone is distinguished for his brilliant theoretical constructions in the various branches of applied economics, while Pietri-Tonelli's main work, Lezioni di scienza economica razionale esperimentale (1921), is a systematic reformulation of Pareto's manual. Ricci has done work in

all branches of theory, more particularly on utility curves and saving.

English mathematical economists under the influence of Marshall never abandoned the theory of partial equilibria. Perhaps the most distinguished of them is Edgeworth, who dealt in his Mathematical Psychics (1881) and in numerous articles (collected as Papers Relating to Political Economy, 3 vols., 1925) with virtually all problems of economic theory. Among other things he originated the idea of the contract curve, which presents the indeterminateness of conditions of exchange between two individuals; it should be said, however, that Menger before him treated the same notion in a non-mathematical form.

Continental scholars outside of the Lausanne school have also made numerous but scattered contributions to mathematical economics. The Austrian economists Auspitz and Lieben have produced in their Untersuchungen über die Theorie des Preises (1889) noteworthy constructions of cost and supply curves and formulated a number of general propositions on utility and price theory. Their work was entirely original and contains many ideas which are still of value. The Swedish economist Knut Wicksell has made a successful attempt to synthesize the Austrian psychological approach with a mathematical formulation. He also made valuable contributions to the theory of monopoly and to taxation theory. By his work on money, particularly through the distinction between real and nominal interest, he laid the foundation for the explanation of business cycles in terms of the expansion and contraction of the supply of money and credit. His countryman Cassel is better known, although he is not quite so original. Cassel took over Walras' equations in a simplified form, but in his presentation there are more equations than unknowns; that is, the conditions of equilibrium are overdetermined.

Quite recently many efforts have been made to adapt mathematical economics to a study of dynamic conditions. The Americans Roos and Evans attempted to achieve this by introducing the time element as one of the conditions in the fundamental equations. Their premises are thus made to approximate reality more closely, but the mathematical technique to which they must have recourse is more complicated than has been common heretofore. For example, in their analysis of monopoly price they employ the calculus of variations rather than infinitesimal calculus, because they work with variable price functions.

The Italian Amoroso has also been devoting himself to problems of dynamics; he places considerable reliance on analogies from physics. In general, problems of dynamics are coming more to the fore in current economic discussions, and the questions posed by the mathematical economists will undoubtedly attract the attention of literary economists.

In order to complete this survey it is necessary to mention a group of economists who work with mathematical tools in the field of inductive study. They attempt by utilizing statistical data to translate the general formulae of theory into empirical equations with numerical values for constants. Unlike other descriptive and statistical economists these investigators are not antagonistic to abstract theory; on the contrary, they regard their work as the building of a statistical complement to and as the inductive verification of pure theory. So far they have been concerned mainly with the statistical determination of demand and supply curves. Although this question was broached as early as 1838 by Cournot and although several noteworthy attempts in this direction were made by Pigou, Mackeprang and others in the beginning of the twentieth century before the development of modern methods of economic statistics, really significant work in this field was not done until very recently. A leader and in a sense the founder of a school in this type of research is the American II. L. Moore, whose Synthetic Economics (1929) is the systematization and crystallization of the work of a lifetime. Moore introduces statistical numbers, such as trend values, directly into the Walrasian system of equations and claims to have transformed thereby the equilibrium of static theory into a moving equilibrium. His work has elicited a number of interesting reviews and will remain for some time to come the subject of animated discussion.

The history of mathematical economics leads to the conclusion that mathematical methods of reasoning have an important place in economic theory. At times methods and types of approach which looked promising at the start had to be given up in the end, but such occasional failures do not militate against the general conclusion. In the future an increasing use of mathematics for purposes of both deduction and induction may be confidently expected. Another mark of progress would be the achievement of a closer integration between the psychological and mathematical orientations, a development which would not be hindered by any fundamental dis-

agreements between the exponents of the two types of economic theory.

OSKAR MORGENSTERN

The Cambridge School. The foundations and essential propositions of neoclassical theory were developed by the English economist Alfred Marshall (1842-1924), who taught at the University of Cambridge for over forty years; the theory is therefore often referred to as Marshallian and those who followed and elaborated upon Marshall as the Cambridge school. Marshall, who in his early days was greatly influenced by Henry Sidgwick and on particular points by Cournot and Roscher, imbibed the Ricardian tradition through the medium of J. S. Mill, whose Principles were at that time the gospel of political economy in England. At the same time he was arriving independently at many of the novel ideas expounded by Jevons in The Theory of Political Economy (1871) and developed in the seventies and eighties by the leaders of the Austrian school. By training a mathematician and in original intention a missionary of the gospel, Marshall combined an interest in formal problems of semimathematical analysis with a practical desire to make economic theory an engine of social betterment. Cambridge economics has accordingly combined a devotion to "pure theory" with a definite humanistic tendency. The social philosophy underlying it represents, like that of J. S. Mill, 19th century bourgeois liberalism with a bias toward social reform, Although it has retained in the main the classical laissez faire and emphasized the harmonies of competitive equilibrium and the function of individualist enterprise, it has also laid special stress on the limitations and exceptions to laissez faire. Marshall was the first economist in the Ricardian tradition to pass from specific exception to the harmony of laissez faire to a general stress on its limitations; in the work of Pigou, who succeeded him, these exceptions have formed the special theme; and in the less academic writings of J. M. Keynes, notably in his pamphlet on The End of Laissez-faire (1926), the liberal tenets of the classical school have received a more specific denunciation. Indeed, it is the Cambridge economists who in English academic circles take at the present time the lead in the departure from nineteenth century liberalism. It is hardly a misrepresentation therefore to say that the Cambridge school has been identified in the later phases of its development with an eclectic system of thought.

Theoretically the Cambridge school has always embodied a certain amount of eclecticism, or, as its apologists would say, it represents a synthesis of the substantial truths which have lain behind the differences of phrasing and emphasis of other schools. Marshall was fond of mathematical methods as an intellectual shorthand but distrusted the snare of oversimplified abstraction and emphasized the need for concrete study of particular situations and the search for practical results. He borrowed from the German historical school a keenness for the study of origins and of development, but he strictly subordinated such study to the requirements of analysis. He laid the foundations for his theory on the rock of Ricardian conceptions-"real cost" as the basis of value, the distinctiveness of rent, the concept of "a normal rate of profit," the basic theory of money and of foreign trade but he built upon them the superstructure of marginal utility and demand curves and adorned it with a rococo façade of "exceptions" and modifying "additional hypotheses." Yet in it all Marshall's eye sought the design of a unified system. He found the unifying concept in economic equilibrium, where quantities balanced at the margin were poised between the fundamental forces of utilities, or satisfactions, expressing themselves through demand, and the no less fundamental forces of disutilities, or "efforts and sacrifices" (the classical "real costs"), expressing themselves through supply. It is to be noted, however, that both utility and disutility figure in Marshall's system not directly as psychological forces but indirectly as represented by their monetary equivalents. Marshall was conscious that his system was not complete. There were gaps, where conditions of equilibrium could not be consistently postulated or where the conditions necessary to determine it agreed too little with the real world; and these loose ends he always hoped to tidy before his life work was closed. Part of this work his successors, particularly Pigou, have done for him. But in recent years doubt has increased rather than diminished. The post-war generation is more skeptical than its sire and is more conscious of the loose ends that still remain untied; it recognizes that particularly in the theory of distribution there is still much that is confused and uncharted, perhaps internally inconsistent.

The neoclassical theory of value is a theory of particular equilibrium as contrasted with the theory of general equilibrium characteristic of some other schools, especially the Lausanne, or

mathematical, school. The determination of the value of a particular commodity is treated by Marshall in isolation, the prices of all other commodities being assumed to be given and constant. In this way a simplified set of equations representing the demand for the commodity and the conditions of supply of it, expressed as a demand function or demand schedule and a supply function or supply schedule, is obtained. Value is determined by the equilibrium, or balancing point, of these two sets of forces; it is given by the solution of these simplified equations. By this device of isolation certain things can be treated as constants which could not otherwise be so treated. For instance, this method neglects that reaction of a change in the consumption of a certain commodity on its price which may take place either through the effect on the amount of income spent on other commodities and on their price or through the possible alteration in the value of factors of production due to changes in the amount of them used in producing this commodity. The neglect is justified by the consideration that such reactions will ordinarily be of "the second order of small quantities."

In application to the theory of distribution, that is, to the determination of the value of the factors of production—land, labor and capital this method meets with stricter limitations. For while it is possible to determine the value of each factor of production separately, on the assumption that the problem of distribution is solved for all other factors, i.e. that their values are given, it is more doubtful whether, if they are all treated as variables at the same time, the complete system of simultaneous equations is capable of satisfactory solution. Solution is possible on certain assumptions such as that the technical coefficients and the supply of the various factors of production are constant; but without these assumptions the result is more complex and at the same time more questionable.

Unlike the Austrian school and Cassel, who assume the supply of the factors of production to be determined independently of the price paid for them and so treat them as constants in their equations, the Cambridge school employs the important distinguishing conception of a supply price for the factors of production other than land, the schedule of supply prices relating the supply of them to the prices offered. In equilibrium the price of each factor equals its supply price at the margin of its use; and this in turn represents the real costs, the efforts and sacrifices

involved, as measured in money. The result is an imposing symmetry: just as utility, or satisfaction, underlies demand and figures as the quantity to which the system of demand schedules is related, so disutility, or effort and sacrifice, underlies supply and represents the "real costs" to which the system of supply schedules is related.

In the theory of distribution the lines of the classical tradition show most strongly. The Ricardian concept of rent is retained as the example of a surplus par excellence—the return to a factor which involves no effort or sacrifice in the supplying of it and no supply price. It was characteristic, however, of Marshall's treatment that he considerably softened the rigidity of the distinction between rent and profit. Rent of land was not a unique and exceptional phenomenon in the field of distribution; "it was but the leading species of a large genus." In the case of capital and labor a surplus payment would also appear, in so far as interest and wages, determined as they tend to be by the marginal supply price, exceed the average real cost and the average supply price of the total amount of capital and labor employed. Hence the appearance of a number of types of "producers' surplus," symmetrical with the "consumers' surplus" on the side of demand, or the surplus utility which buyers obtain because they can purchase commodities at a lower price than they would pay rather than lose the enjoyment of them entirely.

In the treatment of surpluses Marshall made particular use of the conception of time. In fact, in his handling the border line between a rent payment and other payments reduced itself to a time differentiation. In a period shorter than the duration of life of fixed capital the supply of such capital was as unchangeable as that of land. Moreover, the real cost involved in its creation was a thing of the past, exerting no direct influence on the present. Hence the return which this capital received was determined at any given time by conditions of demand and bore no precise relation to its supply price. For the yield of fixed capital viewed in its short period aspect Marshall coined both the term and the conception of quasi-rent. The conception also extended to various short period fixities in the supply of labor, e.g. skilled labor which required a period of training and education to produce it. But from a long period standpoint the supply of such capital would adjust itself responsively to the reward it was obtaining; and in conditions of static equilibrium interest would tend to equal the normal supply price of capital—the aspect of quasi-rent

would disappear. It is to be noted that in contrast to a number of American and European economists the Cambridge school includes profit, as the earnings of business enterprise, in this general framework. From a short period standpoint profit represents a pure surplus, which can be taxed without any effect on cost of production. But in the long period the supply of business enterprise tends to adjust itself to the actuarial expectation of profit, so that long period normal profit in the "representative firm" of an industry tends to equal the normal supply price of business enterprise.

In the theory of increasing returns Marshall was responsible for clarifying a great deal of confusion. This he did by his distinction between internal and external economies of large scale production, the former being relevant to the size of the firm and the latter to the size of the whole industry. On this he based the distinction between the supply curve of an individual firm and the supply curve of the whole industry; the latter represents the equilibrium costs, i.e. the costs at the point where marginal and average costs are equal, of the representative firm in the industry at different stages of the industry's growth.

Pigou has considerably developed the theoretical conception of his predecessor in relation to a number of problems of applied economics. Taking as his norm the desirability of maximizing economic welfare, he has laid down important criteria of economic desirability. Thus, other conditions remaining unchanged, a given amount of wealth will yield more welfare the more equally it is distributed. And again, ceteris paribus, the production of wealth will be maximized if productive resources are so distributed that the net social yield to a marginal unit is equal in all uses. He then proceeds to an inquiry as to the extent to which laissez faire and various conditions of monopoly tend to fulfil or to violate these principles and as to the circumstances under which state interference would promote a closer approximation to the optimum. In particular, developing a hint of Marshall's and using the latter's important conception of external economies, he has established the proposition that conditions of laissez faire will result in a scale of investment and output less than the "desirable" in industries subject to increasing returns.

The Cambridge school has always given an important place to the theory of money and of foreign trade, both of these being treated as particular cases of the general theory of value. Here especially the main lines of the classical tradition

have been closely followed. Marshall restated Ricardo's theory of purchasing power parity and of the mechanism of gold movements in relation to the foreign exchanges; and he developed the classical theory of foreign trade in terms of elasticities of demand. In recent years a significant formal change has taken place in the statement of the theory of money, the demand for money being conceived as "the volume of wealth, the command over which people desire to hold in the form of money balances"; changes in this demand are regarded as of equal importance with changes in the supply of money in governing the level of prices. Most recently Keynes in A Treatise on Money (2 vols., 1930) has formulated an entirely new set of "fundamental equations," the gist of which consists in an emphasis on the ratio between saving and investment as affecting the level of prices and the volume of production and employment and on the influence of the action of the central bank on these two factors, particularly through the discount rate.

In the last decade two tendencies have shown themselves among the younger members of the school. On the one hand, there has been a tendency to concentrate on practical problems, particularly the problem of the business cycle (Pigou, D. H. Robertson and Keynes). On the other hand, there has been a certain tendency to question and to revise. Thus Sraffa has raised some important questions concerning the adequacy of the conception of costs. H. D. Henderson has dissented from the orthodox distinction between rent and other payments. The adequacy of the theory of distribution has been questioned by Maurice Dobb. Keynes and Robertson have effected important restatements of the theory of money. How far the school will continue to be marked by its characteristic uniformity and which direction its contributions may take in the future time only can show. But so far the most noteworthy feature of neoclassical theory has remained its attempt to create a unifying concept of economic equilibrium by effecting a synthesis of the classical and the Austrian points of view. It is by its success or failure to achieve this unity that it must ultimately be judged.

Maurice Dobb

The Historical School. The historical school is German in its origin and the character of its teaching. Unlike the classical school and the school of marginal utility, it did not formulate a set of positive doctrines, having attained its uni-

ty at first through opposition to classical theory as transplanted to German soil. In its German adaptations classical economics comprised several variants. At the beginning of the nineteenth century it was mixed with a considerable dose of traditional cameralism. Later some expositions emphasized Smithian doctrines, other Ricardian economics and still others followed in the main J. S. Mill. In the heyday of "liberalism" it exercised a most far reaching influence in the distorted form of Manchesterism. It is not surprising therefore that even greater differences are to be found among the writers of the historical school. The later exponents of *Historismus* were quite aware of these divisions. They regarded List as the forerunner, Roscher, Knies and Bruno Hildebrand as the founders of the older school, which they distinguished from the younger school, whose most outstanding representatives may be considered Schmoller, Bücher and Georg Friedrich Knapp. These distinctions may now be regarded as obsolete. List was assigned a separate position because he was an academic outsider and because his importance for theory was not recognized by his first biographer, Ludwig Häusser, in 1850 and was generally ignored for a long time. Since the discovery in 1925 in the archives of the Institut de France of the manuscript of his Paris prize essay, Das natürliche System der politischen Okonomie (1838; tr. from the French and ed. by E. Salin and A. Sommer as vol. iv of Schriften, Reden, Briefe . . . , Berlin 1927), there is no further reason for not considering him a member of the historical school proper. Similarly the division into an older and a younger school is no longer fundamental. It is true that Roscher was an industrious compiler working from secondary sources and that Schmoller, influenced by Ranke, attempted in his work on economic history to go back as far as possible to original sources. Yet in the final analysis this was merely a personal difference of no greater importance than other personal differences found within each of the two schools. Nor was it really characteristic of the distinction between the two schools; Sombart, for example, is in this respect closer to Roscher than to Schmoller.

Other more significant distinctions may be observed between the older and the younger schools, but none of them really impairs the fundamental unity of the historical school. One of these distinctions is found in the attitude toward classical theory: whereas the older school was satisfied merely to supplement it, some rep-

resentatives of the younger school thought to supersede it entirely. The establishment of the proper relation between history and theory was one of the most important achievements of the historical school, and these different attitudes were merely stages in the process by which the school arrived at the correct conclusion. Another and perhaps the most comprehensive distinction is that the older school, active before the founding of the German Empire in 1871, was preoccupied mainly with economic theory, while with the younger school emphasis shifted to problems of economic policy. The members of the older school, none of whom resided in a capital city, had scarcely any occasion for work in the field of economic policy and Roscher carefully avoided such entanglements, whereas Schmoller, who during his thirty-five years in Berlin was in close touch with the rising empire, was temperamentally impelled to influence the making of policies by the weight of his academic authority. The founders of the Verein für Sozialpolitik (1873) were anxious to help in the building of the empire; they were particularly concerned with the rise of socialism, which was interpreted as a threat to the young empire, and hoped to undermine its power by working out a consistent policy of social reform. Thus it came about that in opposition to the classical economists' preoccupation with static relationships the older historical school put its chief emphasis on problems of development and the younger school on the formulation of norms for the future. From the vantage point of the present this distinction too does not appear as significant as it once was; it may be treated as a difference between successive phases of a unitary development, which the historical school represents in the history of economic thought.

When in the beginning of the nineteenth century the doctrines of classical economics began to spread to the continent, they needed a great deal of correction and adaptation to prove acceptable to the non-English student. Based on factual material almost exclusively English and designed to influence English economic conditions, this theory bore in many of its parts a national English stamp. The fact that English scholars naturally were not aware of this made it possible for them to claim universal validity for a body of theory which was so distinctly a product of English conditions. In Germany efforts were soon made to supplement and rectify it.

The first of such efforts made by List grew out of his practical experience. As business man

and politician in both the United States and Germany he became convinced that the chief task of the economic policy of both countries must be a defense against the superiority of English industry. England might well be content to preserve what a kind fate had given her; a passive policy of free trade was entirely in accord with her interest. Other countries had still some way to go before they reached the point at which England stood; they must therefore consider a purposeful policy of development of their "productive forces." For those countries which lagged behind England an active and consistent economic policy, especially a policy of protection, was requisite. So long as List remained interested in purely practical purposes he demanded that every country should evolve independently of the English tradition a national economic policy in accordance solely with its own needs and develop a national economic science to correspond with the policy. But he soon realized that such a solution was logically impossible. Like every other science economics cannot renounce the principle of universal validity; even for practical purposes such a renunciation would betoken a dangerous weakness. He thus became aware of the necessity for supplementing classical theory in such a way as to make it applicable not only to England but also to countries not so highly developed. He attempted this in his doctrine of stages.

The need of supplementing classical theory in another direction was also early perceived by List. The importance of the great developments in the field of transportation which occurred after Smith and Ricardo had passed from the scene was virtually ignored by their followers. Having been able to observe the beginnings of the railway in England and having taken a leading part in Pennsylvania in the building of one of the first American railways, List recognized the economic significance of the fact that with the introduction of steam the principle of large scale production was extended from manufacturing to transportation. In numerous articles in periodicals he formulated the principles of railway and waterway policy and ranked it as almost equal in importance to commercial policy. In this field List's role was that of a practical railroad man who benefited his country and science by the rich fund of his early experiences. It was Knies who first attacked the problem of transportation and communication as a scholar (Die Eisenbahnen und ihre Wirkungen, 1853; Der Telegraph als Verkehrsmittel, 1857). Only twenty

years later were such studies resumed on a larger scale by men like Gustav Cohn and Alfred von der Leyen. The historical school was thus responsible for pioncering work in the scientific treatment of the economics of transportation.

Although the third lacuna in the classical doctrine was not so apparent it has proved to be an even greater obstacle to the acceptance of classical theory. The great agrarian reforms of the early nineteenth century turned the interest of science toward the study of agrarian regimes. Hanssen, who began his work in the thirties, was the first to undertake this study in a large way. He taught that the existing agrarian institutions, at least those of the European continent, can be correctly understood only as a product of the past and the types of village settlement only as a function of the national genius. He showed thereby that the study of economic history may be of service for practical purposes. Of the school which he founded Georg Friedrich Knapp is the outstanding representative. Knapp became the most distinguished student of German agrarian conditions and displayed an unequaled ability in stimulating and training other students of the subject. It was due largely to Hanssen and Knapp that the systematic pursuit of agrarian studies has become one of the solid characteristics of the historical school.

These additions to the body of classical economics—the scheme of developmental stages, the new discipline of transportation and the study of agrarian history—laid the foundation of the historical school. It is clear therefore that the school was deeply rooted in German soil, that it was a response to the practical needs of German economic life of the time and not, as Karl Menger believed, a superficial imitation of the developments in related sciences, an artificial creation of ambitious scholars. It is true, however, that the intellectual climate of the period also favored the creation of such a school.

At the opening of the nineteenth century the new emphasis on the idea of evolution and the progress of the historical method produced an efflorescence of a number of social sciences in Germany. Roscher wanted to build a historical economics along the lines of historical jurisprudence created by Savigny and Eichhorn, and Bruno Hildebrand took comparative philology for his model. As stated by Roscher, they thought it necessary to institute an economic comparison of all the peoples for whom information was available. Roscher carried out this notion but rather superficially. He read through all the more

important secondary works in German and foreign tongues and noted carefully everything that seemed to depart from, or to agree with, the classical doctrines. One result of this study was to ascertain the extent to which the general laws of economics applied to agriculture and forestry, industry and trade, in the various countries. Thereby Roscher became the true founder of the discipline of applied economics. Rau was the author of the first German text of the new discipline, which he called economic policy. He treated it in juxtaposition with, but without any organic relation to, the theoretical economics of the English classical writers; and he had included in it in addition to many elements of the old cameralistic lore a quite unsystematic collection of practical counsels and rules. In contrast with this Roscher, who denied the possibility of a science of economic policy, wished to effect a connection between the special branches and the central theory of economics by treating them "as a geographical map rather than as a travel guide." It was due to Roscher that an interest in applied or special economics has become traditional with the historical school. Later writers again partly lost sight of the connection between applied and theoretical economics; instead, attempts were made to build up a comprehensive science of society, the feasibility of which Roscher denied.

In the field of theoretical economics Roscher has left fewer traces. It is true that he proposed the transformation of classical economics into a study of the laws of economic development and distinguished periods in the course of such development. But he did not get beyond establishing a superficial analogy with the life of an individual and distinguishing accordingly periods of infancy, adolescence, maturity and senescence in the life of nations; occasionally he used also the factors of production as the basis of his classification. The decisive advance in this field was made by List. In contrast with Roscher's superficial periodization he set up the doctrine of the progressive evolution of productive forces, and by grafting this form of evolutionism upon the body of English static economics transformed the latter from the mere intellectual reflection of English economic supremacy into a true science of universal applicability, thus validating its formerly unjust claim. Thereby he provided the same theoretical justification for the protective and educative economic policy of other countries as the incomplete doctrine of classical economics had previously furnished for England only. This was a great achievement in the field of

theory, which was not recognized until very recently.

Since the time of List the doctrine of stages has been an integral part of German economics, but List's own scheme of stages was subjected to many specific criticisms. Bruno Hildebrand has certainly not improved on List; the principle underlying his scheme is illogical. Schmoller's scheme emphasized political and administrative organization rather than economic factors. Karl Bücher was the first to find a really satisfactory solution. By making use of the idea of a self-sufficient domestic economy, which engaged the attention of Rodbertus, and by adopting from Schönberg as well as Bruno Hildebrand and Gierke the concept of a city economy, Bücher succeeded in setting up a scheme of stages which brought to the surface the forces that lead to a transition from one stage to the next. This contribution completed in outline the process of universalization of classical economics.

Yet the actual execution of this task still required considerable effort. It was not merely a question of intensifying historical study. As the historical school became increasingly opposed to the deductive character of classical economics it welcomed every means of dealing with factual material. Along with the historical studies encouraged by Roscher and Schmoller came the statistical studies which Knies especially sought to advance. In 1850 Knies published a monograph, Die Statistik als selbständige Wissenschaft, which attempted to clear up the bewildering confusion in the theory and practise of statistics. Later the discussion of the problems of statistics, to which Knapp also gave some attention, came to be increasingly detached from historical economics and formed a separate discipline handled by statisticians.

With the ever growing amount of concrete work done by the school, it was pressed more and more to pay attention to methodological questions, to give itself an account of the meaning and scope of its activity. Such questions have been recurrently raised ever since the crystallization of a science of economics. Even among the mercantilists and physiocrats, between Ricardo and Malthus, J. S. Mill and Senior, they have come to a head in polemical discussions. Among the classical economists, however, these disagreements were limited to personal differences of opinion which did not disturb the unity of the school on fundamental points; the doctrines of Smith, Ricardo and Mill maintained their sway. It is only with the appearance of the historical school that disputes about method assumed the proportions of a conflict between schools. Methodological discussion in which the historical school engaged has passed through three successive stages.

In the first stage Knies stood in the foreground. Although unlike Roscher and Hildebrand he was not a true historian and has but sparingly applied the historical method in his writings, he has become the theoretical founder of the historico-psychological economics in Germany, as Schmoller correctly observed. His Die politische Okonomie vom Standpunkte der geschichtlichen Methode (1853) was the first book on economic methodology. In this work he dealt exclusively with that tendency in the classical school which refused to recognize the hypothetical character of its abstractions and which regarded its theory as an undistorted conceptualization of reality. Like List and Roscher he combated the absolutism of the theory, which claimed equal validity for all ages, countries and nations. He proclaimed that rigidity contradicts the very idea of life; more specifically, the two concepts most important for economics, private property and self-interest, are not logical but historical categories. It was still possible to establish laws about those attributes of economic phenomena which persist as the common element alongside of individual variations; but these generalizations must assume the form of evolutionary laws, the content of which varies with the stage of development; even for limited stages they cannot be regarded as absolute norms because of the importance of irrationality, the unpredictable of the personal equation. It will be observed that Knies' moderate position in no wise challenged the raison d'être of the classical school.

In the second stage of the discussion the historical school went much further, although not without some hesitation and partial recantation. Schmoller, who was the chief spokesman at this stage, regarded the classical theory as a "premature generalization." He thought it essential first to fashion in careful monographic studies of the past and present the bricks with which the structure of general theory would later be built. Only thus could the closet speculations of abstract economists be transformed into a living science rooted in experience. Only after an examination, from all possible angles, of those elements in economic life which have so far been insufficiently studied, particularly the "psychological-ethical" factors, will there be a science of

economics "in the strict sense of the term." It will emerge imperceptibly out of monographic research and will differ from the theory preceding it by conceiving differently the function of morals and law in economic life and by assigning to the state a position altogether different from that which it was given by classical theory, because the latter concentrated so much upon the individual that it often overlooked social formations of which he was a part.

Schmoller later abandoned this very extreme pos'tion. Apparently under the influence of the criticism of Karl Menger, the head of the Austrian school, and of his friend, the Berlin philosopher Dilthey, he admitted that "the historical school had perhaps been too cautious regarding generalization and theory" and even that there may be a justification for abstract theory as a part of general economics. He desired "not at all to neglect theory but only to build the necessary groundwork for it."

In this significant change Schmoller may have been influenced by the turn which discussion took in the third stage, associated chiefly with the name of Max Weber. In this stage two questions were mooted. Debate waxed warmest over the place of value judgments in science: should science confine itself to an analysis of what "is," or may it not also set up ideals, lend the weight of its authority to some notions of what "should be"? It was sought to draw more clearly and sharply the line of demarcation between science and politics, which had hitherto been thoughtlessly ignored. Even if an overlapping could not be avoided in practise, it was still necessary to impress the essential difference between the two upon the mind of every scholar at the beginning of his career.

The second question, which was discussed more calmly and had a more stimulating effect upon subsequent scientific developments, related to the typological method. This method involves simplifying the picture derived from experiential reality in order to obtain a tool for a more satisfactory understanding of the particular and individual. In this process emphasis is laid not upon the generic but upon the historically significant which is isolated and crystallized into what may be called ideal limits or "marginal ideas," with which the concrete reality is to be compared. This device, which was called by Max Weber (following Jellinek) the method of ideal types, can be effectively used only by a scholar of broad erudition and sure grasp.

The typological method was no new dis-

covery. Since Plato and Aristotle it had been repeatedly applied unconsciously by prominent writers. The same was true of the historical economists, whose doctrine of stages is a good illustration of this method. In the continuity of the historical process no stages are discernible; they are merely conceptual devices which facilitate the understanding of the specific features of this or that historical development. The two members of the historical school who worked best with this method, Bücher and Knapp, combined theoretical analysis with factual study, and as a result their theory more or less inevitably assumed the form of a series of ideal types. Bücher applied this method with an increasing awareness of its technique and implications. After employing it successfully in his schemes of stages for general economic history he used it quite as effectively in his studies of industrial organization and of division of labor. Knapp, who was inclined to think in concrete images, had unconsciously taken the same route. In agricultural and industrial economics, the special branches of applied economic science in which they worked, Bücher and Knapp achieved by using this method that blend of theory and description which was desired and insisted upon by Roscher. In the work of these two scholars may be found the most valuable specific achievements of the historical school.

Sombart took another road. Impressed at the beginning of his scholarly career by Marx' Das Kapital, he set out to continue Marx' economic work, to present the economic history of Europe as a process revolving about the rise and development of capitalism. While Bücher and Knapp attempted an intensive study of important special aspects and areas of economic development in order to arrive at specific type constructs, Sombart desired by taking the present economic order as his point of departure to organize the totality of economic life into "economic systems." Thus he arrived at the distinction between periods of precapitalism, early capitalism, fully developed capitalism and late capitalism. Unlike the clear cut ideal types these constructs are so complex that they cannot be very helpful as a framework for picturing the variegated complexity of economic reality. Sombart's contribution has also been confused by the fact that in the course of his protracted labors on Der moderne Kapitalismus (3 vols., 1902-27) he changed from an adherent of Marxism to its opponent and in connection with this shifted his emphasis from the materialistic conception of a

"striving capital" to the psychological factors, the mentality and ideals of the economic agents. Thus despite his intentions Sombart's historic systematization cannot be regarded as the realization of the program of the historical school. His work is similar in this respect to Roscher's System der Volkswirtschaft (5 vols., 1854-94) and Schmoller's Grundriss der allgemeinen Volkswirtschaftslehre (2 vols., 1900-04). However admirable as an achievement of amazing scholarship, neither of these works may be viewed as an important turning point in the progress of economic theory.

The real accomplishment of the historical school is to be sought not in this or that specific contribution but in securing recognition for the historical and statistical methods of economic investigation. In the first phase of the development of the historical school this recognition had not yet been adequate, since Roscher treated history merely as raw material for theory. In the second phase Schmoller had taken the stand at the other extreme by assigning to history primacy over theory. In the third phase historical and descriptive studies were brought into proper relation to theory in the methodological contributions of Max Weber and the correct relation between the historical and the theoretical approaches exemplified in the work of Bücher and Knapp. History and theory must be treated as correlative and mutually interdependent approaches. The ascertainment of facts and of causes, of the universal and of the particular, must go hand in hand. The economist must not overlook, to use the words of Dilthey, "the relation of the abstracted part to the living whole," nor must he avoid the use of abstraction. Theory alone remains partial knowledge, and history without theory is unsatisfactory. These are considerations which must be constantly borne in mind; the mature scholar must follow them in his researches, and the beginner must make them an integral part of his instinctive approach to the subject.

The achievements of the historical school have not been won without grave errors and onerous sacrifices. Although it inspired great hopes and stimulated scholars to industrious researches the unqualified hegemony of the historical school led to a considerable degree of stagnation in German economics because of its isolation from the movement of economic thought in other countries. The criticism and later the complete rejection of classical doctrines barred German economists from taking an interest in the refine-

ments upon classical theory produced by foreign scholars. The violent polemic between Schmoller and Menger turned German economists away from marginalist economics, which had been more popular throughout the world than any other school of economics. The slighting of theory and the consequent lack of serious criticism of socialist doctrine helped Marxism to strike deep roots in Germany. The consequent isolation of German science from the international community of economic scholarship and the resulting provincialism of German economics have been overcome only slowly and with difficulty.

The historical school has extended its influence beyond Germany and found adherents in England and in the United States, in France, Italy and the Scandinavian countries. In none of these countries, however, has there been a school resembling the German, because the following has been limited to a scattering of individual economists. The success of the historical school outside of Germany can in no way be compared with that attained later by the school of marginal utility.

A movement bearing a superficial resemblance to the historical school began quite recently and has been meeting with increasing international recognition. It is different in its origin from the historical school and is related to statistics rather than to history. While the historical school came into being in order to cope with the problems of immaturity in economics, the new school is a response to the needs of a mature if not excessively mature economics. When the historical school attempted to adapt English classicism to conditions in other countries, its task was to supplement and rectify classical doctrines by impregnating them with factual material bearing on economic conditions outside of England. At that time such material was scarce, and in order to fill this gap the school proceeded to its lasting credit to encourage all types of factual study, qualitative and quantitative, historical and descriptive. At present there is no lack of such material in the larger countries, and the most advanced suffer from a superabundance of it. The daily mounting quantity of factual material has become so enormous that no single investigator is able to master it or even to obtain a clear view of it. It has become necessary to devise new methods in order to facilitate the handling and utilization of the material for scientific as well as strictly practical purposes. The new methods are important not only in order to make the most of

available statistical data but also to prevent the superabundance of statistics from destroying the unitary framework and impairing the scientific character of economics. It is the superabundance of factual data that leads to ever growing specialization among economists; even by now this has progressed so far that with the passing of the older generation there will be scarcely anyone to claim mastery of the entire domain of economics. Should economics lose its unitary character it will cease to be a science of the economic life of society and will become a loosely coordinated series of business disciplines. The present day statistical school is thus called upon to perfect new methods for the effective utilization of a stupendous mass of statistics for purposes of economic generalization and to integrate these generalizations with the main body of economic theory. It is obvious that the problems of the new school and the sphere in which it is apt to render its greatest service are quite different from those which gave an impetus to, and earned lasting recognition for, the historical school.

HERMANN SCHUMACHER

Socialist Economics. Socialism is not an economic theory nor a school of economic thought in the sense of the classical school or that of marginal utility. It is a term attaching to a series of movements which rest more or less upon a foundation of social and economic doctrine. The movements derive their vigor from ethical and to a certain extent religious convictions, and in so far as they make use of economics the elements are borrowed from all currents of economic thought. Yet socialist theory tends to emphasize the notion of objective labor value and conceive of economic theory not as the analysis of a universal economic process, but as the establishment of laws of development of capitalist economy.

With regard to economic theory a distinction must be drawn between the older socialism and the modern socialism. The older socialism is the product of a social will that seeks to combat and abolish all injustice and exploitation, all want and misery, by calling social forces into play, by creating a new distribution of power in society and in particular by abolishing private property. The newer socialism is rooted in the pauperism produced by early capitalism and later in the will of the modern industrial proletariat; it lays bare the structure of capitalist production and the place of the proletariat within it and calls for a socialization of the productive

forces, the control of all production by society or the proletariat.

The older socialism comprises all those religious, ethical and political doctrines which aim at abolition of mass poverty and the injustices of government. It includes also the so-called socialist mass movements which at the close of the Middle Ages and in early modern times resulted from the impoverishment of the peasantry. These movements are naturally characterized by an attack on large private fortunes and even on private property in general and by a questioning of power derived from the possession of large landed estates. But their ideology is not based upon an analysis of the economic system nor have they attempted to disclose its driving forces, to discover the laws of economic change. From this point of view the older socialism includes also the whole range of social utopias, beginning with that of Thomas More, and the entire literature of social reform characteristic of the age of Enlightenment. Older socialism appealed either to the religious and moral sense or to the intelligence of the ruler; sometimes it relied upon the power of the organized poor. It was quite clear as to the goal but was ignorant of the social processes which might lead to it. Since it was not cognizant of the underlying social structure it tended all too easily to mistake political transformation for social reorganization.

Not until the nineteenth century was socialist ideology linked to a recognition of economic realities. Such recognition did not come suddenly; it appeared piecemeal in the work of various writers. The factor chiefly responsible for the change was the association in revolutionary movements of the proletarian masses with the liberal bourgeoisie and with their demands for autonomy in social and economic affairs. It is significant in this connection that Saint-Simon both propounded the doctrine of industrialism which laid the theoretical foundation for large scale enterprise and originated a trend of thought which was socialist in character and denied justification to private property.

Marx was the first to combine socialism with a historical and theoretical analysis of economic processes and to transform socialism from a utopia into a science. Just as the intellectual comprehension of capitalism made possible the deliberate building up of modern industrial society and the establishment of the primacy of industrial interests in economic, social and political life, so Marx' economic analysis laid the foundations for a modern labor movement,

process. For this reason the concepts dealt with are by their very nature dynamic and envisage a development whose end is the abolition of the present economic system. This development is regarded therefore as a historical process in which the form of economic action and particularly the social structure of the economic body will undergo a radical change.

The linking up of theoretical economic with sociological and historical concepts is characteristic of all varieties of modern scientific socialist thought. Pre-war revisionism, as represented in Germany by Bernstein, had no objections to offer against this synthesized consideration of economic and social processes. In the purely economic sphere it attempted merely to take account of the points of view introduced by the marginal utility school. It also criticized many of the forecasts of future development made by orthodox Marxians, particularly the law of concentration and the thesis that economic crises will become increasingly serious and will lead to dialectic revolutionary reversions from capitalism to socialism. Revisionism defended an evolutionary point of view and attached more weight to voluntaristic factors. But like orthodox Marxism revisionism envisaged economic processes in historic flux and objected to an analysis of economic phenomena in terms of universal laws and to a conception of a market which overlooked the facts of social stratification.

The further development of the economic doctrine of socialism is to be looked for particularly in the writings of Rudolf Hilferding and Rosa Luxemburg. They have attempted to interpret the economics of developed capitalism from the standpoint of socialist thought. Thus Hilferding's Das Finanzkapital (Vienna 1910) is an analysis of that stage of capitalism in which under the influence of large financial and banking institutions the small independent entrepreneur is displaced by large aggregations of capital in the form of corporations and cartels. It offers a closer analysis of the processes of concentration and their consequences, of the aggravation of maladjustments between the various branches of production and of the intensification of the frequency and severity of crises. While Hilferding's book is a theoretical analysis of concrete economic developments, the thema probandum of Rosa Luxemburg's Die Akkumulation des Kapitals (Berlin 1913) is that capitalism needs an external outlet for its products; otherwise a part of the commodities representing surplus value cannot be marketed. Just as at

first capitalism built on the ruins of the precapitalist European economy, so later it became dependent upon the outlets provided by new colonial regions. With advancing colonization, however, the extent of colonial territories still to be brought within the orbit of capitalist exploitation is constantly shrinking. The struggle for untouched regions becomes ever more violent; capitalism turns into imperialism, resorts to wars on a world scale and sweeps on not only to economic but to political catastrophe. This conception, which rests upon the interpretation of the process of circulation of goods in the capitalist economy as it was first presented by Marx in the second volume of Das Kapital, is founded upon the erroneous theory that a special market is needed for the realization of at least part of the surplus value, whereas the transformation of the entire amount of surplus value into new means of production within the closed system of capitalistic markets may be easily conceived, at least in theory.

A comparison of socialist theory, which ranges all the way from abstract economic concepts to historical generalizations, with the economic theories of other schools is scarcely possible. As an economic theory socialism is linked with the doctrine of labor value, which served as the point of departure for Ricardo, but the doctrine has been impregnated with sociological connotations and elaborated quite independently. Moreover, the theory of marginal utility is also represented in socialism. The socialist conception of the labor market and of the commodity character of labor as well as the theories of concentration of capital, of the industrial reserve army and of economic crises may be easily brought into accord with the fundamental notions of marginal utility analysis. For, as Schumpeter once observed, marginalist analysis is but an organon of thought which may be applied to any concrete set of facts. The economic signifi cance of class stratification in capitalist society may easily be evaluated by the methodology of the marginal utility approach, and the production of surplus value may be explained in terms of the special situations obtaining in the labor market. It is clear therefore that socialism does not rest on a specific, clear cut type of economic dogma, although economic theory as the theoretical interpretation of the existing social order will always constitute the core of the doctrine of modern scientific socialism.

The significance of socialist theories in the history of economic thought is that they were

the first successfully to eliminate the unhistorical approach and to set up as a problem the analysis of the specific features of capitalist economy. Indirectly, by making the theory of labor value appear inseparable from its socialist implications, they have paved the way, at least in Germany and Austria, for the acceptance of marginal utility theories and the adoption of more refined techniques for the analysis of market phenomena. They have strengthened the interest of economists in studying concrete situations. They have inspired research students to undertake investigations of social conditions, of the history and significance of handicrafts, of the concentration of capital and of similar subjects, studies which have been quite numerous since the last quarter of the nineteenth century. Finally, they have provided a most powerful stimulus for social and labor legislation.

EMIL LEDERER

Socio-Ethical Schools. As a revolt against the central classical traditions of economic theory socio-ethical economics must be distinguished from the historical and institutional schools on the one hand and on the other from the socialist school. Historical and institutional economics seek to supplement and correct classical doctrine on a factual plane, while socialist theory intends to remain on the level of the causal or functional discourse set by the classical economists even though it begins with or leads to certain ethical attitudes toward economic life. It is more difficult to draw the line of demarcation from the romantic authors and schools, whose protest against economic classicism likewise originated in the specifically human or emotional viewpoints and values neglected by classicism; indeed the boundary between socio-ethical and romantic economics assumes the character of a broad strip of common ground. And yet there are pronounced differences between the underlying principles of the two tendencies. The background of romanticism remains metaphysical or aesthetic, while that of the socio-ethical schools is more akin to religious or rationalist ethics. While romantic tendencies in economics, which have so far been related to historical and institutionalist tendencies, seem to lead to more positive and apologetic attitudes toward economic realities, socio-ethical tendencies lead up to more critical positions and consequently to manifold relationships with socialism in its various forms.

The doctrines of classicism which provoked the resistance of moralists were of very different origin, and perhaps none of them was without reservations that could have softened down its harshness in a more benevolent or even fair interpretation. Malthus' conception of the laws of population was at bottom the agriculturist's warning against industrialism and in its reedited form went a long way to meet moralist objections and hopes. Ricardo's view of social progress as hemmed in by the laws of rent and of wages was originally just the opposite of Malthus' warning and hence strove even more to conciliate the "friends of humanity"; it actually furnished all the necessary weapons to socialism. Yet it was not unfairness of interpretation alone that made the amalgam of classical doctrines repulsive to the ethical critics of the "dismal science." The emphasis of that science rested on the central idea of the more or less mechanical laws of competition that came to sweep away the harassing and even immoral restrictions of mercantilism and of the "police state" at the dawn of the industrial revolution. As soon as the promised paradise of economic freedom began to reveal its specific defects and its hidden substructure of class interests, criticism was reawakened as unavoidably as the revolution of 1789 was followed by those of 1830 and 1848. To such criticism even the cautious empiricism and humane benevolence of Adam Smith might have seemed to be infected with the sordid or commonplace materialism that was thought responsible for the tragedies of the early capitalistic age. It is surely Smith's famous passage on the "romantic hopes" of the soldiers as a part of "the whole price of their blood" (Wealth of Nations, bk. i, ch. x, pt. i) that inspired Ruskin in *Unto This Last* with the no less famous praise of the soldier, to whom "the consent of mankind has always, in spite of the philosophers, given precedence . . . because he holds his life at the service of the State . . . does, in reality, die daily" (1899 ed., p. 25-26).

The English reaction against the classicists comes at times very near that French or German romanticism which after the Restoration was rediscovering the picty and chivalry of the "dark ages" despised by liberalism. Indeed, the economic teaching of Ruskin, like that of his master Carlyle, had that strong element of aesthetic emotionalism that made him and his followers more important for English art than for English economy. Yet the dominant strain for the whole line of thinkers was the ethical, from the militant Puritanism of Carlyle to the political socialism of

William Morris the artist. The explanation for this seems to lie in the practical genius and the religious tradition of the English.

Through its alliance with utilitarianism English classicism had anticipated many of the ethical criticisms later directed against what was bound to appear, in the light of the succeeding economic development, as its crude naturalism and even amoralism. And its stoical attitude of making the best of an economic world which by its very nature cannot be the best of worlds makes its ethical critics often look inconsistent in wavering between the imperatives of better action and the assumption of better realities. The dignity of the English moralist writing on economics was therefore found mainly in the more or less conscious upholding of the religious ideals that had been attacked by the utilitarians and were to be definitely thrown over by Marxian

It is not without significance that Carlyle's principal economic book, Past and Present (1843), was suggested to him by the reading of a mediaeval monastic chronicle by Jocelyn de Brakelond. The description of the patriarchal rule of a great abbot attracted his attention to the religious forms of social organization, the continuity of which was in England less disturbed by the Reformation than in any progressive country on the continent, whether Catholic or Protestant. So the foundations of what on the continent came to be called social policy were in England deeply rooted in the religious traditions that reasserted themselves in nonconformism as well as in the Church of England, and in the evangelical no less than in the Oxford movement. At the same time liberalism, even as represented by a Quaker like John Bright, stood aloof, on the ground of the preestablished harmony of selfinterest and competition, from most of the urgently pressing readjustments of the acquisitive society.

In this broad religious setting ethical economics has tried since Ruskin to engage in battle with the classicists not only in the sphere of practical action but also on their own ground, the plane of theory, and to dispute their fundamental theses as to the nature of wealth, the economic motive, the determination of exchange value and the causes of economic crises. As laymen in economics the moralists began with attacking the more simple generalizations, such as the place of manual labor in industry, before they passed on to the more complicated problems of functional economics. But that by no means deprives even

their earlier writings of scientific interest. Ruskin's protest against the principles of the liberal Poor Law of 1834 is a forerunner of the still unsettled controversies on world unemployment after the World War. Their avowed ethical viewpoint prevented these economists from ever conceiving of a mechanical generation of surplus value such as the early English socialists and Sismondi had believed in. But their doctrines resemble somewhat liberal socialism in that the institutions of property, inheritance and freedom of contract are postulated as ethical values rather than rejected in the manner of socialist theory or assumed as systematic premises along the lines of classical economics.

As with the progress of industrialism classical economics lost its former aggressiveness and grew apologetic in character, the writers of the socio-ethical trend came increasingly to consider themselves the legitimate and genuine successors of that "free thought in the social sciences" inaugurated by Adam Smith. John A. Hobson, the author of the book using this phrase as its title, regards himself and actually is the principal follower of Ruskin the economist; the emphasis of his economic reflections is, however, no longer on the religious but on the liberal and rationalist ethics. Yet in the numerous and somewhat prolix restatements of his fundamental conceptions he seldom reaches the scientific level of his neoclassical adversaries. Like most socialist liberals he hardly attempts to reconcile the interventionism of his opinions on arbitration and unemployment relief with the noninterventionism of his tenets on international free trade. His conviction of the ethical soundness of property makes him, quite in accordance with socialists like Sidney Webb, limit his attacks upon capitalism to the Ricardian rent concept and the Marshallian concept of quasi-rent. In his lifelong struggle against marginalism, which he feels instinctively to be the most dangerous weapon in the defense of economic reality and in the offensive against economic utopias, he has not so far rectified the elementary mathematical misapprehensions pointed out to him by Edgeworth and Marshall. At one important point he does strike upon a real weakness of the neoclassicists: their inconsistency, inherited from utilitarianism, in first neatly distinguishing economics as a formal science of means from "noneconomic welfare" as a realm of social ends, and afterward introducing by a variety of back doors the kind of bourgeois ethics that prevailed in England in the first half of the nineteenth cen-

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tury. But even at this point the critic's sin is graver than that of the criticized: what he would have the neoclassicists do is not to keep to their first cautious promise, but to go further and achieve the impossible by deducing from their factual premises an express system of rationalist liberal ethics.

Only recently has the leaven of socio-ethical viewpoints produced a group in English economics whose technical equipment is on a par with the apparatus of neoclassical analysis and which has therefore better prospects of fruitful cooperation with it. The school headed by Henry Clay is inspired not by individualist liberalism but by an appreciation of the economic duties and possibilities of government and hence by a more conservative bias and a skepticism of liberal socialism, which is in many respects akin to the pre-war German state or "professorial" socialism (Kathedersozialismus). This orientation of present day ethical economics is significant because the situation produced by the post-war disturbances of world economy and their scientific reflection in an intensified study of crises and business cycles is in many respects similar to that in which Carlyle and Ruskin first pronounced against the glories of the competitive harmony. On the plane of theory the chief object of an ethical remolding of economics has now become the attempt to supplement in terms of the Austrian school the study of functional distribution by that of personal distribution, to advance from mere abstract "factors of production" to their empirical counterparts in actual social classes and income groups.

While in England landlords and farmers have scarcely had friends among theoretical economists since Ricardo's victory over Malthus, in Germany the first protest against classicism, apart from romantic economists like Adam Müller or historical economists like Friedrich List, came from the ranks of the large proprietor farmers, titled and bourgeois, who had profited little from the individualistic legislation of the Bauernbefreiung and who for the most part began to feel early the pressure of capitalist markets, the scarcity of agricultural credit and the hardships inflicted by the consequent mobilization of land. Placing himself on the theoretical foundations laid by the French socialists and German idealistic philosophy Karl Rodbertus voiced this protest in a decisive attack upon the Ricardian rent concept and a corresponding call to both farmers and labor to offer united resistance to the exploitation of financial capitalism. Ideolog-

ically even more than through his intercourse with Lassalle, Rodbertus represented the potential coalition against liberalism between the old Prussian ruling class of country gentlemen and the labor and middle classes, which were as yet scarcely touched by trade unionism and Marxian socialism, a political combination relied upon by Bismarck in his earlier domestic policies. Although Rodbertus' agrarian socialism might at first sight appear to be a kind of casual crossing of antiliberal tendencies, his untiring attempts to make socialism "acceptable to Society" (salonfähig) must be recognized as the theoretical basis of that great social insurance legislation of the eighties and nineties which made the new German Empire a model of social policy the world over; and his conception of land as a peculiar "fund" incapable of being subjected to a purely capitalistic valuation and encumbrance has proved one of the chief stimuli to the more critical study of the concept of capital in the United States and elsewhere.

Rodbertus' central ethical position, the conservative belief in government as symbolized in the suum cuique of the Hohenzollern monarchy, rather than the sharper edge of his socialism or of his agrarianism, was taken over by Adolf Wagner, his pupil and admirer. Wagner, who hailed from southern Germany, blended Rodbertus' ethical views with the fine old traditions of German cameralism, a comprehensive theory of the economic aims and possibilities of government, which persisted longest in the middle sized states of southern Germany and of which he was the last great master. His restatement of the German science of public finance was not merely a great technical achievement but also the conscious continuation of that older line of German theory which in the hands of Rau and Hermann had striven to reform rather than supersede the English classical teaching. It is significant in this connection that Wagner was antagonistic to Schmoller's historical school and loved to call his master Rodbertus the "Ricardo of socialism."

A last stage in the development of German socio-ethical economics came with the hardening of German socialism into political Marxism and with the peace concluded between the bourgeoisie and the government. This stage is marked by the predominance of a legal formalism. Rudolf Stammler, the leading legal philosopher of official pre-war Germany, thought of the relation of economy and state-made law no longer as primarily a combat for supremacy in society but rather as a fundamental identity be-

tween economic "matter" and legal "form." This conception of "just law" (richtiges Recht), however bitterly it might be attacked by an authority of the rank of Max Weber, was broad enough in both its ethical and its social science aspects to furnish food for theoretical reflection to economists like Karl Diehl and Rudolf Stolzmann. In Stolzmann's many works, devoted almost exclusively to the methodology of economics, there appears to be a strong vein of liberal individualism laying stress on might as the necessary corollary of right, on individual wants as the material of social coordination and on economic policy as aiming to remove disturbances from the free cyclical movement of production and consumption rather than to substitute another economic order for it. Diehl, the reeditor of Baumstark's commentaries on Ricardo, has been mainly occupied with the social and legal foundations not only of capitalism but of economic systems in general.

The French branch of socio-ethical economics represented by Léon Bourgeois' solidarisme reflects the condition of French social and political life at the end of the nineteenth century. The theory was the result of an attempt of Bourgeois' parliamentary party, the Radical Socialists, to translate into economic and sociological theory their plan of an ideological compromise between the radical liberalism of the schools of Say and Walras and a decisive socialist or at least state socialist break with this liberalism. The relation of mutual rights and duties which this theory posits for all members of society recalls the organismic societal theories from Menenius Agrippa to Spencer and Schäffle but is so weak a reflection of both these and the religious theories of mutual responsibility of man to man that it is not altogether undeserving of Pareto's bitter description as an "excuse for those who like to profit by the other man's labors." Yet in a society of a peculiarly individualistic and conservative type, like that of France, such a compromise between liberalism and socialism had a mission to fulfil in assisting movements of voluntary joint action such as cooperation and trade unionism and in promoting moderate forms of government intervention such as factory legislation, social insurance and progressive taxation. Solidarism was thus the exact French counterpart of the Rodbertian and Wagnerian influences on the social policies of modern Germany.

While solidarism is a consciously secular theory and, like French laicism generally, represents only one of the two main streams of socio-

ethical thought in France, the other, to which solidarism is more or less sharply opposed, is the clerical or Roman Catholic stream that has been running on powerfully since the Restoration in contrast to the ideas of 1789. This division into solidarism and social Catholicism weakens the effectiveness of the theoretical constructions of socio-ethical economics in France, but it also offers the practical advantage of a double opportunity for French socialist thinkers to blunt the edge of revolutionary criticism by compromises either with liberalism or with Catholicism. While the school of Fourier has been largely merged into solidarism, the schools of Saint-Simon, Louis Blanc and Comte were closely related to the Roman church. There is also an unbroken tradition of less decidedly socialist Catholic economics reaching from Lamennais' friend de Coux, Buchez and Huet down to Marc Sangnier's Sillon.

Outside France and outside the more strictly theological economic conceptions taught on the basis of Aristotle and Thomas Aquinas in all other Catholic countries there has been only one other instance of theoretical economic system building for religious purposes, that of the German Jesuit Heinrich Pesch of Cologne. Educated in the atmosphere of the old scholasticism of the Rhineland and the Netherlands and influenced by the "social bishop" Ketteler of Mainz, Pesch had the chance and the courage to establish contact with the followers of Rodbertus and afterward to study with Adolf Wagner at Berlin, with the result that his researches culminated in a broad if not very deep system of economics that cuts a path between liberalism and socialism somewhat on the lines of Pope Leo XIII's famous encyclical Rerum novarum. Like Stolzmann, Pesch stresses the teleological unity of economic society as a system of material means for moral ends, like Le Play he insists on the importance of the family as the primary social group, and like German romantic conservatism he wants to uphold or restore the organic differences and interrelations of corporate classes (Stände) as an incarnation of the religious idea of divine "vocation" and as a solid bridge between the family and the state. By the readiness to take into this system the modern technical reasoning on production and distribution Pesch rises above the level of mere religious sociology and is distinguished from the many practical forms of "Christian" economics in his own church, in the Anglo-Saxon churches and sects and in German Protestantism, which in so far as they take up

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economic problems in earnest develop definite leanings toward socialism. Before Pesch produced his economic system there was a moment at which the Protestant and conservative Christian Social party founded by Adolf Stöcker at Berlin in 1878 seemed to be approaching a position of its own, chiefly through the assistance of Adolf Wagner. But after Wagner left the party this opportunity was lost, and it has not returned.

CARL BRINKMANN

Romantic and Universalist Economics. Although it was accorded universal acclaim throughout Europe Adam Smith's Wealth of Nations could stimulate a development of indigenous economic thinking along classical lines only in those countries where, as in France, the prevailing spiritual atmosphere was favorable. As Friedrich List clearly showed in his celebrated writings of the 1840's, the theoretical and practical acceptance of "English political economy" in Germany would have checked all industrial progress. The political will for the development of the country into an "agricultural-manufacturing-commercial" state was bound therefore to prevent at least for a time the victory of free trade economics. Yet this political opposition would perhaps have come too late to be effective had not philosophical opposition already become strongly intrenched by the end of the eighteenth century. The latter took the form of romanticism, which rejected the philosophy of the Enlightenment and weakened the tenability of economic theory based on it. Eighteenth century philosophy had postulated a rationality pervading all forms of life, reduced all phenomena to the manifestation of a single principle and all institutions to a typical contractual arrangement of free individuals, proclaimed the sovereignty of natural law embodied in a series of causal relationships and believed in the existence of a natural order which would suit equally well all nations and all ages. To this calculating and analyzing rationality of the Enlightenment the romantics opposed their feeling that life is manifold, limitless, unfathomable. And so they came to stress doctrines of organic growth and of physical and spiritual acclimatization; to focus their attention on the growth of individuals and the history of nations, on the evolution of symbols and cultures, of the political and the economic order; to oppose the conception of a developing and living whole to the notions of causally linked atoms and of rationally grouped individuals. This Weltanschauung underlies romantic economic theory.

The romantic economists did not, however, constitute a school of thought. The poet Novalis, the philosopher Franz von Baader, the political journalist Josef Görres and the publicist Adam Müller developed their views on politics and economics quite independently of one another and none of them found disciples to continue his work. There are therefore only a few economic propositions common to them all; and an idea of romantic economics could best be obtained by uncovering the specifically romantic elements in the teachings of the foremost representative of romanticism in the social sciences, Adam Müller, the author of Die Elemente der Staatskunst (1800) and the Versuche einer neuen Theorie des Geldes (1816).

According to Müller the constitutive economic principle is not free competition but the integration of individuals and classes into a living community, whose spiritual bonds set a limit to the logically limitless division of labor and specialization among men. The emphasis on material wealth leads to a neglect of the more essential "ideal" production and of the importance of the whole for single production processes and individual articles. Value does not inhere in the product; it is derived from the fact that the product is available in society. Money, the foremost embodiment of value, can be understood only within the framework of the society and the state and as a reflection of them.

Romanticism stimulated the development of the historical sense in the nineteenth century; in fact, general historiography as well as the legal and economic history of this age of Historismus can be understood only in the light of the influence exercised by romanticism. But on economic theory in the stricter sense the latter left no significant impress. Müller failed to develop his ideas into a formal theoretical system and the rising tide of liberalism paralleling the growth of industrialism consigned to oblivion the abiding verities in Müller's work along with its obsolete and reactionary elements. The account of romantic economics and the treatment of economic life and the state along romantic lines in Othmar Spann's Haupttheorien der Volkswirtschaftslehre auf lehrgeschichtlicher Grundlage (1911), in which his views, later developed in many directions, were first propounded, came therefore as an entirely new discovery. According to Spann an economy is in its objective aspect "a system of means" and in its subjective aspect "the selection and adaptation of means to ends"; all economic phenomena are therefore

"organic parts of a structure of services." The ideas of organic relationship to a whole and of service ability in regard to the whole are applied to every primary economic action and unit. A hierarchy of "wholes" is established, at the apex of which are the national and world economies and finally the state. The state is not merely another form of association alongside the economic community but, on the contrary, the economic system is but a manifestation and a foundation of instrumentalities for the purposes of the state, whose institutions and laws are to be viewed as creative economic factors, as capital of a higher order. From this point of view non-sociological economic theory based on abstraction and mental isolation is inconsistent with the nature of social economy and of the state. Individualism must be charged with failure to recognize the significance of wholes and of justice, the supreme principle of the political and economic order.

Spann designates this social, political and economic doctrine as universalism; and the name universalist may be applied to his school in order to distinguish it in the field of economics from the classical school. Yet the universalist outlook, even according to Spann's conception, is not limited to this small group but constitutes the common characteristic of a continuous line of philosophers, political thinkers and economists extending from antiquity to the present. This universalism embraces the totality of social life, as may be clearly seen from a few of Spann's fundamental propositions. The first of them is that the individual is not autonomous and selfsufficient, because his life is an organic part of a larger whole. The whole therefore comes before and is superior to the part. The individual is not thereby deprived of spiritual dignity or moral autonomy; for the whole is after all a certain organic combination of its members, who are endowed also with a life of their own. Another of Spann's propositions related to society, which far from being merely a sum of the individuals composing it is a creative living whole whose members are essentially interdependent and mutually complementary. Aristotle's justitia distributiva in its more modern form of suum cuique, the perfect expression of the eternal principle of justice, is the law determining the structure of society.

Spann has attempted not only the statement of all the ramifications of universalism but, also with the aid of his pupils, the building of a comprehensive doctrinal system based on universalist principles. An introduction to this system is

contained in the collection of his articles Tote und lebendige Wissenschaft (1921) and in the textbook of the history of economic doctrines, the Haupttheorien mentioned above, while a sketch of the system is attempted in his Fundament der Volkswirtschaftslehre (1918). The methodology of universalism is presented in his Kategorienlehre (1924), the sociology in his Kurzgefasstes System der Gesellschaftslehre (1914), the social philosophy in his Gesellschaftsphilosophie (1928), the political science in his Der wahre Staat (1921) and the philosophy in his Der Schöpfungsgang des Geistes (1928). Some of his pupils have undertaken a further development of universalism in application to philosophy (Karl Faigl, Ganzheit und Zahl, 1926), to the theory of business cycles (Walter Heinrich, Grundlagen einer universalistischen Krisenlehre, 1928) and to public finance (Wilhelm Andreae, Grundlegung einer neuen Staatswirtschaftslehre, 1930; and Bausteine zu einer universalistischen Steuerlehre, 1927).

The central doctrine of universalist economics is not the theory of prices, as in individualistic economic systems, but the theory of services. In a theoretical construction which conceives an economy as a system of means service is naturally not to be understood as a technical causal category, but rather as a concept bearing on structure, on the articulation of the parts with the whole. The doctrine of services thus interpreted is supplemented by the doctrine of differentiation of the whole of the highest order into wholes of lower orders and their constituent elements. The explanation of value and price is thus undertaken not with the aid of such concepts as marginal utility, but through the establishment of relationships which the goods, conceived as a means for a given purpose, bear to the whole.

Whereas the trend of individualistic price theories since the time of Adam Smith has been away from such metaphysical notions as normal value and natural value and toward a closer concern with actual or market price, universalist economics has attached the greatest importance to just these meta-economic concepts. The important task of a price theory, the universalists would say, is not the explanation of prices preferably in terms of a single cause, but the ascertainment of the degree of correspondence between prices and the underlying structural relations of parts and wholes. The structural relations in the economic system are normative for prices, and the universalist correct price, unlike the scholastic justum pretium, is thus determined

by strictly economic criteria. An economist is supposed to go even beyond that; where prices are found to be incorrect, suggestions should be forthcoming for a rearrangement of parts and wholes to bring about the correction of structural faults.

The concept of service makes it possible for the universalists to reject both utility value and labor value, and together with the latter the Marxian theory of capitalist appropriation of surplus value. In opposition to the doctrine of sole productivity of labor the universalists maintain that a great many general costs are incurred in the process of production and must be covered from its proceeds. Thus in addition to wages, interest, compensation for risk and services of the entrepreneur there are salaries of government officials and other costs of local administration; the cost of maintenance of the productive capital of society collected in the form of taxes; the necessary contributions to capital invested in the education of the young, to capital needed for the employment of the increasing population of workers and to capital increases requisite to insure economic progress. The residuum represents pure profit, which is not an exploitation income but a compensation for the services of leadership exercised by the entrepreneur.

The universalist theory of money rejects the view that money is only the reflection and measure of commodity value. On the contrary, money is a productive instrument and its function is to bring about a proper coordination of primary economic elements, parts and wholes of various orders. In this sense it is an essential constitutive element of value. The objection to the older monetary theories like the quantity theory is that they concentrate on the quantitative aspects of money value and overlook the importance of studying the nature of money value as such.

Universalist economics regards business crises as disturbances in the proper coordination of means which constitute the economic system. These disturbances may arise from a shifting in purposes to which the means are subservient or may follow a shift in the relationships of the various means. Examples of the latter are a change in the relation of a single national economy to the world economy; the effects of new inventions; change in capital of the higher order, i.e. commercial treaties, tax legislation and the like.

Those to whom economic theory means clas-

sical, marginal utility or neoclassical doctrine regard the essential parts of universalist economics as metaphysical and as having no relevance to the science of economics as such. It is not surprising therefore that some surveys of German economic theory do not even mention universalism. A more intelligent appreciation of the role of universalism must rest on recognition of the fact that the development and acceptance of different variants of economic theory are historically conditioned phenomena and that no theory may justly claim eternal and universal validity. In fact, except for a few doctrines, such as the law of diminishing returns and the law of differential rent, accepted by all schools of thought economics today is divided between two diametrically opposed points of view giving rise to two essentially different types of theory. It is comparatively unimportant whether one distinguishes them with Spann as universalist and individualistic or with Sombart as Geistwissenschaft and natural science theories or with Harms as synthetic and analytic or with Salin as intuitive and rationalistic, so long as the essential difference in the underlying approach is kept clear. Müller's romantic economics and Spann's revival and further development of it in the form of universalist economics may be best understood and evaluated as a variant of economic theory based on a philosophy rejecting the individualist, rationalist, analytic, natural science approach. It is significant in this connection that classic individualist theory was developed in England, the home of utilitarianism, and that the universalistic theory is a creation of the German spirit, which left its impress also on historical economics, another form of theoretical opposition to English utilitarianism and atomism. But universalism is not simply a nationalist German contribution to social thought. At the time when the individualistic-liberal state is passing through a crisis in many countries and in others new political and economic forms are gradually emerging, universalism offers the first well developed organic theory of society, the state and economic life.

EDGAR SALIN

The Institutional School. The form assumed by the dissent from orthodox economics has differed from country to country and from period to period. In the United States such dissent has come in the twentieth century to be increasingly and indeed almost exclusively associated with what has been called the institutional school.

Yet the numerous proponents of the institutional approach to economics differ so markedly in their views concerning the purpose, content and methodology of institutional economics and the bonds of spiritual unity among them, engaged as they are in diverse and vaguely related tasks, are so intangible that the use of the term school is justified only if the loosest possible meaning is attached to it. Nor is it to be inferred that the institutional approach to economic theory is exemplified only in the work of American economists or that before the twentieth century an institutional emphasis in economics was unknown.

Institutional studies have always held an important place in economics. While the classical doctrine and its derivatives have tended to make them a subordinate category of description, they have occupied a position of great importance in the explanatory scheme of most dissenting individuals and schools. Thus the work of Sismondi and Richard Jones may be described as primarily institutional. The German historical school of necessity was deeply concerned with the changing structure of economic institutions and the progressive adaptation of life and thought to such change. Karl Marx' attention was centered upon the evolution of economic institutions in their relation to the distribution of economic power. Other socialist thinkers also examined the origin and effects of economic institutions as a preliminary to devising ways and means of reconstruction. In general the institutional interest has been tied to reform movements of one sort or another and has been antipathetic to economic explanations running in terms of uniform self-interest, static economic relationships and a stable institutional structure.

While institutionalism is a word applied specifically to a phase of economic thought in the United States, it stands in a close spiritual relationship to certain developments in all the social sciences both in America and Europe. Thus, to take American examples, the work of Roscoe Pound and R. L. Hale in jurisprudence, of Charles A. Beard and J. H. Robinson in history and government and of W. F. Ogburn in sociology is based upon a set of similar presuppositions. Among economists in both England and France the closest alliance with institutional theory is found among groups primarily interested in projects of reform, such as the French solidarists and the English Fabians. Even in the relatively orthodox precincts of the University of Cambridge the influence of Marshall has

stimulated an institutional interest, while Cannan at the London School of Economics has quite directly been responsible for a series of institutional studies, although not in the Veblenian terminology of American institutionalism. In Germany more than elsewhere may be found a rich development of ideas and activities like those in the United States. They are in part derivatives of the earlier historical and Marxian schools of economics, in part aspects of more recent sociological thought.

The institutional movement in American economics is peculiarly a derivative from the work of Veblen, although with his name should be linked that of C. H. Cooley and the pragmatic philosophical trend represented by William James and John Dewey. Much of Veblen's thought is compounded from the ideology of Marx and the historical school. What is most distinctive in it, however, is an introduction into economics of ideas derived from the evolutionary sciences, particularly biology, anthropology and psychology. Thus the central theses of Veblen are that human activity, including economic activity, may be most profitably approached from the angle of an evolutionary process; that institutions are decisive factors in shaping human behavior; that social science must deal with real human beings, not with a rationalized human nature, with the run of facts rather than with a normalized picture of them.

Stated in somewhat greater detail, the cardinal tenet of institutionalism is that contemporary society is a complex of institutions or habitual forms for organizing and regulating the behavior of individuals. Social institutions, including the economic, defined as those which bear on the behavior of individuals in providing the community with its complement of useful goods and which determine the manner of the control and use of these goods, are subject to change because of the impact of human nature, changes in technology and the general development of knowledge and ideas. In a certain sense the development of institutions is a competitive process, and its outcome determines what forms of behavior are acceptable and sanctioned. At any given time the behavior of individuals or groups is restricted within limits set by such formal or informal sanctions. Since in the view of psychologists "original human nature" is remarkably stable, most overt behavior must be explained by reference to the prevailing institutional structure, and this in its turn is intelligible only if viewed as a result of cumulative change.

The bearing of this general ideology on economics is in the first place critical. Institutionalism impugns the credibility of orthodox economic theory on the following counts: it asserts that orthodox economics depends upon a discredited hedonic theory of human behavior; that its basic institutional postulate of individualistic competition is inadequate and inaccurate; and that its central problem of determining the conditions of economic equilibrium rests on an untenable analogy to physical science and implies a static view of economic organization at variance with the actual processes of development. The institutionalists believe that while the equilibrium concept and the marginal method may be found useful for some subordinate purposes of analysis fundamentally correct explanations of economic phenomena are possible only by reference to the nature and prescriptive force of social institutions.

While the critical position which constitutes an essential ingredient of institutional economics is definite and clear cut, the positive content of institutionalism is not so well defined. In the nature of the case it is difficult to draw the boundaries of an economic science based upon institutional postulates. Since economic institutions, such as competition, the wage system, the credit system, the property system and the like, are but isolated aspects of a much more complex general structure of social institutions, the specific scientific boundaries between economics on the one hand and sociology, politics and jurisprudence on the other tend to become very indistinct. Moreover, since the raw materials of an institutional economics are of necessity a vast accretion of factual data, the institutional approach tends to realize itself in an unorganized and vaguely related congeries of separate studies, quantitative, descriptive or historical. In consequence there has been developed no technique of analysis, or methodology, of a uniquely institutional character. In fact, the common institutionalist attitude is that each economic study justifies itself on other grounds than those of method and that, methods being but instruments, each study may proceed with the aid of any extant methods of economic analysis or call into existence new methods. Thus is achieved a certain methodological elasticity in the treatment of social data, which are so complex that they must be subject to varied "approaches." In this there is striking contrast with orthodox economics, the peculiar strength of which is that it provides concepts and analytical procedure applicable to an unlimited number of detailed situations.

In discussions of methodology one rather commonly hears of the descriptive method, the quantitative method and the genetic method as adjuncts of institutional economics. This mode of speech involves some inaccuracy. Description, for example, can hardly be spoken of as a method, since realistic description of concrete data raises a host of problems of method with respect to categories, concepts and generalized results. The influence of the institutional approach in the field of description is, however, real and far reaching, not merely through promoting it but through attacking its problems in an experimental frame of mind. Thus institutionalism may alter the categorical framework of description; illustrations of this may be found in Hoxie's studies of labor organization, in studies of corporate organization and in other fields.

Quantitative analysis may be regarded as a specialized method of description, although a more ambitious theoretical destiny is held out for it. It has no particular affinity with institutional economics but has been linked to it as providing a type of institutional knowledge and perhaps a type of theoretical conclusion different in kind from the generalizations of orthodox economic theory. In this connection it is significant that the institutionalists regard W. C. Mitchell's treatise on Business Cycles (1913) as a positive contribution to their critical attack upon orthodox theory. Although quantitative analysis is no more allied to one type of theory than to another, quantitative studies have a very special interest for institutionalists and a special bearing on their system of thought, because they afford an opportunity and a justification on the grounds of expediency for arranging data in other categories and concepts than those crystallized in orthodox economic usage. In particular, quantitative-descriptive studies tend to present data in the categories in which they appear to those technically trained for, and actually engaged in, the various practical pursuits of life. For example, treatments of interest which deal with call money, commercial paper, bank loans, farm mortgages, public credit and the like are different in kind from systematic theories of interest but not an alternative to them. Another example is offered by studies of corporate organization and profits, a field in which the assumptions of general theory seem to have lagged behind the current facts. Such studies may be properly regarded as having an importance beyond the immediate end which induced them and as collectively furnishing data for extensive emendation of general economic theory.

The so-called genetic method, the explanation in terms of cumulative causation, may perhaps be regarded as a distinctive institutionalist method, although it has also been championed by such representatives of the German historical school as Karl Bücher. If contemporary phenomena are the outcome of a cumulation of causes in past time, they cannot be properly or accurately analyzed on causal lines without recourse to the genetic principle. In pressing this point home, in suggesting that orthodox theory is rationalized description and sometimes an apologetic rationalization of the economic institutions of a limited area and period, institutionalists have made orthodox theorists self-conscious and are in part responsible for the recent careful and modest statements of the functions of orthodox theory.

Unfortunately, in their enthusiasm for the genetic principle the institutionalists have overlooked its inadequacies as the sole method and the dangers often implicit in it. In its usual form of a translation of a limited number of historical sequences into terms of cause and effect it is of doubtful scientific accuracy. Nor is it capable, except when used in conjunction with deductive logic, of providing precise answers to many if not most of the analytical problems with which economists are faced. Institutionalist thought, which seems at times to regard the genetic method as an alternative to the allegedly invalid deductive method of generalizing on economic causation, seems not to have grasped the exact significance of the genetic principle.

On such methodological questions American institutionalism has not been as penetrating as might be wished. The methodological writings of Max Weber, who may be regarded as the champion of institutionalist economics in Germany, present the problem of "understanding the phenomena of life in their cultural significance" with more illumination. Having decided to eliminate analogies to the natural sciences as inapplicable, having discussed the objective and subjective aspects of the social scientist's work and the impossibility of creating a direct nexus between scientific knowledge and social policy, he adopted "ideal types" as his chief methodological instrument for the attainment of the necessary degree of abstraction in dealing with complex social data. This device, which isolates and synthesizes into a logically consistent picture

factors deemed relevant to the historical development of the process under investigation, is a particular application of the genetic principle. It is, however, also open to the objections that rigid "ideal types" will command no consensus of support and that their very construction is a highly personal performance permitting the penetration of bias.

American institutionalist writing on methodological questions has taken the form of sections and chapters in books devoted to other subjects and of occasional articles in periodical publications. It has been on the whole of a very inferior or else very fragmentary character; it has not attempted, as J. R. Commons justly observes, "to go at the fundamental concepts upon which the institutional school should be constructed." American institutionalism is far from having thought through its problems when it criticizes economic doctrines so stated as to be unamenable to empirical verification and praises the quantitative method of analysis for the connection of its data with concrete reality, at the same time that it places reliance upon something yielding such vague and highly personal interpretative results as those of the genetic method. Actually, the institutional interest is for things in flux, and it has stood ready to approve whatever methods are applicable for the presentation or interpretation of processes of economic change. One cannot quarrel with this interest, but one may doubt whether it need carry with it an exaggerated dissent from the methods of presenting and interpreting the elements of economic stability and order which are the stock in trade of orthodox economic theory.

The tendency has been for institutional economics to make a virtue of its shortcomings. It has not regretted its inability to construct economic laws; on the contrary, it has neglected and tended to deride studies largely dependent upon a formal economic logic. It has applauded studies of the derivation of the contemporary institutional structure on the one hand and statistical or other accounts of observed behavior on the other; it has favored the multiplication of monographic studies. But it has achieved no synthesis of its data, no general plan wherein its parts will fit, no alternative methods or concepts of general applicability. In fact, it has found a source of gratification in changing economics into a collection of diverse types of study, so long as these offer a concrete body of knowledge relevant to understanding the economic order. In much of this it appears to be repeating the experience of

the historical school, which it so greatly resembles and from which it in part derives.

One reason for the lack of interest on the part of institutionalists in questions of method and system is that the thought and work of most institutional economists actually center less upon problems of scientific explanation than upon those of public policy. Their orientation is primarily a welfare and reform orientation. Centering their attention upon the mutability of institutional structure, they quite generally regard their function as that of bringing disinterested human intelligence to the guidance of social change.

It has been suggested that institutional economics consists of studies of three types: genetic studies, studies of the economic significance of single institutions and studies of typical economic structures in terms of economic functions and types of organization. While this classification indicates the emphases which are common to institutional studies, it offers no clue to the positive content of institutionalist economics. In the absence of a consensus as to the concepts and categories which should govern such studies, of homogeneity in plan and method and of a unitary framework the content of institutional economics can only be described as the aggregate result of all these studies irrespective of the methods by which they have been pursued. Another difficulty in this connection arises from the fact that many notable studies of economic institutions have been made by persons who do not ally themselves with a dogmatic acceptance of the institutionalist approach to economic theory. Such studies cannot, however, be excluded from the range of institutional economics.

Of the branches of economic inquiry in which the institutional approach has proved most fruitful the field of business organization stands out prominently. In this field belong on the one hand studies such as W. H. Hamilton's The Case of Bituminous Coal (1925), which combine description with theoretical analysis, and on the other theoretical and interpretative writing like that of Veblen in The Theory of Business Enterprise (1904) and Absentee Ownership (1923) and of J. M. Clark in his Studies on the Economics of Overhead Costs (1923) and the Social Control of Business (1926). Recent studies of corporation law in an institutionalist setting, such as those of A. A. Berle, may also be properly considered as an investigation into the genesis and functioning of an important form of business organization.

In the field of labor organization one finds also

a mass of writing, descriptive and interpretative, much of which partakes of the institutionalist spirit. At the head of such works must of course be placed the Webbs' The History of Trade Unionism (1894) and Industrial Democracy (2 vols., 1897). Hoxie was perhaps the most conspicuous American figure giving an institutionalist interpretation of the labor movement. Other works, such as Carter Goodrich's The Miner's Freedom (1925) and Solomon Blum's Labor Economics (1925) and the statistical and other writings of Leo Wolman and Isidor Lubin, are similarly related to the movement. One cannot of course overlook the important work of Commons in the labor field, but his interest in relating this work to a new theoretical orientation is a relatively late development.

As in other fields of inquiry, no type of theoretical orientation has any peculiar affinity with research in the field of business fluctuations. It is perhaps an accidental circumstance that one of the most distinguished American proponents of the institutional point of view, W. C. Mitchell, is also the author of the outstanding study in this field. Yet it is undoubtedly true that cyclical studies have not only attracted persons of institutional leanings but have strongly reenforced the effort to study economic phenomena in process, as opposed to analysis of the normal operation of economic forces, and to restate economic theory in these terms. They have impregnated with new meaning the distinction between statics and dynamics current in orthodox economics. In the work of J. M. Clark in the United States and of the German economists who differentiate between structure and conjuncture and attempt the establishment of a dynamic methodology there is promise that the study of business cycles will eventually lead to the formulation of a new theory of dynamic economics. Nevertheless, it is doubtful that quantitative cyclical analysis has the close affinity to institutionalism which is sometimes attributed to it.

The genesis and development of such complex sets of institutions as capitalism in its various aspects constitute a subject peculiarly attractive to the institutionalist. In this field one must notice particularly Werner Sombart's *Der moderne Kapitalismus* (3 vols., 1902–27). In distinguishing the three elements of spirit, form and technology and carrying them through the evolution of economic institutions Sombart has not merely added vastly to the factual knowledge of the past but has developed an interpretative scheme representing an example of that eco-

nomic theory which Veblen has called "the theory of a process." In his sociological writings Max Weber has dwelt at length upon spiritual elements which underlie social institutions; his studies of the relation between the Protestant ethic and the spirit of capitalism offer a particularly penetrating contribution to the literature of economic institutions. A somewhat comparable contribution in this field is R. H. Tawney's Religion and the Rise of Capitalism (1926). Veblen is the only recent American economist to attempt historical analysis of a theoretical and interpretative sort, but what he did (e.g. in The Instinct of Workmanship, 1914) stands almost as the foundation of institutional economics and furnishes the basis for classing such men as Sombart and Weber with institutional economists. Commons' Legal Foundations of Capitalism (1924) must be added to the list of important works in this field. Although it covers a relatively short period and was preceded by a number of studies on the economic significance of property and contract it may be said to open a new branch of inquiry because it represents a peculiarly skilful handling of legal material for the purposes of well considered and thoroughly grounded economic generalization.

This brief survey of the institutionalist contributions may not be concluded without mention of the work of C. H. Cooley (Social Process, 1918; Social Organization, 1909) and of B. M. Anderson, Jr. (Social Value, 1911). The former is second only to Veblen in his general influence in establishing the institutional point of view, while the latter is the only American writer except Commons to attack the problems of conomic value from the angle of institutionalist preconceptions.

It is impossible at present to give a definitive evaluation to institutionalism in the context of the historical development of economic thought. The institutionalists constitute one of the most active groups of economists today, and it is impossible to anticipate what will be the final impact of their thought upon the general body of economics. So far one effect of the movement has been to wear down the entrenched authority of the orthodox discipline, until it no longer can be regarded as providing the exclusively correct explanation of economic phenomena or the exclusively accredited instruments of economic analysis. Besides stimulating a large amount of useful research and analysis, oriented with reference to a postulated evolution of institutional structure, the movement has fertilized economic

thinking at large by the infusion of new and relevant ideas. Having failed, however, to create a complete alternative organon of economic thought and sceming unlikely to do so, its separate and controversial existence appears due to be ephemeral. In the synthetic and creative construction of an adequate organon, which is the present task of economic theorists, the influence of the institutional movement will be large; but the outcome should be something larger, something better equipped methodologically than the institutional approach alone appears able to achieve.

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See: Introduction I and II in volume I; articles on related sciences such as Economic History, Geography, Anthropology, Sociology, Statistics and the like; articles on economic concepts and institutions such as Value, Price, Capital, Capitalish, Exploitation, Interest, Rent, Profif, Distribution, Exchange, Demand, Entrepreneur and the like; and biographical articles on outstanding economic theorists.

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EDDY, MARY BAKER (1821–1910), American religious teacher and organizer. After a few years of elementary schooling in New Hampshire this temperamental girl was kept at home until at the age of twenty-two she married. Her husband soon died of yellow fever, and from the birth of her son until 1862 she suffered from severe hysteria. In 1853 although an invalid she married a dentist who was unable to support her and left her at the outbreak of the Civil War.

Dr. Phineas P. Quimby, a mental healer at Portland, Maine, succeeded in restoring her to comparative health after a brief treatment. After 1862 she traveled in eastern Massachusetts, trying with little success to make a living by practising Quimby's art. In 1866 as a result of a fall she

suffered a temporary relapse, but recovery was rapid and according to her later theory miraculous. In 1875 she abandoned Quimby's technique of healing by "manipulating" and claimed that in 1866 she had discovered the principles of Christian Science. From 1870 to 1880 she taught her "science" to students at Lynn, Massachusetts. In 1875 the first edition of her textbook, Science and Health, appeared and in 1876 was formed the Christian Scientists' Association, which became The Church of Christ (Scientist) in 1879. In 1877 she married one of her students, Asa Gilbert Eddy. In 1882 she moved to Boston, where she founded the Massachusetts Metaphysical College. Her work prospered and she was soon able to send "spiritual healers" to many American cities. She enlarged and with James H. Wiggin's help improved her textbook. In its fiftieth printing (1891) the book, which is the chief basis of Christian Science, appeared in essentially its present form. After a serious schism among her students she closed the "college" in 1889 and obtained autocratic control of the Mother Church; she then retired to Concord, leaving its actual management to a board of directors. Rumors spread that she was failing in body and mind. Although she suffered periodically from violent hysteria and delusions of persecution she administered church affairs skilfully until almost the end of her life.

HERBERT W. SCHNEIDER

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EDELMANN, JOHANN CHRISTIAN (1698–1767), German free thinker. Edelmann was born in Saxony and was at first a follower of the traditional Lutheran orthodoxy. He became, however, profoundly influenced by his reading of Pietist literature, especially Gottfried Arnold's Unpartheyische Kirchen- und Ketzerhistorie (2 vols., Frankfort 1699–1700), and as a result became filled with "real disgust" for orthodoxy. In his Unschuldigen Wahrheiten (Bückeburg 1735–43) he began his attacks upon the Lutheran orthodoxy and proclaimed the equal value of all creeds. He familiarized himself with the writings of Dippel and accepted his rationalist

principles, even his Socinianism. In 1735 Edelmann visited Zinzendorf in Herrnhut in order to become better acquainted with the Pietism of the Moravian Brethren. He also collaborated in 1736 in the Berleburg translation of the Bible. Gradually, however, he came under the influence of the English deists and especially of Spinoza. In his Moses mit aufgedecktem Angesicht (Berlehurg 1740), Die Göttlichkeit der Vernunft (Berleburg 1741) and Glaubensbekenntniss (Frankfort 1746) he popularized the ideas of Spinoza and expounded his own radical criticism of the Bible and a pantheistic and immanental form of rationalism. He aroused the hostility of the theologians, and only after promising not to publish any further writings was he given permission by Frederick the Great in 1746 to live in Berlin.

Edelmann was the most hostile as well as the most influential German critic of orthodoxy before Reimarus and Lessing. He showed the inconsistency of orthodoxy with the early Christian faith in a perspicacious and dexterous manner. He reduced the religion of the church to politics and private mysticism and secularized it until it became a mystico-immanental anthropology and sociology. This vague pantheism and this intellectualistic religion of cultural improvement was unable, however, to exercise a positive and enduring effect. Edelmann's writings were rediscovered in the nineteenth century by Bruno Bauer. The latter represented him as an atheist who had anticipated Bauer's own development from an orthodox theologian to an atheist and denier of religion and as one whose life demonstrated the truth of the theory that subjective Pietism necessarily disintegrates the orthodox creed and produces, as a kind of secularization, the modern individualistic civilization.

ERNST BARNIKOL

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EDEN, SIR FREDERICK MORTON (1766-1809), English economist. He was a founder and chairman of the Globe Insurance Company. In his monumental work, The State of the Poor (3) vols., London 1797), he describes parish by parish the conditions of life of the English laboring classes at the close of the eighteenth century. He was moved to undertake this survey, he tells us, "from motives both of benevolence and personal curiosity" as to the high prices of 1794-95 and the distress caused by them. He prefaces his study with a historical account of the operation of the British poor laws and an attack on Pitt's proposed extensions. To make this survey Eden adapted his questionnaire from that used by Sir John Sinclair in his Statistical Account of Scotland (Edinburgh 1791-99), employed a field agent for over a year, visited certain localities himself and prevailed upon "respectable clergymen and others" to help collect his material. His harvest is a mass of concrete data covering for large parts of England the typical "diet, dress, fuel and habitation" of laborers, their occupations, their wages, their friendly societies, the trend of population, the rent and distribution of land and the organization and conduct of local workhouses. The core of his work is a series of family budgets from each locality. The book is still a mine of information for the student of eighteenth century England, and Eden's method has inspired the social statisticians of succeeding generations.

Eden's attitude is one of laissez faire. He uses the more frugal living and lower scale of relief in the northern counties to prove that not wages but improvidence is at fault in the south and insists that not the landed interests but the "marked favour shewn to commerce" causes the disproportionately low wages of agricultural labor. In spite of this differential he finds that "Manufacturers more commonly become Paupers than Labourers in Husbandry." Calling Adam Smith to his support, Eden concludes that the growth of friendly societies rather than a minimum wage and poor laws will best help the laboring poor. He represents the ruthless new husbandry of Arthur Young against the yet newer humanitarianism of Davies and Whitbread. His later works include an Estimate of the Number of Inhabitants in Great Britain and Ireland (London 1800) and an Address on Maritime Rights (London 1808), in which he favored firm opposition to the neutrality claims of the United States.

DOROTHY W. DOUGLAS

EDGEWORTH, FRANCIS YSIDRO (1845–1926), English economist. He was born at Edgeworthstown House, County Longford, Ireland, where the family had established itself in the reign of Queen Elizabeth. He was a grandson of the celebrated Richard Lovell Edgeworth, a nephew of the novelist Maria Edgeworth and a first cousin of the poet Thomas Lovell Beddoes. Late in life Edgeworth succeeded to the family property, and on his death his branch of the family in the male line became extinct.

Brought up at Edgeworthstown under tutors, he went at the age of seventeen to Trinity College, Dublin, and then to Oxford. His classical education colored his entire life; he was one of the few survivors of the tradition of free quotation from the classics on all occasions and in all contexts. He was first a lecturer in logic and afterwards Tooke professor of political economy at King's College, London. In 1891 he succeeded 'Thorold Rogers as Drummond professor of political economy at Oxford and was elected a fellow of All Souls', which became his home for the rest of his life.

Edgeworth never composed a magnum opus, which would have been entirely contrary to his temperament and inclinations. Early in life he produced three slim volumes, New and Old Methods of Ethics (Oxford 1877), Mathematical Psychics (London 1881) and Metretike (London 1887). Of these only the second is important, the latter part of it containing the essence of much of Edgeworth's most characteristic work on mathematical economics, in particular the treatment of contract in a free market (his famous contract curves first appear here) and its possible indeterminateness. For the rest of his life he was content to offer the world his contributions to science in the form of numerous papers in a considerable range of learned periodicals. His work falls into two well defined groups, those dealing with the theory of probability and statistical theory, concerned mainly with the law of error, and those dealing with economics. The former papers, more than fifty in number, have not been collected. A list of those published before 1887 is given in an index to his Metretike. A list of the more important, bearing on probability, published before 1921, is given in the bibliographical appendix to Keynes, A Treatise on Probability (London 1921). Professor Bowley has summarized Edgeworth's contribution to the theory of the law of error in a volume entitled F. Y. Edgeworth's Contributions to Mathematical Statistics, published by the Royal Statistical

Society (London 1928). His principal papers on economics, on the other hand, were collected by himself toward the end of his life, thirty-four papers and seventy-five reviews being reprinted in his Papers Relating to Political Economy (3 vols.), published by the Royal Economic Society (London 1925). These three volumes, together with Mathematical Psychics, preserve in accessible form all of Edgeworth's contributions to the subject of economics which he wished to see preserved. The opportunity thus offered of obtaining a general conspectus of Edgeworth's work added greatly to his reputation. Most present day students of mathematical economics would probably consider Edgeworth the most eminent of nineteenth century pioneers in this subject.

The connecting link between Edgeworth's different works is to be found in his interest in the problems of measurement applied to the so-called moral sciences, or, as he expressed it in his early work, mathematical psychics. He conceived this subject as having five branches—the measurement of utility or ethical value, the algebraical or diagrammatic determination of economic equilibriums, the measurements of belief or probability, the measurement of evidence or statistics and the measurement of economic value or index numbers. Almost all Edgeworth's work falls into one or other of these five groups, his many contributions to the subject of index numbers being particularly important.

Edgeworth's other main work was connected with the *Economic Journal*, of which he became the editor on its first foundation in 1891. For the last thirty-five years of his life, first as editor, then as chairman of the editorial board and finally as joint editor, he devoted a great part of his time to this journal. Its traditions still owe much to his wisdom, his scientific tolerance, his wide international sympathies and to his practical good sense, which he combined with a measure of personal eccentricity and idiosyncrasy.

J. M. KEYNES

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EDGEWORTH, RICHARD LOVELL (1744-1817), Irish writer, inventor and educational reformer. Edgeworth was educated at Trinity College, Dublin, and at Corpus Christi College, Oxford, lived for a time in England, became prominent in the Lichfield circle of wits and cultured radicals and in 1782 settled on the family estate at Edgeworthstown, Ireland, where he became a philanthropic and popular landlord. He married four times and had nineteen children. In the last Irish parliament he voted against the Union. He invented a telegraphic system and anticipated caterpillar traction. Of inquiring mind and buoyant temper, public spirited, energetic, humorous and affectionate, Edgeworth was a pioneer of child study and of experimental methods in teaching. His early enthusiasm for Rousseau had become chilled after bringing up his eldest son according to the principles of *Emile*, and he entered upon a search for practical processes to replace a priori theories. He laid stress on home education but recognized the value of public instruction. In Essays on Professional Education (London 1808, 2nd ed. 1812), written while he was serving on a commission of inquiry into Irish education, he urged the comparative study of various school systems. Influenced by French writers he envisaged a scheme of national education, including secondary schools—Edgeworth was probably the first English writer to use the term —in which advancement from grade to grade would depend upon merit ascertained by public examination. In Essays on Practical Education (2 vols., London 1798; new ed., 3 vols., 1822) he had collaborated with his famous daughter, Maria (1767-1849). The book was suspect in evangelical circles but the joint authors put it on record that they deemed "religion the only certain bond of society." A register reporting actual conversations with the Edgeworth children at various stages of their development formed the basis for the essays and gave to Practical Education a foundation of carefully recorded experiences which distinguished it from most other pedagogical works of its time.

Possessing great talents as a story teller Maria Edgeworth developed under her father's unwearied direction into an eminent writer of moral tales. As a medium for illustrating the precepts gleaned from her experience she employed the didactic story. These tales, collected in *The Parents' Assistant* (London 1796, new ed. 1897) and *Early Lessons* (London 1802, new ed. 1857), immediately took a prominent place in con-

temporary children's literature. Of her numerous novels Castle Rackrent (London 1800) is a strikingly realistic portrayal of Irish social conditions and character. Her writings impressed Turgeney, then just beginning his descriptions of Russian life, and Walter Scott, who declared that she had inspired him to depict Scottish character. The Absentee (London 1812), Ormond (3 vols., London 1817), Belinda (3 vols., London 1801) and other novels were primarily directed toward inculcating the "practise of the moral virtues which constitute human happiness." The extent of her preoccupation with social problems is indicated by the opinion of a contemporary writer, Madame de Staël, that Maria Edgeworth "s'est perdue dans la triste utilité." She was at her best when under the stimulus of her father's lively mind.

MICHAEL E. SADLER

Consult: Memoirs of Richard Lovell Edgeworth, Esq., Begun by Himself and Concluded by His Daughter..., 2 vols. (3rd ed. London 1844); The Black Book of Edgeworthstown, ed. by H. J. and H. E. Butler (London 1927); Zimmern, H., Maria Edgeworth (Boston 1883); Lawless, E., Maria Edgeworth, English Men of Letters series (London 1904); Pons, Jacques, L'éducation en Angleterre... 1750–1800 (Paris 1919).

EDMONDS, THOMAS ROWE (1803-89), English social theorist. After graduating from Trinity College, Cambridge, Edmonds published Practical Moral and Political Economy (London 1828), a comprehensive treatise presenting his view of social philosophy and a constructive, if in its principles highly revolutionary, scheme for the establishment of a "social system." Affiliated in general background with the Owenite socialists, Edmonds accepted the Ricardian laws of value and distribution as necessarily valid for the system of private property and after a detailed analysis of the fundamental needs of society concluded that the operation of these laws, coupled with general ignorance, alone prevented the attainment of human happiness. If private property were abolished, the labor of each adult male for two hours a day would suffice to supply the entire community. Delving into the problem of dissipating ignorance, Edmonds constructed in book III of his work what was in reality a complete and strikingly original system of social psychology; this aimed to show that all aspects of group culture including public opinion and national characteristics had their source in natural instincts, from which they developed by processes of association and memory. At this point Edmonds adumbrated a theory of

evolution resting on the assumption that knowledge is power and leading to the conclusion that the nation which acquired the best methods of controlling the processes of mental and spiritual growth-Edmonds thought it would probably be Great Britain-would become the nucleus of a world state. The means selected by Edmonds as the most conducive to the achievement of social perfection were, besides education, the stimulation of the instinct of gregariousness, the abolition of competition, which he regarded as an obstacle to advantageous division of labor, and the practise of eugenics. As he envisaged it in book IV of his work the structure of his "social system" involved, not unlike the Soviet system, a hierarchy of regional and professional councils for self-government. But lacking confidence in the working classes as agents of their own reform Edmonds believed that the change must be effected from above by the political powers and that it might come gradually. The strengthening of this conservative tendency was indicated by the publication of his Enquiry into the Principle of Population (London 1832), in which he considered various plans for the immediate amelioration of social poverty, "the nutriment on which sedition feeds" (p. ix). Among his most original suggestions were national reorganization of poor relief, national insurance for workers, state construction of public utilities, civic development and town planning and the encouragement of education and of a free press.

In 1832 Edmonds became actuary of the Legal and General Life Assurance Society, a post which he held for thirty-four years. Henceforth he devoted himself to problems of vital statistics. In his *Life Tables* (London 1832) he tried to show that the tendency of mortality can be reduced to a law of geometric proportion. This law he expressed by an algebraic formula which closely resembles the celebrated formula stated by Gompertz, although Edmonds insisted upon the independence of his conclusions. Between 1835 and 1862 Edmonds published many articles in the *Lancet* dealing largely with population, mortality and laws of sickness.

C. H. Driver

Consult: Driver, C. H., "A Forgotten Sociologist" in Journal of Adult Education (English), vol. iii (1929) 134-54; Beer, M., History of British Socialism, 2 vols. (London 1919-20) vol. i, p. 230-37.

EDUCATION, PRIMITIVE. Primitive education, the process by which preliterate peoples induct children into the cultural tradition of

the tribe, is characterized by a very great variety of theories and practises. Different societies select diverse customs for explicit emphasis. The Manus of Admiralty Island give definite early training in the respect for property; Samoans neglect to give any such specific instruction to their children, yet adult Samoans like adult Manus habitually respect property and property rights. Etiquette may be taught very early, as among the Omaha Indians and the Samoans, or the children may be given unbridled license for years, as among the Manus, yet in all three societies the adults observe the customary rules of etiquette. The Manus spend a great deal of time in teaching small children to make correct physical adjustments; the Samoans leave these same adjustments to the casual care of slightly older children and to the processes of imitation. The Kaffirs of South Africa and the Manus do not demand social responsibility from their children until they reach or pass puberty, while the Cheyennes and the Omahas treated the smallest child as an inefficient but nevertheless responsible member of society. A people may select a single technical skill to be taught by social and religious elaboration, as did the Maori in the case of weaving and the Fijians in the case of the art of war, or they may permit their young people to acquire these same arts through play and casual imitation of adult activity, as in the making of mats in Samoa or in the case of the art of spear throwing among the Manus. The importance of the child's role in the community and the consequent attention which is lavished upon him may wax or wane with age: among the Manus young children of two or three are considered of paramount importance and the developing individual is accorded less and less general recognition until after the first few years of married life; in Samoa status and age are positively correlated. The standard set and the progress made by children may be determined by an individual standard, as among the Manus and apparently also among the Plains Indians, or by a group standard, in which a child is expected to approximate only to the average of its age group, as in Samoa. Differentiated behavior for the two sexes may be insisted upon at a very early age or not until puberty, and it may be of different sorts. There may be similar games but sex segregation, as in Samoa; or no sex segregation but an early differentiatio. of types of play, as among the Manus; or L ? children's group may be regarded as a unit in

society, as in the children's camp of the Plains Indians or the Kaffir children's play communities, which had their own rules and regulations.

Adults are guided by varying conceptions of the child, who may be regarded as an adult in miniature moved by the same motives which actuate his elders, as among the Plains Indians, or as an unaccountable and irritating creature to be deceived, threatened and intimidated, as among the Kaffirs. There is also a wide variety in the self-consciousness with which the society views any of the processes of education. Among the Manus each child learns to swim by playing with slightly older children and in the same way he learns to beat a slit drum, to throw a spear or shoot a bow and arrow; the elders applaud informally but take no formal part. In Samoa the small child's début on the dance floor is carefully stylized. The Plains Indians were notable for the degree of conscious instruction which was given children through legends and long moral homilies; among the Omaha a father began to train his young sons into a mystical receptivity to the supernatural at a very early age. Similarly, a Dobuan child is taught magic from his earliest years and is also required to plant and till a small garden plot of his own. The Manus children never receive any formal instruction in religion, magic and the arts; physical proficiency, automatic respect for property and intense prudery are instilled more by chastisement and communicated effect than by any formal appeal to reason.

Methods by which the points that the society has selected for emphasis are enforced upon recalcitrant children also vary widely. The Zuñi Indians fiercely deprecate parental corporal punishment but subject the child to the far more nerve racking experience of being whipped by the masked scare dancers. The Samoans have adopted the disciplinary technique of punishing not the culprit but the next oldest child, who is viewed as being responsible for the younger child's good behavior. The Manus punish a child before the age of three for infractions of the rules of physical training and respect for property but then permit the child to gain the upper hand and control the parents through sulking and threatened withdrawal of emotional allegiance—the parents reserving as a weapon the sense of shame which has been instilled into the young children and which can later be invoked to enforce tabus and social conformity. Attitudes toward the pace at which the child should acquire its cultural tradition

and attempt to participate in adult activity also vary from the Samoan deprecation of all precocity to the gentleness and care with which the older men among the Cheyenne protect a child member of a war party against the teasing of the young men.

In spite of the greater frankness which characterizes much of primitive life there is wide divergence in attitudes toward sex knowledge and sex behavior. Seemliness is enjoined upon children in Samoa and in the Trobriands as the standard of sex behavior: Dobuan children are permitted a license in speech which would be a matter of insult if spoken by an adult; Manus children are denied the slightest approach to sex play. Manus parents make every effort to prevent their children from witnessing sex activity, while Samoan children make a game of spying upon lovers. In Samoa the youngest child is permitted to witness childbirth, but the Kaffirs felt constrained to lie in answer to children's questions about the facts of pregnancy and birth.

The role of the parents, the grandparents and the older siblings is very differently conventionalized among different peoples. In many parts of Melanesia the father's role is that of an affectionate and indulgent nurse, which may be further elaborated by the contrast between the gentleness of the father and the sternness of the mother's brother, who in matrilineal societies assumes disciplinary authority. Among the Kru, however, a strong development of patriliny casts the father in a stern role from earliest childhood. Among the Omaha Indians the moral and disciplinary role was taken over by the grandparents; the parents apparently remained the subjects of active identification, so that a split between moral discipline and affectionate identification may have occurred. In matrilocal residence a child may find refuge from too much teasing in the arms of the husbands of his mother's sisters, as among the Zuñi Indians. The strong emphasis upon the fostering role of the father for young children of both sexes among the Manus results in the mother's taking a secondary role, which later complicates her daughter's satisfactory identification with her own sex. Rank within the household may have a strong influence upon the child's development, as in Samoa, where association between men of rank and young children is socially forbidden. The extension of the biological family to include in a close residential unit some dozen to two dozen relatives results in a child's always having brothers and sisters of various ages and makes the sibling relationship a dynamic one educationally. The opposite condition found in Dobu, where each small biological family lives by itself and the child is continuously with its parents, prevents the sibling relationship from any important functioning.

The degree to which the supernatural is invoked as a disciplinary measure also varies arbitrarily. The Kassirs invoked monsters in whom they do not themselves believe in order to intimidate the children; the Manus rely more upon scare stories of land devils than upon the ancestral spirits in fear of which the community of adult Manus lives; the Dobuans early instil into their children a lively fear of the sorcery of members of other villages and this same fear is a powerful social deterrent in adult life.

Because initiation and puberty rites are conspicuous and lend themselves easily to description, there has been an overemphasis upon their educational significance. Puberty rites are characteristic not of all primitive societies but of some cultural areas in which particular and usually contiguous or related social groups have selected the period of puberty for social, economic, religious or educational elaboration. Initiation ceremonies for boys and girls are also found to have definite geographic distributions. Where either puberty or initiation rites occur, these ceremonies may have an explicit educational reference, as among the Koko Papuans, where consecutive religious training is given to the segregated boys; or they may be merely the admission of the initiate into some secret of adult life. Puberty ceremonials for girls may be oriented to their future success and moral and social achievement, as among the Thompson Indians, where the girl performs symbolic acts which are believed to encourage her magically and practically in various desirable moral traits; or they may be oriented to a protection of the community of the girl from maleficent supernatural influences, as in various parts of California; or they may be definitely directed toward beautifying the girl, as among the Gilbert Islanders and in east Africa. In the Gilbert Islands the nubile girl must remain in a hut which is shrouded from light in order to beautify her complexion, making any industrial pursuit impossible; but moral and legendary exhortation is given her by some elderly female relative. On the other hand, there are many cases, as among the Dobuans, where there is

no social recognition of puberty for educational or any other purpose. Puberty only becomes a crisis if the society has so conventionalized it; it is not necessary to tide an individual over the period of physiological puberty nor the period of social acceptance into the adult group unless that adult group has first phrased either one or both of these universal experiences as some sort of dangerous ordeal.

Definite social institutions designed primarily or at least in part for the instruction of the young are the exception rather than the rule in primitive society. They do not correlate with the amount of esoteric lore to be learned or the difficulty and intricacy of any technique which is to be handed down from specialists in one generation to novitiates in the next but are special developments. The formal training given the priestly novitiate in the Whare Wananga, the sacred college of the Maori, observed all the customary formalities of instruction such as common residence, a teaching class, examinations and graduation—although these were muffled in magical practises which cloud the analogy. Among the Zuñi, on the other hand, where there is apparently far more ritual to be memorized, no such institution is developed. A similar contrast is found between instruction in the art of housebuilding in Samoa and among the Indians of the northwest coast of America. Housebuilding in Samoa although not remarkably complicated was in the hands of a definitely recognized group of craftsmen, and apprenticeship to this group and recognition by it were necessary before an individual could become an accepted housebuilder. No such institution is found on the northwest coast, although there more elaborate houses are constructed. In Polynesia the emphasis upon payment for magical or traditional information is lacking; in North America payment between the novice and the master is strongly conventionalized. Where hereditary professions are found in a stratified society, such as in Africa with its smith's group or in India, the problem of technical education receives a special emphasis. The lack of correlation between the formality of training and the complexity of tradition no longer obtains when the tradition becomes as complex as that of ancient Mexico or Peru.

Primitive education, whatever its methods, whatever the age at which formal training is given, regardless of who the teacher is or what disciplinary means are employed, is from a superficial angle uniformly successful. In all

cases the tradition of the society is absorbed by the young. As primitive education does not ain. at improvement or at innovation, the standards which modern educational philosophers set up cannot be applied to it. Although divergent societies seem to attain objectively similar results, more detailed studies of primitive education, using as criteria the special consequences to the individual rather than the general results for the society as a whole, may provide data showing differential results. The varying ages at which different social attitudes and habits are instilled may be found to be a decisive factor in the peaceful adjustment of the individual to the demands of his society. Whether respect for property is made an automatic response, as among the Manus, or is enforced by fear of sorcery, as in Dobu, or by the fear of vendetta, as in Ifugao, may make a significant difference. The relative degree to which affection, fear or shame are utilized as socializing techniques may also be found to have important reverberations in the individual personality. The institutions of social control in any society may be found to be in some measure necessitated by or at least responsive to the type of training which is given the children, to the sex, age and relationship of the teacher, to the age of the child and to the techniques of training which are employed.

Striking contrasts are found when primitive education is compared with education in modern society. Modern education is a formal institution integrated with economic and political institutions, a fact which tends to obscure the essential similarity in all societies of the purpose of a total educational process, which may be defined as the assimilation of each individual to a cultural tradition. The great accumulation of knowledge and techniques in a society with a written tradition, a huge population and extensive division of labor makes the educational process impinge differentially upon members of the growing generation. The heterogeneity of contemporary culture also results in propagandist groups developing educational institutions of their own. Although modern man like primitive man cannot teach his children anything which some adults in the culture have not already mastered, it is possible to change so radically the proportions among those who learn different aspects of the accumulated tradition that profound quantitative changes may be wrought in society. It is for this reason that primitive education appears to be much more

static than does education in our modern civilization.

MARGARET MEAD

See: Adolescence; Initiation; Family; Social Organization; Custom; Tradition.

Consult: Mead, Margaret, Coming of Age in Samoa (New York 1928), and Growing Up in New Guinea (New York 1930); Grinnell, G. B., The Cheyenne Indians, 2 vols. (New Haven 1923); Fortune, R. F., Sorcerers of Dobu (London 1931); Malinowski, Bronislaw, Sex and Repression in Savage Society (London 1927), and The Sexual Life of Savages in Northwestern Melanesia (London 1929); Chinnery, E. W. P., and Beaver, W. N., "Notes on the Initiation Ceremonies of the Koko, Papua" in Royal

Anthropological Institute of Great Britain and Ireland, Journal, vol. xlv (1915) 69-79; Grimble, Arthur, "From Birth to Death in the Gilbert Islands" in Royal Anthropological Institute, Journal, vol. li (1921) 25-54; Hovey, E. O., "Child-life among the Smith Sound Eskimos" in Natural History, vol. xviii (1918) 361-71; Kidd, Dudley, Savage Childhood (London 1906); Ploss, Heinrich, Das Kind in Brauch und Sitte der Völker, 2 vols. (3rd ed. by B. K. Renz, Leipsic 1911-12); Gennep, Arnold van, Les rites de passage (Paris 1909); Van Waters, M., "The Adolescent Girl among Primitive Peoples" in Journal of Religious Psychology, vol. vi (1913) 375-421, and vol. vii (1914-15) 75-120; Hambly, W. D., Origins of Education among Primitive Peoples (London 1926); Miller, N., The Child in Primitive Society (London 1928) chs. vii-x.

EDUCATION

HISTORY	GEORGE S. COUNTS
Public Education	I. L. KANDEL
SECTARIAN EDUCATION	H. RICHARD NIEBUHR
PART TIME EDUCATION	JENNIE McMullin Turner
EDUCATIONAL FINANCE	HAROLD F CLARK

HISTORY. Education is as old as the human race. Indeed it may be much older, depending on the definition employed. Some would make education as broad as the learning process and thus include within its ample domain types of behavior common to all forms of animal life; some would confine it to the induction of the maturing individual into the life and culture of the group; others would restrict the concept still further to the conscious and purposeful control of learning by the more experienced members of society; and still others, reflecting the popular mind, would limit education to the work of certain special agencies, such as the tutor and the school, which presumably are devoted exclusively to the twofold task of teaching and learning.

If education be regarded primarily as the induction of the maturing individual into the life and culture of the group and if the group be broadly conceived to include the dead as well as the living, then this process is clearly essential to both the renewal and the growth of human society. In its absence the achievement of men would be limited by the powers and to the experiences of the individual, and what is known as culture could not develop.

Among primitive peoples formal and institutionalized education plays a distinctly minor role. The school is entirely absent. Organized and systematic instruction of any kind is restricted to very narrow areas. For the most part the individual is inducted into the life and

culture of his group by the process of living itself, much as he learns to speak his native tongue in the more advanced societies. But as knowledge grows and the social structure undergoes differentiation there appears a special class of persons, variously known as priests, shamans, wizards or medicine men, who increasingly take charge of group ritual and oversee the religious and moral instruction of the youth. Moreover, being the repositories of certain forms of strictly esoteric knowledge which the group regards as of transcendent worth, they gradually assume a position of great power and importance. Freed from the more immediate demands of life and endowed with leisure, they are enabled to devote their energies to the further development of this valued heritage.

It is probably at this point that the first true schools appeared. Since the priestly knowledge must be passed on with great thoroughness and precision, the need for a period of prolonged and systematic training is apparent. Among the primitive peoples this training process may never go beyond a crude form of apprenticeship, but with the invention of writing and the accumulation of precious records more efficient and reliable methods of tuition become necessary. The origin of a special institution devoted exclusively to the work of education is lost in mystery. Probably, however, this event occurred some four or five thousand years ago in one of those early civilizations which developed between the Mediterranean and the Yellow Sea.

Possibly Egypt led the way in the organization of formal education. During the period of the Old Kingdom (2980-2475 B.C.) schools of some kind evidently existed, attached to the palace and serving not only the sons of the king but also the boys of the wealthy classes. Here pupils received instruction in the art of writing, ethical precepts, practical philosophy and good manners; also in gymnastics and swimming. At a later date, to meet the need for a trained personnel to administer the affairs of the state, numerous instruction houses, as they were called, were established. Boys from the middle classes attended these institutions and served a sort of apprenticeship under appropriate higher officials chosen for the work.

The Chinese system of education, which rivals the Egyptian in age, has been traced back to the twenty-third century B.C. Very little, however, is known about it during the first seventeen or eighteen centuries of its existence. It was after the time of Confucius (551-478 B.C.) that the system took form which persisted with but little change down to the close of the nineteenth century. The major object of this system, which consisted of an elaborate network of schools of lower and higher grade and state conducted examinations, was the selection of candidates for every office of public trust from that of elementary school teacher to that of member of the emperor's cabinet. The subjects of study were the Four Books and the Five Classics, the sacred literature of China written by Confucius and his disciples. The pupil was expected to memorize the content and imitate the form of these literary masterpieces. No deviation from the patterns set by the past and no originality in style were tolerated. For century after century the principle of conformity was enforced upon a vast population. Although the schools reached directly but the smallest fraction of the people and although their methods were extremely crude, their influence was felt throughout the length and breadth of society. To this systematic use of the means of formal education for the prevention of social change history offers no parallel.

If China was ruled for many centuries by scholars, India was ruled for a period of almost equal length by priests. During the Brahmanic era, which dates from about the sixth century B.C. to the thirteenth century A.D., the Brahmans—the priests, teachers and lawgivers of the country—fixed the limits of knowledge and the extent of educational opportunity for the

lower castes: the warriors, the merchants and husbandmen, and the artisans and laborers. The outcasts, an order of persons not recognized by the Brahmanic system, possessed no educational rights or privileges of any kind. Two types of schools, reflecting this stratification of Hindu society, were organized: the Sanskrit school and the village school. The former was literary and philosophical in emphasis, was designed for members of the priestly order but was open to the more favored representatives of the lower castes. Its curriculum consisted of the sacred Vedic literature supplemented by heroic secular poems and the science of the age. In the course of time, however, this institution became differentiated into separate schools of literature, law, astronomy and medicine. The village school was eminently practical in purpose and was conducted for the sons of small landowners, gardeners and traders and therefore reached a much larger number of persons. It consisted merely of a class of boys from five to ten or twelve years of age assembled about a teacher in any convenient place. The subjects of study were reading, writing, arithmetic, money, weights, measures and simple accounts; and the instruction was conducted in the vernacular. The Brahmans also exercised a profound influence over all ranks of Hindu society through the all pervading religious ceremonials.

The Jews represent yet another tendency among the early civilizations. Although they were to a peculiar degree a religious people they were somewhat slow in the establishment of schools. This was apparently due in part to the persistence of a simple tribal culture rather than to a lack of interest in education, in part to the non-speculative and largely behavioristic nature of Jewish religion at the time. The exaltation of the family and parental responsibility was no doubt another important factor. In Biblical times the Jewish child had direct experience with the annual festivals and religious ceremonials. The father played the role of interpreter and counselor and was expected to exercise general supervision over the moral and religious training of his children. The educational ideals of this early period may be found in the book of *Proverbs*, which was written about the year 1000 B.C. Following the return of Ezra in 458 B.C. synagogues were established in which the sacred writings were studied and expounded. Under the influence of the scribes these institutions gradually developed into centers of instruction for those interested in the

law. About 70 B.C. definite schools for orphans were founded, and a century later a decree was promulgated requiring the establishment of elementary schools for all children from the age of six. Each community was expected to provide a teacher for every twenty-five children. The program of instruction, however, seems to have been much the same as that of the family. The emphasis was strongly religious and the subject matter was Holy Scripture. The further distinctive development of Jewish education was cut short by the spread of Greek and Roman influence.

The contribution of the Greeks and particularly of the Athenians to the theory and practise of education can scarcely be overstated. They freed the individual from the domination of the group, encouraged the development of personal character, formulated the ideal of a liberal education and for the first time in history endeavored to bring into harmony the intellectual, moral and aesthetic aspects of life. Some enthusiasts would even argue that the intervening centuries have witnessed no important advances outside the realm of the conquest of material things. Yet among these Greeks the position of woman was inferior and degrading, and the great majority of the people were slaves.

During the Homeric period the Greeks were emerging from barbarism into civilization. The methods of education were consequently similar to those found among the primitive peoples today. With the appearance of the city-state as the dominant social institution education assumed definite forms which varied from state to state. The contrast between Sparta and Athens, the two leading states, is peculiarly illuminating.

The essential features of the Spartan system of education, which persisted with but little modification until the Macedonian conquest in 338 B.C., are supposed to have been outlined by Lycurgus in the ninth century B.C. The central purpose of this system was to produce the ideal citizen and soldier—obedient, loyal, truthful, courageous. The general conduct of education was placed in the hands of state officials and the whole of life was organized with a view to the training of the young. Every Spartan adult was a teacher and every Spartan child had a tutor. The girl received the same attention and much the same kind of education as the boy.

During his first seven years the boy was under the direct care of his mother. He then went to the public barracks to live at state expense. There under the guidance of his elders he engaged in a great variety of gymnastic exercises and sports—running, leaping, boxing, wrestling, hunting, discus throwing, javelin casting, choral dancing and military drill. Reading, writing and music were a purely incidental part of his education. From eighteen to twenty he devoted himself to the serious study of arms and military science. Thereafter for ten years he lived the life of a soldier in the army. At thirty he attained the full status of citizenship and the privilege of marriage.

In Athens the major responsibility for the education of the young was placed on the family. There were no public schools. The state made direct provision only for the military training of young men between the ages of sixteen and twenty. Through the Court of the Areopagus, however, which had special charge of the morals of youth, the state was able to exercise an indirect control over the work of parents and private schools.

As in Sparta the formal education of the boy began at seven years. If the family could afford it, his schooling continued until fifteen or sixteen, when the period of childhood terminated. He attended two schools alternately—the music school and the palaestra, or the gymnastic school. The former seems to have received its name from the fact that its curriculum consisted originally of music and poetry. Later drama, history, oratory and science were added; and about 600 B.C. reading and writing were introduced. The palaestra was devoted to games, gymnastics and physical contests of various kinds. Through dancing the spirit of the two schools was united.

At sixteen the boy discontinued all literary and musical study and entered the gymnasium—a state institution—where he remained two years. Here, while still under the control of parent or guardian, through physical contests, political discussion and free association with his elders he was prepared for the duties of adulthood. At eighteen he became a citizen cadet and for two years a ward of the state. Then at twenty years of age, having successfully passed various tests, he was admitted to full citizenship.

After the age of Pericles profound economic, political and social changes widened the intellectual horizons and created on an unprecedented scale opportunities for individual advancement. As a consequence the love of ease

and comfort grew, the old loyalties weakened and the sense of social obligation atrophied. The entire program of education was affected. In the music school literary study increased, grammar and rhetoric were emphasized and new musical instruments were introduced. In the palaestra the severity of the physical exercises was relaxed. Everywhere education became more intellectual, and instruction took the place of training. To prepare the individual for success under the changed conditions a new class of teachers, the sophists, appeared in the land. These men professed knowledge in all fields and gave instruction in dialectic, discourse and public speech. In their hands education hastened the process of social disintegration.

The question of the reconciliation of the interests of the individual and society became acute. Educational theorists arose who sought a non-traditional basis for morality. Socrates arrived at the fundamental principle that "knowledge is virtue" and perfected a method of questioning by which the individual could arrive at knowledge through the critical examination of his own experience. The development of the power of thought rather than the acquisition of information was to him the goal of education. Plato in the Republic drew the outlines of an ideal state in which the citizens were divided into three classes: the philosophers, who governed the state; the soldiers, who defended it; and the farmers, artisans and business men, who produced its wealth. The members of these classes were both trained and selected by an elaborate system of education. Since his inquiry into the nature of knowledge had led Plato to the conclusion that reality lay in ideas, their conception dominated his educational program. Aristotle emphasized the functioning of ideas in practical life and formulated the inductive method as the only reliable source of knowledge. Moreover, he made happiness or goodness rather than knowledge the end of education and the basis for the reconciliation of individual and society. The work of these great theorists, however, seemed to have had but little effect on the course of events: the forces of change were too powerful to be thwarted; the individualistic tendency triumphed; education became a means of promoting personal advancement.

Following the conquests of Alexander Greek culture spread throughout the empire and in time became a universal culture. This resulted in further changes in educational institutions. Out of the work of the sophists came two dis-

tinct types of schools: the rhetorical and the philosophical. The first trained for the practical activities of the intellectual class; the second centered attention on argumentation and philosophical speculation. Illustrative of the latter were the academy of Plato and the lyceum of Aristotle. Other philosophers, such as Zeno and Epicurus, also gathered students about themselves and established schools of great influence. Gradually these institutions abandoned the independent search for knowledge and devoted themselves to the formal elaboration and propagation of the thought of their founders. Finally, out of the rhetorical and philosophical schools grew great universities, like those of Athens and Alexandria, in which famous scholars labored and learning in many fields was cultivated. Thus ancient Greece seems to have developed the basic educational institutions found in the modern world.

The Romans were far less prolific in the realm of education than the Greeks. Essentially a practical people, little given to speculation and intellectual cultivation, they were interested in the conquest of the material world. They were soldiers, administrators, statesmen. In the rearing of their children they consequently emphasized character formation and the homely virtues of piety, modesty, courage, fortitude, prudence, honesty and trustworthiness. The concept of duty pervaded their program of education.

During the period of early Roman education, which embraced the five centuries following the founding of the city in 753 B.C. and which preceded the coming of Greek influences, the processes of education were carried on without the help of special agencies. The major responsibility was borne by the family. Both father and mother directed the education of the child. By means of an informal but rigorous system of apprenticeship which brought the child into contact with real life, rather than through gymnastics, sports, music and literature, the individual was prepared to discharge the various duties of the Roman citizen. Every boy was expected to learn by heart the laws of the Twelve Tables, not for the purpose of awakening the mind but to provide a guide to conduct. Toward the close of the period a few private and relatively unimportant elementary schools for teaching the rudiments of reading, writing and arithmetic began to appear.

As Rome extended her influence over the Italian peninsula in the third century B.C. the old educational system felt the impact of new

forces. The elementary schools increased in number and importance. Their curriculum became more literary. The *Odyssey* was translated into Latin and introduced into the program of study. Greek teachers came to Rome, often as slaves, and founded Greek grammatical and rhetorical schools. Roman youths were sent to Greece to finish their education.

With the founding of the empire during the first century B.C. the appropriation of Greek culture proceeded more thoroughly and systematically. The elementary school took on the character of a preparatory institution for the imported grammar school, which became definitely organized, received public support and assumed two forms, the one teaching Greek and the other Latin. The latter spread throughout the cities of the empire, carrying not only the Latin language but also Roman history, science, literature and in time even music, mathematics and dialectics. After completing the grammar school at fifteen the Roman boy entered the rhetorical school and continued his preparation for public life. Here he studied the theory and practise of oratory and in addition music, arithmetic, geometry, astronomy and philosophy. The object of this training was to produce the orator, the man capable by reason of his knowledge, grace and ability as a speaker of occupying and holding positions of leadership in a society lacking newspapers and printing presses. Quintilian in his De institutione oratoria gives the Roman conception of the nature of oratory and at the same time presents the first systematic and comprehensive treatise on education ever written.

Other phases of Greek education were also introduced. Libraries were brought to Italy by Roman conquerors as a part of the spoils of war. One of these libraries, which was established in Rome by Vespasian, developed into the Athenaeum under Hadrian and eventually into the University of Rome. Here were taught Latin, Greek, philosophy, law, medicine and even architecture, mathematics and mechanics. This direction of the university to the service of practical ends is entirely characteristic of the Roman influence.

With the decay of Roman society, the establishment of the absolute monarchy and the reduction of the liberty of the individual citizen the social foundations of this educational system were gradually undermined. As a consequence by the end of the third or the beginning of the fourth century the schools began to lose their

vitality and to become formalized. At the same time a powerful revolutionary force had appeared in the Mediterranean world; through a series of decrees following the conversion of the emperor Constantine in 312 A.D. Christianity was made the official religion of the Roman Empire.

The rapid spread of the Christian church throughout the Roman world during the fourth and fifth and among the Germanic tribes during the sixth and seventh centuries represented a political rather than a spiritual conquest. The task of Christianizing vast populations, pagan and barbarian, still remained. This required, on the one hand, the philosophical elaboration of the simple doctrines of lesus and, on the other, the conversion of the masses to a new way of living. The first need was met by the work of the early Christian fathers who had been trained in the schools and universities of Greece and Rome; the second, by the various ceremonies and institutions of the church operating over a period of a thousand years.

In the Mediterranean basin the church gradually took over many of the old Roman schools and directed them to the development and propagation of Christian doctrine. In these schools and in others specially founded for the purpose the leaders of the new religion were prepared to meet the attacks of Greek philosophers. Also special schools, known as catechumenal and catechetical schools, were organized to instruct converts in the articles of faith. In time these institutions developed into episcopal or cathedral schools and became a definite part of the ecclesiastical organization: each bishop founded a school for the training of his clergy and after the fifth and sixth centuries for the preparation of boys for the priesthood. Since only these schools and those associated with the monasteries survived the triumph of the barbarians in the West, education reverted to a more primitive level.

The schools established by the various monastic orders for the purpose of training novices were the most important and numerous schools of the Middle Ages. The education provided, however, was primarily moral and disciplinary rather than literary and intellectual. Dedicated to the service of the church, the orders were founded on asceticism; yet the monastery was a center of learning in an age when things of the mind were not prized. The monks collected books, copied manuscripts, wrote chronicles and practically monopolized the production of

literature down to the eleventh century. They also organized the knowledge of the time into the seven liberal arts: the trivium, including grammar, rhetoric and dialectic; and the quadrivium, embracing arithmetic, geometry, music and astronomy.

In the eleventh and twelfth centuries a marked revival of intellectual interest followed the breaking down of mediaeval isolation, the establishment of contacts with the civilizations of the East and the general growth of culture in the West. This revival took the form of scholasticism and generated a movement which dominated the cultural life of Europe until the fifteenth century. Its controlling purpose was to found faith upon reason and combat various heretical views which were creeping into the church. To the task came men of great talents, such as Albertus Magnus (1193–1280), Thomas Aquinas (1225-1274), John Duns Scotus (1271-1308) and William of Ockham (1280-1347). The philosophy of Aristotle was rediscovered and vigorous controversies were waged. Although the subjects of disputation were the doctrines of the church and the methods were highly formal, scholasticism nevertheless represented a movement of great power and significance. It set forces in motion which were destined to overthrow the orthodoxies of the mediaeval world.

The most important product of scholasticism was the establishment of new types of schools. It was in the reign of the schoolmen, as the leaders of the movement were called, that the first universities were founded: the University of Bologna in 1158 and the University of Paris in 1180. During the next century, the thirteenth, nineteen more were founded; during the fourteenth, twenty-five; and during the fifteenth, thirty. By 1600 there were 108 universities in Europe. Since these institutions were given special privileges and a considerable measure of freedom they rapidly became centers of great influence. Young men from many countries mingled together and engaged in the study of the arts, medicine, law and theology—the four faculties, or divisions of knowledge, into which instruction was organized. Latin was the language of the university as it was of the church and constituted approximately the only prerequisite of attendance. Because of the scarcity of books the instructor employed the lecture method and gave opportunity for disputation. Although the university reflected in its structure and its practises the life of the age it fostered

the spirit of inquiry and laid the foundations of European scholarship. Out of it came the heralds and the architects of the modern world —Dante, Petrarch, Wycliffe, Huss, Luther, Calvin, Copernicus, Galileo, Newton.

Because of the position of Latin in church and university the later Middle Ages witnessed the growth of a variety of Latin schools. To the schools of earlier origin—episcopal, cathedral and monastic—were added at this time schools established by various guilds, schools maintained by private endowment and schools connected with almshouses and other institutions for poor relief. The function of these grammar schools was to prepare young boys for the church and the university. By the sixteenth century they were found in most of the towns and cities of the countries of the West. With the passing of the feudal order they gradually came to constitute the system of secondary education which, combined with the university, was to provide the opportunities of formal education for the ruling classes of Europe for more than three hundred years.

At the same time certain social changes were taking place which eventually fashioned a school for the masses. Between the twelfth and the sixteenth century with the growth of commerce and the establishment of self-governing cities a new class appeared, composed of craftsmen and merchants. Since the members of this class had no interest in Latin and since their occupations rested increasingly on reading, writing and arithmetic, a demand arose for the organization of schools to teach these subjects in the vernacular. Such institutions seem to have appeared in certain cities as early as the thirteenth century, although even at the close of the Middle Ages they were almost entirely absent in the villages and rural districts. They represented the beginnings of that system of elementary education which was to serve the masses of the people in every western state a few centuries later.

The burden of education during the Middle Ages was borne by non-scholastic agencies. The rites, ceremonials and services of the church were powerful factors in the sphere of religion and morals. The practical training of the masses was acquired for the most part in the home and on the land. With the development of the guilds a definite system of apprenticeship was organized for the preparation of the craftsman. For the nobility an interesting and elaborate scheme of education took form. From his sev-

enth to his fourteenth year the boy served as a page, performing various simple tasks about the castle, such as attending the ladies and waiting upon the table. At fourteen he became a squire and was attached to some knight, for whom he performed personal services and acted as special attendant in the tournament and on the battlefield. All the while he was supposed to be learning "the rudiments of love, of war, and of religion." At the age of twenty-one, after observing a number of religious ceremonies, he received the badge of knighthood.

In other parts of the world during this period —in China, in India, in Asia Minor—important developments were taking place in learning and education. Under the patronage of the Saracen courts beginning with the eighth century the study of Greek philosophy, which had been suppressed by the Eastern church in the sixth century, was fostered. Mathematics, natural science and medicine also flourished. From such important centers of culture as Bagdad, Basra and Kufa the movement spread to Spain and took form in the famous school of Cordova. Everywhere the Saracens established libraries, universities and institutions for the instruction of children. They promoted the study of geography, algebra, advanced arithmetic, medicine, surgery, pharmacy and physiology and made significant and original contributions to knowledge in all of these disciplines. In the twelfth century, however, a reaction set in and Mohammedan culture entered a period of stagnation and decline. At the same time Christendom came into possession of Saracen learning and entered upon a period of rapid progress.

These various influences—the growth of commerce and industry, the founding of the universities, the establishment of contacts with the culture of the East and the rediscovery of the literature of the ancient world—combined to transform the social system and to destroy the intellectual foundations of the Middle Ages. Men revolted against authority in all of its forms; they craved a richer, fuller and broader life; they yearned to explore the realms of art and nature. And they found in the literature of the ancient Greeks and Romans evidence that at one time men had so lived. Originating in Italy, the intellectual center of the period, the revolt gradually moved north and west and profoundly affected every phase of life.

The Renaissance altered both the purpose and the content of education. Particularly in Italy it shifted attention from the world of spirit

to the world of sense; it defined the goals of life in terms of the development of a free moral personality; it revived the conception of a liberal education as developed by the Greeks. Paulus Vergerius, an educator of the period, thus formulated the new point of view: "We call those studies liberal which are worthy of a freeman; those studies by which we attain and practise virtue and wisdom; that education which calls forth, trains and develops those highest gifts of body and of mind, which ennoble men and which are rightly judged to rank next in dignity to virtue only." The fact that the classical languages and literatures became the vehicle of this humanistic education was in a sense a historical accident. They were but the keys which unlocked the doors to the rich cultures of the past, and yet with the passage of time humanism became identified with the particular forms in which it first was clothed. By the end of the sixteenth century a knowledge of Latin grammar and syntax was substituted for an acquaintance with the culture of the ancient world and a severe discipline of the mind became the goal of education.

The effect of the Renaissance on the organization and conduct of education was pronounced. In the universities Greek language and Greek literature were added to the curriculum, classical Latin was substituted for ecclesiastical Latin, and the general tone of the institution was liberalized. But it was at the level of secondary education that the most significant changes occurred. Here a struggle for control developed between secular and church authorities. In Italy and to some extent in Germany under the influence of court and nobility schools were established in which the ideas of chivalry and humanism were fused. More important in the Teutonic countries, however, was the founding of the Gymnasium, which has prevailed down to the present time as the most characteristic form of secondary education. This institution was created during the latter part of the fifteenth century by the transformation of church and burgher schools already existing. The type was set very largely by the Gymnasium organized in Strasbourg by Johann Sturm (1507-1580) in 1537. In England the movement took the form of the great public schools, such as Winchester, founded in 1379, Eton in 1440 and St. Paul's in 1512, which have trained British leaders for centuries. In the establishment of the Latin grammar school in Boston in 1635 the influence of the Renaissance reached

America; but by this time the ecclesiastical tradition had triumphed over the liberal vision of the early humanists.

In the north and west of Europe the Renaissance was closely related to, if not identified with, the Protestant Reformation. This movement, which was also a protest against the authority of the mediaeval church and which had its roots far back in the past, reached its fruition in the sixteenth century under the leadership of Martin Luther and John Calvin. According to the Protestant theory the road to individual salvation lies through a direct appeal to God rather than through the mediation of the church. And since the Divine Will was supposed to be revealed to man in its clearest form in the Holy Scriptures, the ability to read the Bible became necessary to salvation. The Protestant Reformation thus laid the foundation for the organization of universal elementary education in the vernacular.

The establishment of a system of universal elementary education, however, was not the immediate result of the Reformation. The first concern of the Protestant leaders was the winning of the struggle. The fact that the art of printing had just been developed greatly affected the situation. The struggle among the rival sects was carried on through books and brochures, as well as by means of the sword. The pamphlet is said to have been originated by the reformers as a cheap and convenient method of reaching the people. In the press society found a new educational agency, which has continued to gain in power with the passing of the centuries. But neither in England nor in Germany was there any great increase in the provisions for elementary schools. Only in Puritan Massachusetts was the logic of the Protestant position applied. There as early as 1647 the General Court required all towns of a certain size to establish and maintain reading schools. When the Protestants finally did organize primary instruction they were less interested in preparing their children to read than in thoroughly indoctrinating them in the tenets of the new faith. The Reformation therefore increased for at least a time the grip of the clergy and the church upon the schools.

This conclusion is reenforced by a reference to the Counter-Reformation. The Catholic church quickly took the offensive in the struggle. The methods of education and propaganda which the Protestants had proved effective were adopted. Various teaching orders were founded

whose members rapidly took over the educational functions of the church. The most powerful of these organizations was the Society of Jesus, which was organized in 1540 by Ignatius de Loyola. Since the major interest of the Jesuits was the education of leaders, they devoted their energies to the promotion of secondary and higher education. This they did with great energy and efficiency. They gave close attention to administration and supervision, upheld a stern and rigorous discipline, provided for a thorough training of teachers and recognized the importance of method. The teaching orders controlled secondary, higher and a large part of elementary education in the Roman Catholic countries of Europe until the end of the eighteenth century.

With the coming of the modern age formal education assumed a significance far in excess of anything that the world had yet seen. The school, which had been a minor social agency in most of the societies of the past, directly affecting the lives of but a small fraction of the population, expanded horizontally and vertically until it took its place along with the state, the church, the family and property as one of society's most powerful institutions. Moreover, the processes of education became the subject of increasingly careful and intensive study, and elaborate programs for the training of teachers were developed. At the same time the educational responsibilities of old institutions like the home, the church and industry weakened, while certain new institutions endowed with large educational possibilities, such as the press, the cinema and the radio, appeared and prospered. The great changes of this period may best be outlined under the heads of nationalism, democracy, industrial civilization, social revolution and the theory and science of education.

The development of the strong national state with populations united by a common cultural tradition and the sentiment of patriotism challenged the power of the church in the realm of temporal affairs. From the sixteenth century onward the former grew at the expense of the latter. As a consequence the state gradually took over responsibility for the organization and conduct of formal education. This change of course progressed at different rates in different countries,

Although the English were perhaps the first people to manifest the characteristics of nationalism they did not establish a national system of schools before the middle of the nineteenth

century. It was Prussia, under the despotic but benevolent rule of the house of Hohenzollern, that led the way in making education a function of the state. Throughout the eighteenth century the Prussian kings displayed an active interest in the question of education and encouraged experimentation. During this period also a powerful philanthropic movement, devoted to the improvement of the conditions of the masses by means of education, spread through Germany, England, France and other countries. In 1794 the agitation and decrees of practically a hundred years culminated in the publication of the Allgemeine Landrecht, the fundamental code of the Prussian law, in which schools and universities were defined as state institutions. In the United States the battle for free state schools was fought in the second quarter of the nineteenth century.

The transfer of the school from the church to the state had profound effects on the conduct and substance of education. The purpose of education underwent fundamental transformation. Whereas the church had sought to make good communicants and save souls, the state was interested in making good citizens and promoting the national welfare. To be sure, the conception of what constituted good citizenship or national welfare varied greatly from country to country and reflected the interests of the ruling class or group. Nevertheless, there was a general shift of purpose, which was revealed particularly in changes in the curriculum. Under the domination of the church practically everything taught in the school, from the alphabet to science, carried a strong religious flavor. The state introduced a secular bias, widened the program of instruction, emphasized the teaching of patriotism and exalted the national culture. Moreover, while administrative control ranged from the highly centralized systems of France and Prussia to the extreme localism of England and certain American communities, the assumption of responsibility by the state undoubtedly resulted in the wider extension of educational opportunity and the more systematic organization of schools. During the nineteenth century compulsory schooling for children between the ages of six or seven and thirteen or fourteen became general among the more advanced nations of the world.

Democracy is another force which has left its impress on the schools. Although there is much disagreement about the nature of democracy as an ideal, historically it has assumed two

forms which have greatly affected education. In its political manifestation democracy involves the extension of the right of suffrage to the masses. In democratic countries one of the most powerful reasons advanced in favor of the establishment of free schools is the argument that the responsible citizen must be informed and that in order to be informed he must know how to read. It is interesting to note, however, that the more enlightened monarchs have also favored the abolition of illiteracy. Undoubtedly the ability to read may merely make the indi vidual citizen more subject to propaganda and a willing tool in the hands of some ruling caste. Universal literacy greatly widens the possible range of mob behavior.

A second manifestation of democracy which has influenced the school is the ideal of equality of opportunity. Practically throughout history the privileges of formal education have been limited to a small part of the population, to the favored social classes. Even with the rise of the great state systems of education in the nineteenth century a dual organization of schools was commonly adopted. The one half of the system, providing a meager education and composed of the elementary school only, was designed for the masses; while the other, comprising a rich and extended program of secondary and higher education, was open to the children of the aristocracy. In its primitive stages this dual system was brought to the American continent by the early colonists, but it was unable to survive the democratic conditions generated by a pioneering economy. During the seventeenth century the private academy replaced the Latin grammar school and opened up a variety of opportunities for the middle classes. Then in 1821 there was established in Boston the first public high school. This institution represented an upward extension of elementary education and spread rapidly through the country. During the next thirty years the development in the American Middle West of the state university completed the educational ladder and established a single system of free public schools open alike to all classes of the population. Since the beginning of the twentieth century and particularly since 1918 this organization of education, with certain modifications, has spread to many other countries.

Industrial civilization, although still in its early stages, has already transformed the institutions of education. This new civilization of science, technology and machinery which has

taken form in the west of Europe and in America during the last century and a half and which now unites the whole world into a single great society is marked by rapid change, close integration, extreme differentiation and most extraordinary power; it has greatly widened the interests, the responsibilities and the opportunities of men. The small self-sufficient community is rapidly making way for an order of greater scope and complexity. In the preparation of the individual for even the more common activities of life the simple methods of apprenticeship are no longer adequate. As a consequence the curriculum of the school has been greatly extended. The so-called modern disciplines—mathematics, natural science, modern language and literature, history and social science—have been added to the program of studies in the secondary and higher schools. And following these have come the distinctly practical subjects, such as agriculture, commerce, technology and the industrial, household, aesthetic and recreational arts. The founding of trade schools, technical institutes, engineering colleges and great research laboratories during the nineteenth and twentieth centuries may be traced to the rise of industrial civilization.

Along with the extension of the curriculum has gone a great expansion of formal education. The school, in the form of kindergartens, crèches and nursery schools, is extending itself downward to embrace the early years of childhood and even of infancy. This institution is also reaching upward into the years of adult life. The dynamic quality of industrial civilization is making of education a lifelong process. But perhaps the most striking response of the school to new culture is found in the growth of secondary and higher education. Thus in 1890 there were probably not more than 300,000 boys and girls, or less than 6 percent of children of appropriate age, attending the secondary schools in the United States. By 1930 this number had increased to approximately 5,000,000 and embraced at least one half of the children of appropriate age. More recently the colleges and universities have been growing in similar fashion. Apparently the same forces are operating in other countries as man's conquest of nature increases the economic surplus, lengthens the span of life and makes possible the prolonging of the period of childhood and youth.

The non-scholastic education of the child has also been greatly affected. The family and

small community, the major educational institutions in practically all societies of the past, have both been greatly weakened. The same may be said of the church. On the other hand, certain institutions of great power have either appeared or grown rapidly during recent times. The press although continuing to evolve has already become a factor of enormous influence in social life. The cinema, the radio and travel are still in their youth, but their educational possibilities are clearly manifest. One of the major cultural tasks of the immediate future is the direction of these new agencies to socially desirable ends. The importance of this problem seems to be most fully recognized in Germany, the Soviet Union and some of the smaller countries of Europe.

As industrial civilization spreads over the world it seems destined to influence educational theory and practise everywhere. The great nations of the West, in their search for markets and raw materials, have imposed themselves and their institutions on the industrially retarded peoples of the earth. Thus the English have gone into India, the French into Indo-China, the Dutch into Java, the Americans into the Philippine Islands. In each case the conquering people has sought to carry its educational system, at least in part, to the conquered. On the other hand, the Japanese scrapped their antiquated educational institutions in 1872 and introduced a new system based upon European ideas. At first they followed French leadership, but in 1886 reorganized their program somewhat after the German pattern. In 1905 the Chinese experimented with the new Japanese program only to abandon it seven years later in favor of an arrangement more like that developed in the United States. Throughout the world old educational institutions give way to science and the machine.

The war of 1914-18 precipitated a series of social and political revolutions of profound significance for education. The outstanding event of the period was the great convulsion which overthrew the rule of the Russian czar in 1917 and under the leadership of Lenin proceeded to the construction of a socialistic state. Here for the first time in history formal education is being used on a grand scale in the building of a new order. Practically all of the cultural institutions of society except the family and the church have been forged into a single instrument and made to serve the one great purpose. The Soviet educational system there-

fore includes not only one system of schools for the younger generation and another for adults but also the press, the library, the bookstore, the museum, the art gallery, the theater, the cinema, the radio, the excursion, the amusement park, the army and many other agencies. With the launching of the Five-Year Plan in 1928, a gigantic program for the industrialization of the country, the collectivization of agriculture and the general development of the cultural life of the people, this vast system of education has been assigned a concrete and definite task of enormous magnitude. It is being asked to change the very character of a population of about 160,000,000 persons and to compress within the limits of a single generation the evolutionary processes of a century and a half.

The modern age, like the ages that went before, has had its educational theorists-men who have devoted their lives to the study of the educative process, the nature of the child and the work of the school. John Amos Comenius advocated the complete development of man as a rational creature, outlined a comprehensive plan for the organization of education from birth to maturity, championed gentleness and kindness in the discipline of children and greatly advanced the writing of textbooks. A generation later John Locke contended that learning from books is less important than virtue, wisdom and breeding; that the aims of the school should be secular rather than religious in nature; that the development of "a sound mind in a sound body" should be the dominant purpose of education; and that methods of instruction should be based upon the natural activities of the child. Jean Jacques Rousseau, following in the footsteps of Locke, vigorously attacked artificiality and formalism in education as well as in life; advocated a return to nature in the realms of education, family, politics, religion and art; wrote the most influential book (*Emile*) on education published during modern times; argued that man is good by nature and degraded by social institutions; contended that the child should be treated as a child and not as a miniature adult; and outlined a general theory of education which emphasized motor activity, sense perception, natural interests, simple reasoning and the psychological rather than the logical method. Johannes Heinrich Pestalozzi, under the influence of Rousseau, sought "to psychologize education"; insisted that the child's instincts and

capacities be respected; defined education as the "harmonious development of all the faculties"; advocated strict but loving discipline in the school; conceived of education as an instrument for improving the condition of the masses; and by precept and example argued that the correct methods of teaching should be discovered by experimentation. Johann Friedrich Herbart said that the "term virtue expresses the whole purpose of education"; pointed to the practical limitations placed on education by the nature of the child; made the development of many sided interests the aim of instruction; rejected the "faculty psychology" with the associated conception of education as formal discipline; argued for the importance of subject matter in the educative process; emphasized the humanistic aim of historical studies; developed the doctrine of apperception; and outlined a definite method to be followed in the acquisition of new knowledge. Friedrich Froebel, a close disciple of Pestalozzi, organized experimental and model schools; founded the first kindergarten; developed an elaborate system of symbolism for the instruction of young children; emphasized the importance of creative activity in play, art and domestic life; and contended that social training should be provided from infancy through cooperative games. Herbert Spencer attacked the formalisms of the English education of his day; contended that scientific knowledge is of most worth; defined the goal of education in terms of "complete living"; and made an analysis of the educational needs of society that has greatly influenced subsequent students of the school curriculum. John Dewey argues that the "primary business of the school is to train children in cooperative and mutually helpful living"; that the "primary root of all educative activity is in the instinctive, impulsive attitudes and activities of the child"; that interest and effort are not to be regarded as antagonistic; that industrial activities should be made the basis of the life of the school; and that education should involve the continual reconstruction of individual experience and social life. Under the leadership of William H. Kilpatrick and other educational thinkers in the United States and Europe the ideas of Dewey and certain of his predecessors have taken the form of a definite movement which in the United States has received the label of progressive education. The movement has already gained considerable strength in many schools and in time will no doubt affect the

conduct of the great state systems of education. Closely associated with the development of educational thought just outlined is the movement for the scientific study of education. Pestalozzi in his insistence on the testing of method by experimentation and Herbart in his psychological studies both recognized the importance of applying the scientific method to the problems of education. In the realm of psychology this point of view received systematic development in the last century at the hands of Wilhelm Wundt, William James, G. Stanley Hall, Ivan Petrovich Pavlov, Ernst Meumann and many others. By the opening of the twentieth century objective and quantitative methods were being employed in the study of the learning process by such men as Charles II. Judd and E. L. Thorndike. At the same time the measurement of mental functions was being cultivated by Alfred Binet and J. M. Cattell, and the history of education by K. A. Schmid and Paul Monroe. Within a few years the movement spread to embrace every phase of education-administration, methods of instruction, curriculum making and the measurement of the results of teaching. Although this interest in scientific inquiry has fostered a mechanical conception of education, centered attention too exclusively on the school and the narrower aspects of tuition and resulted in the accumulation of vast quantities of sterile facts, the new method has already made important contributions to the theory and practise of education.

GEORGE S. COUNTS

PUBLIC EDUCATION. The question as to whether the family, the ecclesiastical authority or the state shall have control of the education of the child is no nearer settlement today than when it was first broached by Plato and Aristotle, who already had before them the laissez faire practise of the Athenians and the state controlled system of the Spartans. The universal tendency today is toward the provision of education by the public as represented by the state. State monopoly of education is still contested, however, by those who demand the right to educate their children as they please, mainly in private schools, and by religious bodies who claim that education belongs preeminently to the church. Thus the encyclical letter of Pope Pius XI in 1930 on the Christian Education of Youth, while recognizing the concern of the family and civil society in education,

states that the right of the church is "absolutely superior . . . to any other title in the national order." The Catholic point of view is in some countries shared by other denominations. Thus in England the Church of England, while accepting state aid for education, insists on the right to provide its own sectarian schools; in Holland public elementary schools are organized on a denominational basis; in Germany a new Kulturkampf was waged from 1925 to 1928 around the proposed Reichsschulgesetz which aimed to conserve denominational interests in elementary education. Nor has the question been permanently settled in France despite the law of 1904 in favor of a state system. In Russia all education has been laicized and private schools are tolerated only until public schools can be provided or to give vocational or technical training. Recent attempts in Italy and Mexico to withdraw schools from clerical supervision even for religious instruction have failed. The United States and several South American countries, notably Argentina and Uruguay, have definitely broken away from the traditional partnership with religious denominations and have adopted systems of public education under the supervision of public authorities. Yet even in these countries there exist private lay and denominational schools, generally under no public supervision whatever.

Little has been added to the theory underlying public education since Aristotle's discussion of the subject. "Of all things that I have mentioned," he wrote in the *Politics*, "that which contributes most to the permanence of constitutions is the adaptation of education to the form of government." Nearly two thousand years were to pass before these statements of the theory became problems of practical politics. Public education did not become a reality until the pressure of two modern forces—the rise of nationalism and the industrial revolution—produced conditions that demanded action.

The essential features of a system of public education are requirements of compulsory attendance, free tuition and provision of books and equality of educational opportunity "from the gutter to the university." Few of these ideals have been realized in most countries; free education is generally limited to elementary education, and equality of opportunity is provided in the United States only to the extent of the provision of free education in all branches. The additional proposal that free tuition should be supplemented by maintenance scholarships in

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the leading countries of the world is still in the discussion stage. Compulsory attendance is, however, more nearly realized in most countries. Examples of compulsory education can be cited before the nineteenth century; it was to be found among the Spartans and the Jews; indirectly it was fostered during the Middle Ages in the oft repeated injunctions to parish priests to open schools. Compulsory education, however, is not synonymous with public education, but public education developed ultimately out of the movement for compulsory education stimulated by the Protestant Reformation in order to make the Bible accessible to the masses. Luther's recognition of the right of the state to enforce education as it did military service was put into practise in 1559 in Württemberg through the organization of a system of elementary, secondary and higher education. This practise was imitated in a number of other German states both Protestant and Catholic and culminated in 1642 in the establishment of a public system of education in Saxe-Gotha. Following the principle of cujus regio, ejus religio, education was placed under the combined supervision of state and church. According to Calvin education is a public necessity for all, "so that the Commonwealth may have some comfort by them" and the church be unharmed. Calvin's influence in education extended to Switzerland, parts of Germany, Scotland and New England, but while it spread the idea that the state had the right to enforce education in the interests both of state and church in only a limited sense did it lead to the establishment of public systems of education. Compulsory education lagged behind provision for education.

The modern movement for public education began with the French Revolution. The theorists of the period as exemplified by La Chalotais (Essai d'éducation nationale, Geneva 1763) urged that the child belongs to the state, which has both the right to enforce education and to provide schools in the interests of itself, of its citizens and of the nation as a whole. The purpose of education thus shifts from an emphasis on religious ends to one on national well-being. In 1791 Talleyrand drafted a bill for the organization of a public system of education aimed to make happier and more useful citizens through enlightenment. Condorcet in a bill presented in 1792 added a new note: education should also have the purpose of establishing equality of opportunity for the full

development of ability. Neither Talleyrand nor Condorcet contemplated the provision of equality of educational opportunity beyond the primary school. Their main interest lay in establishing that principle expressed by Napoleon in 1805: "Of all political questions, that (of education) is perhaps the most important. There cannot be a firmly established political state unless there is a teaching body with definitely recognized principles." A Napoleonic decree of 1808, supplemented under the Third Republic by the adoption of a system of lay education and the Law of Associations of 1904, has served as the foundation upon which the system of French education is built: the state alone has the right to provide, maintain and supervise education; non-public schools may be established only with the permission and approval of the government and must be open to government inspection.

So far as compulsory education is concerned, attempts during the French Revolution to compel parents to send their children to school or to make citizenship a privilege dependent upon a minimum of education failed. Guizot's law of 1833 requiring the provision of schools did not include compulsory attendance. Compulsory education did not become an issue in France until after 1850 and was finally enacted in 1882 through the efforts of Jules Ferry. This law, which is still unchanged, required attendance from six to thirteen; the enforcement of compulsory attendance, however, is notoriously defective.

The right of the state to enforce education was definitely asserted in Prussia in the Allgemeines Landrecht of 1794 and adopted later in other German states. The growth of political, military and economic nationalism served to strengthen this principle of state control. No departure was made from this principle until 1919; the section on education of the new German constitution provides thus: "Art, science, and instruction in them are free. The state guarantees their protection and participates in their promotion." The state thus retains its right to promote and supervise education, but a new spirit which encourages variety and flexibility has entered into the system. The constitution, however, carefully safeguards the establishment of private schools and in order to promote national solidarity prohibits them entirely during the first four years of compulsory education.

In Germany the practises begun during the

Reformation—compulsory provision of schools by localities or the imposition of compulsory attendance at schools, as in Weimar in 1619 and Saxe-Gotha in 1642—were continued with more or less success until the Prussian rulers used education as an instrument of state wellbeing and power. In 1717 Frederick William required parents under severe penalties to send their children to school. The General Country School Regulations of Prussia in 1763 required compulsory attendance from the fifth year "until the child is found to possess the knowledge necessary for every rational being," which in practise throughout Germany up to the present meant up to fourteen years of age. The average attendance usually reached 95 percent. The constitution of 1919 required compulsory attendance up to eighteen with full time attendance up to fourteen and imposed not merely compulsory education (Unterrichtszwang) but the compulsory school (Schulzwang) by compelling all children to attend the public Grundschule for the first four years of elementary education.

While France and, until 1919, Germany proceeded on the theory that the provision of education is the inherent right of the state, England has never looked kindly on it and has proceeded on the doctrine of laissez faire in education as in other aspects of social control. Although the state passed laws as early as the sixteenth century for the control of apprentices and pauper children, intervened through the law courts in the interpretation of educational endowments and through the Church of England regulated the licensing of teachers, it did not begin to participate actively in the provision or support of education until 1833. Education for the poor was provided by philanthropic organizations and for the rest in private fee paying schools, elementary and secondary. A few writers, such as William Godwin and Robert Owen, urged the provision of a public system of education by the state; but the rest of the country either was opposed to such a provision on the ground that education would make the lower classes restless and discontented or accepted the compromise suggested by Adam Smith and Malthus that the state might enforce compulsory education and might give financial support for schools for the poor, but that those who could afford it should pay for their own education. For the poor education must be provided to promote decency and order and to save them from delusions and superstitions. Adam Smith's plea for the provision of public education to secure decency and order was crystallized by Guizot in the epigram "every schoolhouse opened closes a jail," which was used for propaganda purposes in England and the United States as well as in France.

The *locus classicus* on the English position is to be found in J. S. Mill's Essay on Liberty (1859). Mill was not opposed to the provision of education by the state but believed it should be only one of a number of competing types and a model. A state system of education, he feared, would in time tend to mold all to one pattern intellectually. The extension of the franchise and the development of trade and commerce compelled the state to encourage and support the gradual expansion of the system of public education. The duty of seeing that children within the age limits of compulsory attendance are educated remains, however, with the parents, who may send them either to schools provided at public expense and inspected or to private schools which are in no way controlled or supervised by the state. The function of the state is to guide, encourage and advise the local authorities on whom falls the statutory responsibility of providing schools, and to assist financially not only public schools but others which furnish secondary and higher education and are not run for private profit.

Compulsory education was not introduced in England until 1876, when an act was passed which imposed on parents the duty of securing an efficient education for their children, abolishing child labor under ten and restricting child employment between ten and fourteen under certain scholastic conditions. The ages for employment and for exemptions for part time employment were later raised. Although in 1900 an act was passed permitting local authorities to require full time attendance up to fourteen, in 1914 there were still 70,000 children employed in part time work. The act of 1918 not only abolished the half time system and extended compulsory education to fourteen for all, but further provided that local authorities could raise the age limit to fifteen and by special permission of the Board of Education to sixteen. A report published in 1926 (England, Board of Education, Report of the Consultative Committee on the Education of the Adolescent) advocated the extension of the age limit for all to fifteen with the implication that some form of secondary education should be offered to all from about the age of eleven. A school attendance

bill to put these recommendations into effect was carried by the Labour party in the House of Commons but was defeated in the House of Lords in January, 1931. The average attendance attained in England is approximately 90 percent.

In the United States the movement for public education was based on arguments derived from eighteenth century French political philosophy. Two ideas dominated the advocates of a national system of education: faith in the perfectibility of man and belief that loyalty to republican ideals and democratic equality could be promoted only through a general and uniform system of education provided and maintained at public expense. Keen opposition was generally expressed to private schools. These ideas were inherent in the writings of Benjamin Rush on education (A Plan for the Establishment of Public Schools . . . , Philadelphia 1786), in the essays submitted in the competition conducted by the American Philosophical Society in the last decade of the eighteenth century and in the political philosophy of American statesmen. They found their way into the state constitutions framed in the early part of the nineteenth century. It took nearly three quarters of a century, however, to effect these ideals and to overcome such obstacles as opposition to taxation for free schools; the elimination of the charity school and the demands of sectarian schools for state aid; and the deep rooted tradition of localism, which was opposed to state control or supervision. Although American opinion in general looks with disfavor on private schools, they are not prohibited and exist in the interests of sectarian groups, of experimentation or of those who can afford to pay the fees. The attempt of one state, Oregon, to prohibit by law the establishment of private schools for elementary education was declared unconstitutional in 1925. Except for the right exercised in some states to enforce the attendance of pupils within the age limits for compulsory education, no provision exists for the control and supervision of private schools. Although Massachusetts laws of 1642 and 1647 imposed on towns of fifty householders the duty of providing a teacher and required parents to educate their children, the fight for compulsory education in the United States had to be undertaken anew after the War of Independence. The provision of public schools and of compulsory education came slowly through the efforts of philanthropic agencies, sectarian and secular, a

variety of education societies and the organized workers' groups and through the growth of cities and rapid spread of industry. The agitation for tax supported, non-sectarian, publicly controlled schools, free of tuition and compulsory, lasted during the first half of the nineteenth century. The first compulsory attendance law, requiring attendance for twelve weeks a year from eight to fourteen, was passed in 1852 in Massachusetts. Twenty-five states had followed the example of Massachusetts by 1880, but according to a report of the United States commissioner of education in 1890 the laws were inoperative except in Connecticut and Massachusetts. By 1914 all but six southern states had some provision for compulsory attendance and in 1920 Mississippi was the last state in the country to adopt such a measure. The effectiveness of the laws was for a long time nullified by the absence of satisfactory child labor laws and by provisions that school might be attended for a minimum period of weeks instead of the full time that schools were in session. A measure to enforce full session attendance was adopted in Connecticut in 1890.

At the present time, although the principle of compulsory education has been adopted throughout the country, the requirements vary considerably in such matters as ages of attendance, minimum length of school session and scholastic attainments required to obtain labor permits.

There is today a general tendency all over the world to require compulsory education up to the age of fourteen. This movement has received a strong stimulus from the international labor conventions held at Washington in 1919, Genoa in 1920 and Geneva in 1921, at which declarations were adopted against the employment of children under fourteen. In 1924 the Fifth Assembly of the League of Nations adopted the declaration of the rights of the child known as the Declaration of Geneva. A number of countries adopted this principle in their revised post-war constitutions, others in specific educational statutes. While the principle of compulsory education up to fourteen has been generally accepted, the enforcement of compulsory attendance lags far behind, partly because of post-war economic conditions, partly on account of an inadequate supply of schools for the extended program and to some extent as the result of the inertia of parents who have themselves had no education.

The program of public education was limited

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AGE OF ATTENDANCE AND MINIMUM LENGTH OF SCHOOL SESSIONS IN AMERICAN STATES,

1928		
STATE	AGE REQUIRE- MENT FOR ATTENDANCE	MINIMUM LENGTH OF SCHOOL SESSION (months)
Alabama	8-16	
Arizona	8-16	8
Arkansas	7-15	6
California	8-16	8
Colorado	8-16	6
Connecticut	7-16	91
Delaware	7-17	8
District of Columbia	7 16	9
Florida	7-16	4
Georgia	8-14	6
Idaho	8 18	7
Illinois	7 -16	7
Indiana	7-16	6
Iowa	7–16	8
Kansas	7-16	8
Kentucky	7-16	7
Louisiana	7-14	7
Maine	7-17	71/2
Maryland	7-17	9
Massachusetts	7–16	8
Michigan	7-16	7
Minnesota	8-16	7
Mississippi	7-16	4
Missouri	7-16	8
Montana	8-16	9
Nebraska	7-16	9
Nevada	7-18	8
New Hampshire	8-16	9
New Jersey	7-16	9
New Mexico	6-16	7
New York	7-16	9
North Carolina	7-14	6
North Dakota	7-17	7
Ohio	6-18	8
Oklahoma	8-18	3
Oregon	9-15	8
Pennsylvania Rhode Island	8-16	8
South Carolina	7-16	9
South Carolina South Dakota	8-14	7 8
Tennessee	8-17	8
Texas	7-16 8-14	6
Utah	8-14 8-18	_
Vermont	8-16	5 8 կ
Virginia	7-15	-
Washington	8-16	7 8
West Virginia	7-16	8
Wisconsin	7-16	8
Wyoming	7-16	8
	, 1	

Source: Compiled from United States, Bureau of Education, "Laws Relating to Compulsory Education," Bulletin, no. 20 (1929).

at first to the provision of elementary education for the masses and secondary education for the privileged classes or for the unusually able. A long fight had to be waged also before the idea of free education beyond the elementary school was adopted. In the United States it was not

until after the decision in the Kalamazoo Case in 1874 that taxes could legally be levied for the provision and support of high schools. The industrial revolution, the rapid expansion of trade and commerce and the development of the sciences led to the recognition not merely of the importance of more elementary education and of more differentiation of curricula in the secondary schools but also of the need of more diversified types of education better adapted to the demands of industrial society. This need became more insistent as the traditional systems of apprenticeship began to decline everywhere during the nineteenth century. The gradual universalization of elementary education in the leading cultural countries of the world in turn led to demands for more education. The most rapid progress in the development of public education has, however, taken place since 1918. To this have contributed not only national and economic needs but the spread of democratic forms of government, whose success is dependent on a literate public, and the recognition of the worth of the individual irrespective of the social class to which he may belong. There are thus found side by side world wide movements for the elimination of illiteracy among young and old, movements for the extension of equality of opportunity, which involves the provision of diversified forms of education adapted to the needs and abilities of the younger generation.

Another influence that has been contributed to this expansion is the recognition that education is a continuous process which begins with the birth of the child and persists throughout life. Accordingly, a system of public education is no longer limited to the provision of elementary and secondary education but consists of schools and institutions as varied as the needs of the individuals that make up a state: preschool and child care institutions; primary and secondary schools; special schools for physical and mental defectives; part time and full time vocational schools at different levels corresponding to the great variety of occupations; colleges and universities; professional schools; institutions for the preparation of teachers; adult schools and courses as diversified as are human interests.

The concept of public education is not limited, however, to the provision of schools for instruction only; it includes the provision of all those activities and organizations that will enable the pupils to derive the fullest benefit from

school work. These generally include provisions for medical inspection; medical treatment (legalized in England); meals in school with or without charge; school libraries; vacation schools and classes; school camps and excursions, as in England and Germany; colonies for physically defective children; and above all adequate playgrounds and athletic fields. To these should be added the organization of agencies for vocational guidance and employment of juveniles. If the complete realization of this combination of social services and education is not to be found in any one system of public education, the cause is to be found in the recent origin of this conception of the scope of public education. No country has yet gone so far as Russia in utilizing all possible educative influences and agencies both in and out of school for the preparation of its future citizens. Although extra-school activities, such as clubs, boy scouts and girl guides, are found everywhere they have not been incorporated in public school systems under the control of public authorities. In Russia, however, such youth organizations covering groups between the ages of seven and twenty-three as the Octobrists, the Pioneers and the Young Communists are recognized parts of the national machinery for training future members of the Communist party; in Italy the Balilla for boys from eight to eighteen is a recognized agency of the Fascist party receiving state aid.

In most countries the administration of education has been entrusted to a national ministry of education; in federated countries the practise varies. Thus in the United States there is no ministry but only the Office (formerly the Bureau) of Education in the Department of the Interior, whose primary function is to collect and distribute information on education but without any administrative authority; in Germany there is no federal ministry but there is a semi-official agency, the Zentralinstitut für Erziehung und Unterricht, which is mainly a center for information and research; in Switzerland there is no central organization of any kind; in Argentina the Ministry of Public Instruction administers secondary education but delegates the control over elementary education to the provinces; in Canada the Dominion Bureau of Statistics is limited merely to the collection and publication of educational statistics; while Australia does not possess an agency with even this limited duty. In the Union of South Africa the central department of education administers

in the main only higher and vocational education; the control of other forms of education is left to the provincial authorities.

The functions of ministries of education may be as broad as the whole range of the educational and cultural activities of a country or may be limited to the control and supervision of formal educational agencies. Under the first of these types may be included general supervision of fine arts, including theaters and moving pictures, and of scientific undertakings, as in France, Austria, Prussia, Czechoslovakia, Hungary, Denmark, the Irish Free State, Japan, Sweden and Turkey, with the addition in some countries of supervision over ecclesiastical affairs, as in Austria, Czechoslovakia, Norway, Hungary, Japan and Sweden. In general ministries of education are responsible for the administration and organization of education, for drafting and presenting the annual budget to parliament, for proposing legislation, for inspection, for consultation and advice on educational matters, for drafting curricula and courses of study, for examinations and for research.

The important problem in national educational administration, however, concerns not the functions of the central authority but rather the general question of policy or the extent to which direct control is exercised over the process of education and the degree to which local autonomy and private effort are encouraged. In some countries, probably the majority, control is not merely centralized but is bureaucratically conceived in the sense that everything that concerns education is carefully regulated, prescribed and supervised. On this question a dividing line cannot be drawn between countries on the basis of the form of government, whether monarchical or democratic. Thus France, the states of Australia, and Ontario in Canada represent the best examples of closely guarded centralization, while England and the United States represent the best examples of delegation of powers to local authorities.

The character of central control is governed rather by the theory generally accepted in a country of the relation of the state to education. A system of education may be divided in general into the *externa*, all those factors that are essential to make the classroom procedure possible, such as buildings and equipment, compulsory attendance, length of school year, qualifications and salaries of teachers; and the *interna* or the instruction proper, such as curricula, time schedules, courses of study and examina-

tions. The centralized administration tends to regulate and control both the externa and the interna, as in France; while in those systems in which the responsibility for the progress of education is delegated to local authorities under the inspection, advice and encouragement of the central administration the externa are prescribed and the interna are influenced by the publication of suggestions, reports and memoranda, as in England and Germany, where the individual school tends increasingly to become the center of initiative. In the first type the emphasis is on uniformity and standardization, in the other on freedom and responsibility as the bases for the advancement of national culture. Between the two, intermediate types may be found; thus in some countries, as in Uruguay and Argentina, there may be freedom in clementary education but prescription in secondary; or in others, as in Italy and Russia, there may be freedom in the development of curricula and courses of study only up to a certain point where the dominant political faith of the country is affected. In the United States the two main types may be found not only within each state but within the local areas to which the control of education is delegated by the state; the tendency seems to be, however, in the direction of greater freedom and flexibility. Bureaucratic administration of the interna is increasingly tempered by enlisting the cooperation of teachers.

The character of inspection is determined largely by the general type of control. In the centralized systems whether of a nation, state or city the function of inspection or supervision is to see that the regulations and detailed prescriptions are carried out; in the decentralized system, where prescription is reduced to a minimum, the purpose of inspection is to encourage, advise, discover and disseminate progressive ideas.

The degree of centralization may affect the official definition of the aims and purposes of education, particularly of the masses. Thus the official aim of elementary education in France is "to teach those things of which no adult should be ignorant," just as in pre-war Prussia the aim was "to train God-fearing, law-abiding, self-supporting subjects." The aim in Russia today is to produce socially useful revolutionary activists, in Italy citizens loyal to Fascism and in Japan loyal subjects of the emperor in accordance with the imperial rescript of 1896. In the decentralized systems the aim is more vague, with less direct emphasis on the social end and

more on the development of the individual. Thus the aim in England is character formation, in Germany development of personality "in the spirit of German nationalism and international conciliation," in the United States the training of individuals as intelligent citizens.

It follows from this distinction that educational progress tends to be slower in the centralized systems; thus the elementary school course of study in France remained virtually unchanged from 1887 to 1923 and in Prussia from 1872 until the post-war reorganization, while in England and the United States it has been constantly subject to change, particularly during the present century. New methods and changes in curricula and courses of study are discouraged in the centralized system, while in the decentralized they result in part in response to social changes and demands, in part from the free initiative of the teaching profession. But even in the second as much as in the first type, limits whether deliberate or unconscious are set to freedom in one field of instruction: the teaching of patriotism and nationalism. Here most countries emphasize, particularly in the elementary schools, propaganda and indoctrination through the teaching of history, civics and social studies. Even where a certain amount of professional freedom is tolerated in the choice of textbooks for other subjects, those in historical and civic subjects are under careful supervision and censorship. Thus in Russia and Italy, where teachers are permitted to frame the local courses of study and encouraged to use progressive methods, this freedom is limited in matters of political education, a condition which is also found in the United States. England and Germany are at present outstanding examples of greater freedom in these subjects, England perhaps because of the homogeneity of her population, Germany because of a sincere devotion on the part of a majority of the elementary school teachers to international conciliation. There is in this field of education considerable unrest among teachers even in France.

Secondary education is more governed by a traditional concept of its purpose in terms of culture or liberal education and preparation of leadership than is elementary education. Some differentiation has been introduced into the secondary courses of study since 1900, but further diversification may be expected as soon as the ideal of equality of educational opportunity becomes realized and a genuine attempt

is made to provide types of education and courses adapted to individual differences. Diversification has reached its culmination in the American high school. Such a change is inherent in the movement for universal secondary education; but European educational practise may be slow to accept the American secondary school system, which is based primarily on the concept of equality rather than on any basic educational principles.

It follows then that progress in education, including the introduction of new subjects and methods, demands a system which is flexible and in which freedom and initiative are encouraged for the spontaneous development of culture. This involves a sound and thorough preparation of teachers in an atmosphere that makes for professional growth rather than mere craftsmanship or skill, such as is often developed in centralized systems with fixed and definite educational aims; it demands participation, at any rate in the *interna*, by teachers' associations and faculties, as well as the intelligent cooperation of all groups interested in education, particularly of parents' organizations. The centralized system not only tends to keep under its control what is done in the school but excludes both teachers' organizations and parents from participation in the educative process; because it restricts the establishment of private schools it also limits the opportunity for experimentation. The decentralized system because it regards variety as the essential basis of cultural progress encourages experimentation not only by leaving a free field open for private schools, as in England, the United States and Germany (after the first four years), but also within the public school system itself. There is always present, however, a certain inertia among teachers themselves and among parents, which can be overcome in the first instance by placing the preparation of teachers on a professional rather than an apprenticeship basis, as is being done in Germany, England and increasingly in the United States, and in the second by the education of parents through parent-teacher associations, which have developed generally in the last two decades.

The real problems today, granted the right of the state to provide a system of education, are whether the state shall have a monopoly of education and the extent of its control over what is taught in the schools. Since the beginning of the present century and more particularly since the war of 1914-18 the right of the

state to provide education has been justified on the ground that it alone has at its command the resources to extend the benefits of education as widely as possible and to assure equality of opportunity for the preparation necessary for intelligent citizenship and for the promotion of ability and talent wherever found. There is always the danger, anticipated by Mill and exemplified in the pre-war Prussian system and in present day Russia and Italy, that a state system may attempt to mold all alike according to the views of a group in power and to interfere with the free cultural development of a country. This danger does not affect equally all parts of the educational system or all parts of the course of study. Uniformity may be insisted on in the elementary schools, in which the masses are educated, while scientific objectivity may be permitted in the secondary schools, in which the privileged classes are trained for leadership. Freedom in methods and content may be tolerated and even encouraged in all subjects except those, such as history, geography, social studies or economics, which may involve questions affecting the social, economic or political foundations of a country. In such subjects freedom may be curbed by limitations imposed upon the teachers, either through prior training and selection or through threat of dismissal, or by courses of study prescribed in detail or by the careful selection and censorship of textbooks. From this point of view, that is, the utilization of public education for the promotion of nationalism, there are few countries which refrain from direct control, as does England. The danger is by no means limited to countries whose existence is dependent on the acceptance by their citizens of some particular social, political or economic point of view. For in the last resort systems of public education are determined largely by the political, social and economic forces that determine a nation's character and by its cultural traditions.

I. L. KANDEL

Sectarian Education. In strict usage sectarian education denotes general education conducted under the auspices of minority religious groups or sects and is to be contrasted with education provided by established churches. In modern times the term is used to designate all general education provided for and controlled by religious associations in distinction from education conducted under the auspices of political communities.

The relationships of sectarian to state controlled education are as various as are the patterns of church and state relations. Four main types of relationship, with many subordinate modifications, may be distinguished: identification, affiliation, toleration with competition, and attempted suppression. Church controlled and public education are often identified in countries which maintain an established church or in communities with a religiously homogeneous population. In Sweden, for example, elementary education is controlled by the parish; the school board consists of the rector and other members elected by the vestry, while the bishop acts as superintendent. A variation of this type is to be found in countries where more than one religion is recognized, as in Newfoundland, where the state system of education is directed by three superintendents of whom one represents the Church of England, one the Roman Catholic church and one the United church, while the senior clergyman of each parish is always a member of the school board and each denomination is allowed to appoint teachers of its own creed. Modern Germany represents a similar variation, in so far as public schools are permitted to have a denominational character corresponding to the religious character of the community in which they are located, while both the support and the general control of education remain functions of the state. It is frankly recognized that each solution of the problem of control arising between competing religious and antireligious groups represents a compromise dependent on the distribution of political power within the particular community. A similar type of identification prevails in the Irish Free State, where education is also recognized as a function of the state, which provides support and prescribes standards, while in practise the schools are almost all under denominational managership, primarily Roman Catholic but in some instances Episcopalian, Presbyterian or Hebrew. A somewhat similar situation prevails in Canada in the province of Quebec, where two sets of schools—Catholic for the French Canadian and Protestant for the English speaking population -are supported by public funds, drawn partially from a common source and partially from taxes separately collected from the respective groups.

The affiliation type of relationship is represented by England with its system of "provided" and "non-provided" schools, in which schools provided by the state and those estab-

lished and managed by churches or other associations are amalgamated into a single system. The state finances sectarian education in this system to a considerable extent and exerts some measure of control by prescribing standards, by requiring the provision of a limited number of free scholarships and by providing for nondenominational representation on the board of managers. Further, the denominational school is not permitted to discriminate against pupils on religious grounds, and while the school is authorized to teach the doctrines peculiar to the controlling church, parents may withdraw their children from such instruction. In Palestine the British government permits Jewish (Zionist), Arab and Christian sectarian schools but does not wholly meet their budgets.

The third type, that of toleration with competition, prevails in the United States. Under this system the state or local community undertakes no financial responsibility toward sectarian education but recognizes it as legally equivalent to the public school system, at least so far as compulsory attendance is concerned. While state aid has occasionally been granted to sectarian schools in recent times, more than forty states prohibit by constitutional provision the appropriation of public funds for sectarian purposes or that of public school funds for other than public school purposes. On the other hand, provision has been made in nearly all states for the exemption of sectarian schools from taxation. While in law sectarian schools are usually subject to state supervision, the amount of supervision actually exercised is not considerable in the majority of the states. A tendency toward a greater measure of state control, such as the requirement of certification of teachers and the regular inspection of private schools by public authorities, is becoming manifest. Control over secondary and higher education is indirectly exercised by state universities by means of admission requirements and the policy of accrediting recognized schools.

Modern Russia represents the fourth type of attitude toward sectarian education, inasmuch as the state exercises a monopoly over education and suppresses all sectarian education by law.

The history of the French school system illustrates all of the attitudes from identification to attempted suppression, with a modern tendency toward toleration. Prior to the French Revolution education, while a function of the monarchy, had been delegated to the church. Under the Second Republic and the Second Empire

sectarian, i.e. Catholic, schools were affiliated with the national system of education. The anticlerical movements of the Third Republic, culminating in the separation of church and state in 1905, led to the attempted suppression of sectarian education. The suppression of religious teaching orders was designed to eliminate sectarian education and the number of religious schools was in fact greatly reduced. As a result of social changes brought on by the World War, however, and of the accommodation of the church to the situation the attitude of tolerance has become established. The state neither supports the sectarian schools nor does it prohibit them, but it exercises a certain amount of supervision over them, requiring the certification of teachers and providing directly through prescription and inspection and indirectly through higher examinations for some control of the teaching program.

There is great variation in the strength of the different parts of such independent sectarian educational systems as are to be found in the United States and in France, and also in the interest taken by the different religious denominations in this education. Broadly speaking, Catholicism is chiefly concerned with primary and secondary education, while Protestant church bodies emphasize higher education; Lutheran denominations, however, share with Catholicism the interest in elementary instruction, often establishing parochial schools where they are not permitted to influence public education. On the other hand, the changing social character of its membership has led the Roman Catholic church to found an increasing number of colleges and universities in the United States in recent decades. In elementary education in that country the public schools predominate to an extraordinary extent over competitive denominational systems, the latter enrolling only 10 percent of the total number of pupils attending these grades. Of this number the Catholic schools account for all save a few in the Lutheran schools. The largest Lutheran parochial school system, that of the Missouri synod, embraces about 1250 schools with a total enrolment of approximately 80,000, while Catholic elementary schools number over 10,000 and enrol nearly 2,500,000 pupils. While the Catholic elementary school system is increasing at a rapid rate, Protestant primary schools are steadily declining in importance as many denominations gradually abandon the effort to maintain a sectarian system.

A similar situation prevails in the United

States in the field of secondary education with sectarian and private high schools enrolling somewhat less than 10 percent of the total number of students. In this department of education also rapid increases are to be noted in the Catholic system, although the rate of increase is less than that of the public secondary schools, while high schools conducted by Protestant denominations account for about 1 percent of the total secondary school enrolment. The groups conducting the largest number of academies are Episcopalians, Baptists, Methodists, Presbyterians, Seventh Day Adventists, Lutherans and Friends. Nearly all religious societies in the United States provide and control colleges or universities. In this field sectarian and private institutions, most of which owe their origin to religious groups, markedly predominate in numbers and enrolment over the public institutions. Of 868,793 students enrolled in colleges and universities in 1927-28, 533,784 were enrolled in private or sectarian institutions. More than 200,000 of this number were students in schools still directly controlled by Protestant denominations while approximately 75,000 were being educated in Catholic institutions.

Finally, in almost all countries where there is no close affiliation between church and state and especially in countries where the separation has been accomplished, the sectarian educational system includes institutions for the training of the clergy and for other professional church officers.

The development of sectarian education as competitive with public education is due to the same factors which brought forth the latter: the rise of the democratic movement and of nationalism, with the correlate secularization of life, partly as a result of the industrial revolution. While these movements produced systems of public education they left denominational and other minority interests unsatisfied; and the elimination of all religious instruction from state schools-partly as a result of denominational conflict—outraged the convictions of those groups for whom the religious interest was the primary value in life. Wherever a homogeneous culture with a homogeneous religion prevailed, the problem of sectarian education did not arise, since under such circumstances the state system usually recognized the religious interest, whether in the state as a whole, as in the case of Scandinavian countries, or in religiously unified communities, as in the case of Germany. Religious and social heterogeneity, on the other hand, has

led to the development of non-sectarian public education and to the corresponding competitive sectarian system. Class conflicts in which the church and its schools were identified with the upper classes have brought forth non-sectarian educational systems with the continuation of the church schools in the interest and with the support of the defeated aristocracy.

The conflict of religious groups (which are often identical with racial groupings) with each other and the impossibility of satisfying their conflicting interests by allowing them all a share in an inclusive and efficient educational process, together with the state's interest in the promotion of national homogeneity, have led elsewhere, as in the United States, to the elimination of all religion from the public schools and the rise of competitive sectarian systems in which the minority demands could be fulfilled. The interest at stake which led to the development of sectarian education was sometimes primarily religious, as in the case of the Catholic schools; but sometimes it was racial, as in the case of parochial schools founded mainly to teach the language and to transmit the culture of a minority race whose interests in maintaining its solidarity and distinction could not be satisfied in public schools. It is easy to understand therefore why the problems of religious and minority nationalistic education became confused in prewar Austria-Hungary. In the United States many Lutheran elementary and secondary schools were established more for the purpose of continuing the German or a Scandinavian language and culture than for the sake of promoting religion and were abandoned when that purpose could no longer be realized.

It is especially difficult to classify general education under Jewish auspices because of the differences of opinion among Jews themselves and among the governments of those countries in which they are dispersed as to whether they are to be considered a religious, racial or national minority. Thus in czarist Russia and elsewhere Jews willingly absented themselves from schemes of public education for religious reasons and were debarred from institutions of higher learning; in Soviet Russia, however, Jewish schools are permitted on the basis of a national minority but not as a sectarian group. In other countries a genuine problem has been raised, especially in the field of higher education, by the restriction of the number of Jews among both the students and the faculty. If therefore schools are set up by the Jewish religious community they are likely to become parochial and sectarian in character.

Furthermore, when conflict arises between the ethics of the state and the ethics of a particular sect, separate educational institutions may be set up. Thus the interest of the state in educating obedient citizens runs counter to the interest of pacifist sects such as the Quakers, the Dukhobors both in Russia and in Canada, and many others which have been impelled to resist the influence of nationalistic ethics upon their youth by providing special schools for them.

Another phase of the competition between public and sectarian education lies in the conflict between the claims of the state and of the family upon children. The recognition of sectarian education by the state is based ultimately upon its recognition of the primacy of family claims, yet it frequently conditions these claims by prescribing a part of the content of education carried on under other than state auspices.

Sectarian education, however, claims to justify its existence not only by reference to its role in providing for minority interests but also by the contention that it can provide for a more complete transmission of the social heritage than is possible for secular education which has eliminated the religion integral to the culture, and that in consequence it is able to inform the total educational process with a unifying philosophy of life which secularized education is said to lack. Furthermore, sectarian education whether competitive to the state system or affiliated with it asserts that it resists the process of standardization and thus contributes toward the enrichment of social life. Again, sectarian schools maintain that they give freer scope to educational experimentation and individual initiative than do the public systems. It is pointed out that the extension of education to the lowest social classes was inaugurated by church schools under the impulse of religious charity, and that adaptation to the particular needs of these classes led to the introduction of "realistic," scientific and vocational subjects into the curriculum. More recently sectarian interests have led the way in the education of the Negro in the United States and of backward races in colonial possessions; religious organizations, such as the Young Men's and the Young Women's Christian Associations, have made contributions to the advancement of adult education. The association of religious with ethical interests and emphasis upon the motive of benevolence have

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led sectarian institutions not only to extend the scope of education to unprivileged groups but also in some instances to modify the curriculum in the interest of liberal humanitarianism.

While such claims may justly be made for some portions of the sectarian system of education, its tendency on the whole appears to be more conservative than that of public education. Despite the willingness of the academies to accept scientific subjects, sectarian secondary and higher schools have generally maintained the classical curriculum far longer than did the democratic public schools. While sectarian schools for women have been occasionally founded, the churches have remained far more interested in the education of men and have been slow to accept coeducation. In methodology also sectarianism has often resisted improvement or innovation, yet this backwardness was probably due as frequently to the comparative poverty of sectarian schools as to a native conservatism. Furthermore, sectarian schools have been subject to criticism because their primary interest in the religious aim of education, together with a denominational or dogmatic interpretation of that aim, has prevented them from giving due recognition to other values of education, including the economic and political as well as the cultural and scientific.

Criticism of sectarian education is not confined to its frequent pedagogical insufficiency but is due also to its sociological character. While representing minority interests it has sometimes sought to prevent the realization of majority interests, as, for example, when sectarian groups attempted to block the establishment of nonsectarian and inclusive public education in Massachusetts in the time of Horace Mann. The occasional association of sectarianism with predemocratic class structure and its continuation of the aristocratic tradition in schools have been other sources of antagonism in democratic countries; thus the French laws restricting sectarian education were inspired in large part by the association of clericalism with royalism, while the criticism offered by Liberal and Labour groups concerning measures granting state aid to voluntary schools in England was due in part to the class character of many church schools.

When sectarian education serves to continue the language and tradition of a minority racial group, especially when the political loyalty of such a group is suspected, as in the case of German sectarian schools in the United States at the time of the World War, the sectarian system inevitably arouses antipathy. On the other hand, sectarian systems may be suspected of fostering the interests of an imperial economic or political class or race, as in the case of missionary schools in the Orient and in Africa or of government controlled sectarian schools established among minority populations in prewar Austria.

While areas of conflict between sectarian and public schools are still to be found, the antagonism between them has declined in recent times in most countries. For example, the acceptance of secular aims of education and the abandonment of narrowly defined religious aims in the Protestant educational systems have allowed them to adjust their curriculum and methodology to the pattern of public education. Growth of tolerance between the denominations and their acceptance of the separation of church and state have further helped to eliminate conflict. On the other hand, the state's abandonment of efforts to exercise monopoly over education, its acceptance of a more or less regulated sectarian education as equivalent to the public school system or its permission to religious groups to participate in public education, has contributed much to the achievement of a balance of interests in the United States, France, Germany, Great Britain and other nations. Where churches have been refused permission to make religious influence effective through public education they have tended to organize programs of religious education complementary to but quite separate from secular instruction and have thus removed their interests from the area of conflict.

The problem of sectarian education, however, is intimately associated with the balance of power between church and state, with the relations of minorities and majorities and with the interaction or conflict of religious, economic and political interests. At the points of conflict between these institutions, groups and values the problem of sectarian education may arise in the future as it has arisen in the past.

H. RICHARD NIEBUHR

PART TIME EDUCATION. Part time education includes those forms of schooling which are organized to fit the leisure time or are taken out of the working time of juveniles and adults. Of these various types Great Britain has contributed the evening tutorial class and university extension; Germany, the part time day continuation school for young workers; Denmark, that variety of the short course known as the people's

high school; the United States, the cooperative and its near relative, the self-help college.

The most thoroughgoing program of part time education is that planned by Soviet Russia for adults and working youth in cities and rural communities. For this work school teachers, union leaders, party workers and high school and college students have been commandeered and given short courses preparatory to teaching. Industrial enterprises are directed to reserve a certain number of places for student workers. The entire program is based on the theory that it is advantageous to combine work and schooling from youth to old age.

In the past part time schooling has had a more important place in Europe than in America. Since the sixteenth century Sunday schools have taught illiterate Europe and England to read the Bible. Churches have often added week day secular instruction as a reward for Sunday school attendance. Workmen who have learned to read have formed evening classes for general and vocational improvement; joined trade unions and cooperatives; set aside union and cooperative funds for further education; demanded extension of the suffrage, free public full time schools for their children and shorter hours of labor.

British workingmen have been active in organizing their own educational programs. In the nineteenth century they started evening technical classes; many of these became endowed mechanics' institutes and later technical colleges with day and evening or only evening classes. Labor colleges and classes train trade union workers. A college at Manchester offers training to employees of cooperatives of every country. The workingmen form classes for general instruction, especially in the social sciences, and ask the universities for instructors: it was in this way that university extension work began in England. Various organizations interested in promoting educational opportunities for workers were brought together in 1903 in the Workers' Educational Association, which has its counterpart in all the British self-governing colonies and in many other countries. In 1928 it reported 35,730 students; of these 10,000 were in tutorial classes, pledged to follow a definite three-year program of evening school university extension work.

While the English have led in the planning of evening school programs, especially in the fields of general culture and political and economic action, they have not gone far in providing for day part time schooling for young workers. The Fisher Act of 1918, which provided for compulsory continuation schools for young workers, has never been put into operation. The evening class is still the popular method of part time education in technical and general work for juvenile as well as for adult workers in city and country.

In the self-governing British dominions the English tradition is quite closely followed. All have their workers' education associations and university extension classes. In Canada each province has laws providing for evening vocational and general classes. The province of Ontario has a compulsory continuation school law. The province of Alberta, Canada, New South Wales in Australia and the Union of South Africa all have provisions for public supervision and part time school attendance of apprentices.

The contribution of the German states to part time education is the compulsory continuation school for juvenile workers. In the sixteenth century Sunday schools were established to teach religion, singing, reading and writing. In 1739 Württemberg made attendance at a Sunday school compulsory for boys and girls not in full time school; Bavaria passed a similar measure in 1803. Later part time and evening classes were provided on other days, financed usually by public funds or by chambers of commerce. An imperial law empowered communities to set up compulsory part time schools. The new constitution of the German Republic declares for the principle of compulsory continuation school attendance up to the age of eighteen; and although there is no national law, the states are rapidly meeting this standard.

The Danish folk schools have spread from Denmark to Norway, Finland and Sweden. Originally short term boarding schools where farm youth could live for a few months absorbing the national culture, they now frequently include agricultural and home making instruction. Everywhere except in Sweden, where they are public institutions, the folk schools are under private direction with government aid. Several private folk schools have been founded in the United States.

Almost every European country now has its resident rural high schools offering short courses in agricultural and general topics, with evening classes for the neighboring community; its day continuation schools, compulsory or voluntary; its evening and general classes of every grade; its classes for trade unionists and party members. A unique institution is the Chitalishta of Bul-

garia. This is a combination library, theater and social hall built in the various communities in the days of Turkish rule to maintain through education the struggle for national freedom. Returns from 506 of the 1984 Chitalishta showed 337,620 people attending evening classes. Another unique method of providing part time education is reported from Chile: boys in the upper grades are employed part time in instructing their parents and neighbors in evening classes; illiteracy is said to have been reduced in three years from 60 to 20 percent by this method. Although British India with 296,000,000 illiterates out of a total population of 319,000,000 (including 60,000,000 untouchables who are often turned away from the schools) is still a practically undeveloped field for full time as well as part time education, it is reported that about 200,000 adults are attending night schools.

A wide variety of part time schooling, vocational and general, is found in the United States. Private corporation schools have trained a limited number of young people working in large industries. The rank and file of untrained workers lack opportunity for promotion and suffer from inability to readjust themselves when changes in machinery or industrial organization throw them out of work. As a remedy for this continuation schools providing instruction for a few hours a week for young workers have been set up in many industrial centers by means of state laws. These range from the merely permissive to the Wisconsin law requiring all cities of 5000 or over to establish continuation schools and all young workers who are not high school graduates to attend half time to the age of sixteen and eight hours a week to the age of eighteen, and requiring all apprentices under the state supervised system to attend four hours a week for the first two years of apprenticeship.

Very significant is the rapid growth of evening classes in city and country, but even more significant is the changing character of the courses. In addition to cooking and sewing home making education now includes the study of food values, clothing selection, home nursing, home planning and decoration, gardening, landscaping and, most important of all, child care and training. To manual training has been added a variety of vocational courses. Wisconsin has initiated a plan whereby itinerant instructors are employed by several neighboring cities for day work with apprentices and for evening work with journeymen. There has been an increase in the number of courses in foreign languages, literature and

the social sciences. Work in rural communities, aside from classes for illiterates, is just beginning but in some states it doubles yearly. Late afternoon and evening classes of college grade are increasing rapidly. The municipal colleges are outstanding in this field; other universities have followed their lead, and many give extension class work in neighboring communities.

When the day continuation school for young workers made its appearance in the United States it was at first looked upon as a weak substitute for full time schooling. Later it was regarded as a more effective method of vocational education than the full time trade school because it furnished a background of working experience. The so-called cooperative school represents a conscious attempt on the part of educators to create a condition of part school and part work by securing jobs for young people in school and using their working experience as part of the material of instruction. Under the cooperative system, started in 1906 in the College of Engineering at the University of Cincinnati, pupils work half time and attend school half time in two shifts. Most of the cooperative courses offered in this and other universities and in secondary schools are professional courses, but Antioch College at Yellow Springs, Ohio, has adapted itself to letters and science courses as well.

Besides the cooperative colleges, which stress the educational value of work, there are in the United States a number of self-help colleges, which use work primarily as a means for helping students through school. Among these are Berea College, Kentucky; Blackburn College at Carlinville, Illinois; Oakland City College at Oakland City, Indiana, which manufactures fountain pens; Park College at Parkville, Missouri; and the Textile Industrial Institute at Spartanburg, South Carolina, which operates a textile factory.

The main types of workers' education developed in the United States are the resident labor colleges, the summer schools for industrial workers, the evening labor colleges or classes, set up independently by local labor bodies or in cooperation with the boards of education or, as in California, with the university itself, Chautauquas, institutes and conferences. The resident colleges are Brookwood College at Katonah, New York; Commonwealth College, a self-help college on a farm near Mena, Arkansas; and the Vineyard Shore School for Women Workers in Industry at West Park, New York. The Rand School of Social Science in New York City,

owned by the Socialist party of America, gives short residence courses and evening courses for training workers in the party, the unions and the cooperatives, as does the Workers' School maintained by the Communist party. Several summer schools "give workers in industry an opportunity through study and discussion to develop a deeper appreciation of life and a clear understanding of their part and responsibility as industrial workers." The Bryn Mawr and Barnard College schools and the Southern Summer School near Asheville, North Carolina, are for women workers; the school at the University of Wisconsin is for men and women workers; the Colorado Workers' Summer School, which meets in the mountains near Denver for a ten-day session, is for farmers and industrial workers of both

Practically all the universities of Europe and America and all the teacher training colleges offer summer courses. Universities on the continent, in Great Britain, Mexico, Porto Rico, Hawaii, Brazil, Japan and elsewhere plan summer courses for foreigners in languages, economic and social problems, education, literature, music, international relations and science. Various organizations at Geneva offer short courses for teachers and students of international relations.

Part time education may do more than merely offer the same opportunities as do full time educational institutions. It often affords a field for experimentation in the range of topics and the method of approach. A significant experiment in adult education, the New School for Social Research in New York City, aims to give "due recognition to every serious contemporary intellectual interest." Its curriculum therefore is broader than the term social sciences might indicate and has succeeded in attracting to it a student body that ranges from the self-taught to the Ph.D.

It is beginning to be realized that no one can fully prepare himself in his youth for activity in a society as dynamic as that of modern western civilization. In order that the individual may adjust himself to changes which may throw him out of employment or bring him face to face with new social problems he must keep himself flexible. His best insurance against unemployment and social ineffectiveness is continued schooling. Educators are giving increasing attention to the problem. Part time schooling is no longer considered a poor makeshift for unfortunates who have failed to receive adequate full

time schooling in their youth; it is assuming the dignity of a very effective method of education deserving universal application.

JENNIE McMullin Turner

EDUCATIONAL FINANCE. Education in the United States during the year 1928 cost approximately \$2,945,000,000, about 3 percent of the total national income. The part of the total expenditures for education coming from taxes constituted about 20 percent of all taxes raised. Education is the most expensive function of government with the exception of defense activities, including war costs. The expenditure for highways and streets is the only other item of governmental cost that even approaches the tax burden of education.

Of the total amount spent for education in 1928 approximately \$2,440,000,000, or somewhat over 80 percent, was spent for public education. Approximately \$505,000,000 was spent for private schools, colleges and universities. Elementary and secondary schools account for about 80 percent of the total cost of education, probably \$2,400,000,000 out of \$2,945,000,000. Of the expenditures for elementary and secondary schools about 90 percent goes to public schools and 10 percent to private schools. An insignificant part of the amount reported under elementary schools is expended for preschool and kindergarten facilities. The total expenditures on higher education were about \$505,-000,000, of which \$300,000,000 was for private institutions. A small sum was spent upon adult education, not more than a few million dollars.

Of the approximately \$2,200,000,000 spent on public elementary and secondary education about 65 percent went to instruction. This item is almost entirely teachers' salaries. Less than 5 percent was spent upon the general administration of the school system. The operation and maintenance of the physical plant cost approximately \$300,000,000, or about 15 percent of the total. Interest charges and debt retirement and certain miscellaneous items accounted for the other 15 percent. It is not unusual for \$300,-000,000 worth of bonds to be issued in a single year for public school construction, and over a period of years this of course makes a very heavy interest charge. The item of interest alone accounts for about \$100,000,000 a year of the cost of public elementary and secondary education. The amount spent on construction of new buildings was almost \$400,000,000, but this cannot be considered a cost against the current

year. Although the expenditures for health, athletics and certain recreational activities are growing very rapidly, they still constitute a very small amount of the total school expenditure.

In higher education we find a somewhat different distribution of costs. The items of research and instruction together account for a slightly larger proportion of expenditures than does instruction in the lower schools. About 70 percent of the total cost of higher education is chargeable to instruction. Expenditures for operation and maintenance are about 15 percent and a long list of miscellaneous items accounts for the other 15 percent. There is an important difference in regard to buildings, because it is not customary to borrow money for college and university buildings whereas it is the usual procedure for the public elementary and secondary schools.

The expansion of the cost of education in the United States has been phenomenally rapid. For elementary and secondary education alone the cost in 1900 was approximately \$225,000,-000. By 1910 this had increased to \$445,000,000. By 1920 it had increased to \$1,050,000,000 and by 1928 to \$2,200,000,000. Some of the increase, particularly from 1900 to 1920, was due to a change in the value of the dollar. A large part of the increase was due to the remarkable expansion of the secondary school, which increased in number of students from approximately 700,ooo to well over 4,000,000 between 1900 and 1928, and the lengthening of the school year. The increase in high school attendance between 1890 and 1924 is estimated as being 2465 percent in comparison with 156 percent for elementary school attendance, 352 percent college and university attendance, and 79 percent increase in the total population. Some of these factors, such as the increased proportion of children in school, cannot continue to operate indefinitely, for over 90 percent of the children between seven and fourteen are now in school.

Expenditures on education are higher per capita in the United States than in any of the major European countries, but when financial ability is considered the differences are not so great. For instance, England is spending about \$500,000,000 compared with \$2,945,000,000 in the United States. On a per capita basis this is about half the expenditure in the United States, but in relation to income England is spending very little less than the United States.

France and Italy spend substantially smaller sums per capita than England and Germany,

but when taken in relation to national income they compare very favorably. Comparisons are made difficult in view of the great variations in the items which make up the total expenditure, as, for instance, in the range of teachers' salaries, which constitute the major part of the total cost. The Soviet Union has greatly expanded expenditures on cultural activities, and the budget for 1931 provides for about \$3,000,000,000. This includes a far wider range of cultural activities than formal schooling, so it is not comparable with the figures in any other country.

Judgments as to the adequacy of the amounts at present being spent in various countries for formal education must vary with varying social valuations. On a strictly economic basis, however, the great increase in expenditures for education probably could be justified only in case the system had been carefully planned in terms of the educational needs and the economic capacity of the population. Up to the present time no country has worked out a carefully prepared scheme of education in terms of the needs of the entire population. Germany before the war and since has made certain interesting moves in that direction. The Soviet Union, in the last year or two, has started an interesting experiment along this line. One may reasonably question the value of a large part of the money spent for education and still believe that a properly planned system of education would demand a very much larger percentage of the total income than it does in any major country today.

Probably 80 percent of the total revenue of schools in the United States comes from taxation. About 80 percent of the total amount of taxation comes from an antiquated and archaic property tax. Hence it is evident that taxes on property are the major source of money for formal public education in the United States. In theory at least private schools receive no aid from public sources. The total spent for private education is approximately \$505,000,000. Of this amount probably \$300,000,000 comes from fees paid by the students who attend school. Perhaps \$60,000,000 comes from endowments; \$75,000,000 from gifts for current expenses and the additional \$70,000,000 from a large number of miscellaneous sources. Less than half of higher education is publicly supported. Perhaps two thirds of this amount comes from taxation, sometimes from the general state or city fund. sometimes from a specific tax for higher education.

Private gifts to education have recently amounted to over \$100,000,000 a year. A large part of this of course goes to permanent endowment and only the income appears in the figures given above on the cost of private schools. In the past practically all of this money went to higher education, but at the present time many millions of dollars are being given to public elementary and secondary schools each year for a great variety of purposes.

As education has become more expensive the poor communities have become unable to provide adequately for it. One of the most difficult issues confronting public education at this time is how far the nation or state should go in subsidizing such communities. The federal government contributes almost nothing to the support of education in the United States, but in extreme cases as much as 80 or 90 percent of the total cost of education in local communities is being paid from state grants. In a state such as New York about \$100,000,000 a year is distributed by the state to the different school districts.

The development in England has been such that at the present time the central government and the local governments each pay about 50 percent of the cost of public education. In Germany the situation is more nearly comparable to that in the United States. In France and Italy with their more centralized systems the central governments make substantial contributions to the system of education. Each republic in the Soviet Union is in theory largely responsible for education; some contributions are made by the central government, but a large part of the cost is borne by the local districts.

Taxation, fees, gifts and income from endowments provide the major sources for the support of formal education. Taxation will without doubt be used to an increasing extent. If education is to be planned so that it is adjusted to the economic life of the country, the fees should be reduced, perhaps even ultimately abolished. There is considerable discussion on the advisability of increasing gifts for endowments of public education.

Control of finance is control of policy, in education as in other fields. There is a tradition of freedom within certain limits in American schools both public and private. As long as one is operating within the generally accepted fields of discussion and opinion, there may not be great danger. Usually it is only in controversial issues upon which there is deep feeling that

financial pressure is exerted to secure agreement with the opinion of those in control. At the lower levels in both public and private schools the tendency has been to use financial control as a means of preventing discussion of these issues. This is done not so much by actual prohibition as by a process of selection of teachers: teachers are chosen who will have the proper attitude, "proper" being interpreted in reasonable agreement with those in financial control. But financial control does not indicate any one set of economic beliefs or even high economic status, for in the case of certain religious groups those in financial control may be very poor.

In the case of institutions definitely under the control of religious organizations it is customary to exercise very careful scrutiny over the beliefs of teachers before they are employed. This attitude extends even into the higher schools and colleges. The result is on the average probably much less open discussion of many issues in the schools definitely under the control of religious bodies than is the case in other schools. The private institution is under one type of pressure, the public school under another. Although private institutions in many cases claim to be free, their policy in regard to the appointment of the staff is doubtless dictated at times by a desire not to alienate the support of wealthy groups. The public institutions are just as insistent that they are free but undoubtedly are careful in many directions not to offend the legislature and the public that control their support. Except for a very few cases the records of both types of institutions are fairly good as far as the more overt cases are concerned. It is in the selection of faculty that a most subtle difficulty appears.

An additional problem may arise in the future in the case of some of the private institutions which have been given very large sums of money coming from certain specific industries. In a few cases in the United States the control of important industries might revert to universities in case of financial difficulties. This raises again the whole question of the relative efficiencies of endowments as against taxation or current gifts as support for education.

One of the most acute phases of the struggle for control in England has been in regard to the place of religious instruction. Each religious group desired to keep its own schools and receive public money. The schools supported entirely by public funds have developed relatively so much more rapidly that the issue has

receded somewhat into the background. Moreover, the fact that in many of the schools students are from the same social class makes it easier to adopt the attitudes of that class on economic issues.

The religious issue was bitterly fought in Germany for a long time and it is far from settled even now. A number of public schools in Germany reflect very definitely class positions and attitudes, especially where the group attending the school is fairly homogeneous. In both Italy and France very careful watch has been kept upon the opinions of the great mass of teachers. The higher schools and universities have, however, much more freedom; usually the best of the universities attempt to prevent direct interference with teachers' opinions, although the subtle force of selection undoubtedly plays its part. Russia is without doubt the supreme illustration of the maintenance of a class attitude throughout all the schools. Whether the situation in Russia is much worse than in other countries, including the United States, is a question which will be answered largely on the basis of one's prejudices. Certainly the existence of methods of control is admitted more freely in Russia than elsewhere.

Expenditures for education show evidence of a tendency toward rapid expansion. This expansion has proceeded until about 3 percent of the total income in the United States in 1928 was spent on education in contrast with 1.5 percent in 1913, and about the same percentage of the gainfully employed population was working in formal schools. In the future much more attention is likely to be given to education by means of other institutions with a corresponding expansion of expenditures for education through these organizations.

HAROLD F. CLARK

See: Teaching Profession; Adult Education; Workers' Education; Business Education; Industrial Education; Agricultural Education; Vocational Education; Legal Education; Religious Education; Coeducation; Universities and Colleges; Folk High Schools; Correspondence Schools; Continuation Schools; Preschool Education; Parental Education; Child; Adolescence; Humanitarianism; Rationalism; Scholasticism; Method, Scientific; Research; Learned Societies; Libraries; Museums and Exhibitions; Chautauqua; Clubs; Press; Radio; Motion Pictures; Public Opinion; Civic Education; Endowments and Foundations.

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EDUCATIONAL PSYCHOLOGY. The development of educational psychology as a separate discipline is largely a product of the present century. The Zeitschrift für pädagogische Psychologie began publication under the editorship of Ferdinand Kemsies in 1899, and the Journal of Educational Psychology followed in 1910. There were at the close of the century numerous books on genetic psychology, child psychology and psychology applied to education. But in the main these and the courses in which they were used as textbooks dealt with such topics as memory, attention, perception, feeling and voli-

tion, all taken from the introspective psychology of the time. The transformation of this point of view and the growth of educational psychology as a special study in the United States is largely attributable to E. L. Thorndike. In his attempt "to apply to a number of educational problems the methods of exact science" Thorndike adopted a point of view which was later to become an objective psychology. His Educational Psychology (1903) was primarily concerned with individual differences, already treated by Francis Galton in his Inquiries into Human Faculty and Its Development (London 1883), continued experimentally by J. McKeen Cattell (1886 et seq.) and defined in a monograph Uber Psychologie der individuellen Differenzen (Leipsic 1900) by William Stern. In his elaboration of the subject Thorndike added instinct and the learning process. These three topics constituted the theme of Thorndike's three-volume work, Educational Psychology, published in 1913, the first volume of which is called The Original Nature of Man, the second, The Psychology of Learning, and the third, which incorporates the carlier book, Individual Differences and Their Causes.

Thorndike advances the theory that the reflex arc is the hereditary unit of behavior, and he seeks a general interpretation of all learning and all individual differences in terms of the number and facility of the bonds of connection which are originally formed or can subsequently be formed between elements of the nervous system at their synaptic junctures. In accordance with this view learning is regarded as the formation of bonds of connection between "a situation S and a response R." The results of his earlier experiments upon animal learning, first published as a monograph (in Psychological Review, monograph supplement, vol. ii, no. 4, vol. iii, no. 5, 1898-1901) and later as a book, Animal Intelligence (New York 1911), seemed to warrant the belief that these connections are established in two ways: by exercise and by the terminal influence of a satisfying effect. While the law of exercise expresses a mechanical principle of facilitation whereby the resistance to nervous conduction is reduced by use and increased by disuse, the law of effect is not so readily accounted for in mechanical terms. Since Thorndike refers satisfaction and annoyance to the readiness or unreadiness of an action system to function, the learning of a new and unprepared for act does not receive the desired explanation -because the effectiveness of an act is exhibited

after the event and not during the event, as it must needs be if some acts infrequently exercised are more readily learned than others which are frequently repeated.

The behaviorists under the leadership of John B. Watson reduce all learning to exercise alone by invoking the conditioned reflex as the sole means of modifying behavior. Simply—all too simply—stated, the unconditioned responses of an organism are given. Learning consists then in attaching an unconditioned response to a new or "unnatural" stimulus; the response is then said to be conditioned whenever it has taken place together with an alien or unnatural stimulus often enough to produce the response without the presence of its natural stimulus.

The difficulty in both these explanations is the unsolved problem of integration or organization of behavior. Education is not a mere matter of drill and training; it is a matter of many sided development giving rise to the unified procedures of a self-reliant human being. In order to account more adequately for this result of education the psychoanalytic school makes the emotional life of man the effective core of his behavior and seeks in desires and their fulfilment or frustration an explanation of his endowments, his learning capacities and his individual differences. As desires are fulfilled, tensions are released and an organic equilibrium is established. Education then is rooted in man's instinctive cravings. Since, however, the complexity of practical affairs is too great for immediate satisfaction in all cases, these desires remain in part unfulfilled, leaving active tendencies to seek such expression as they may in lapses, dreams and idealistic sublimations. The problem of education is to release these tensions by appropriate means of expression in order that an otherwise tortured soul may find an adjustment to his fellows and to his environment in general. The weakness of the psychoanalytic theory of education is the obscurity of its principles of behavior. The notions of unconscious motivation, censorship and release furnish no clear understanding of what is the precise nature of the physiological and psychological bases of desire.

Another theory of behavior, which is truly of ancient vintage, is advanced by William McDougall as a hormic psychology. According to this view a purposive striving is the basic fact in behavior. Thus no explanation of man's learning is required; instead, one may ask why man fails to learn more readily and effectively than

he does. Based upon a given number of individual and social instincts learning is but a refinement and habituation of these original forms of behavior in their cognitive, emotional and conative aspects.

Gestalt psychology offers still another solution to the problem of learning in proposing to regard both physiological and psychological processes as unitary structures, the analysis of which leads to the discovery of subordinate structures but not to elements of reflex action or conscious process. Learning then will consist in the formation of a new structure both in experience and in behavior, eithe by the differentiation of a subordinate structure or by the assimilation of two or more previously existing structures. The details of these formations depend upon the graded features of experience and behavior and upon the redefinition of existing structures and gradations into new and unique forms. In other words, Gestalt psychology renounces the mechanism of the stimulusresponse and conditioned reflex hypotheses and underwrites the psychoanalytic and hormic psychologies of desire with concrete psychophysical structures that owe their origin and change to field conditions rather than to external stimuli or internal purposes. A Gestalt is a structure in a field of forces which maintain, modify or destroy it. Yet its structural integrity can within limits select the forces conducive to its maintenance and completeness. Hence the learning process of an organism as a Gestalt is centrally motivated and selective of the means at its disposal for satisfying the wants of its structure as a behaving creature.

The scope of educational psychology in this country has been determined externally by requirements imposed upon persons seeking certification as teachers in secondary schools. Internally the subject has defined itself within the limitations of psychology as a growing science. The external limits led to the standardization of a course which would carry a minimum credit recognized by the certificating agencies. Since secondary school teachers are often trained in colleges of liberal arts rather than in normal schools or teachers' colleges, this requirement has led to the modification of existing courses in psychology and to the addition of special courses in educational psychology.

The internal development of the subject has been focused on the learning process, first introduced into the psychological laboratory by Hermann Ebbinghaus' classical experiments on

memory in 1885. The extensive series of investigations which followed under the leadership of such men as G. E. Müller and Ernst Meumann established many important features of the economy and technique of learning, but the experiments on animals, to which Thorndike and Watson gave the chief impulse, contributed most to an objective theory. In addition to these experimental leadings the study of individual differences begun by Francis Galton resulted in the elaborate devices of the mental or aptitude tests. Here we find the independent and influential efforts of such men as Alfred Binet, the author of the intelligence scale; William Stern, the author of a psychology of individual differences; and C. Spearman, the author of a conception of general intelligence. A third leading, which only recently has begun to be employed experimentally, is the study of infancy and childhood. Child study has produced a wealth of material, much of it anecdotal, recorded by psychologists of various countries. Authors of importance in this field are W. Preyer, William Stern, James Sully, Millicent Shinn and more recently K. Bühler, K. Koffka, J. Piaget, Arnold Gesell and J. B. Watson. The late G. Stanley Hall contributed largely both in his own writings and by publications in his journal, Pedagogical Seminary, to the encouragement of studies of this character, as did also J. Mark Baldwin. In summarizing and interpreting the results of these observations of childhood, theories of development resting upon the general theory of organic evolution have played an important

In general, the varied theories and experiments on child behavior, learning and individual differences have converged in two issues: the one mechanistic and the other teleological. Of these the former has seemed to have the sanction of a rigorous, scientific interpretation of facts, while the latter has suffered from the charge of being unscientific and therefore untrue.

It is a paradox that the aims and objectives of educational procedures which common sense defines in terms of an improvement in individual and social life should when subjected to scientific scrutiny reduce themselves to a set of forced actions in which either a hereditary bias or an environmental set of conditions determines every educational change. Within the ranks of the rigid experimentalists, who find no justification for anything that smacks of purpose, it was quite recently the fashion to regard hereditary bias as all important. The problem of education

was supposed to be largely solved by tests calculated to determine the limitations of individual capacity. It was argued that each individual works within the limits of his endowment and may be counted upon to make the best he can of his capacity. Educators need only test the individual and supply opportunities within his range; he will then take care of his own education. But now from the same camp there is the contrary notion of J. B. Watson that environment is all effective. "Give me," he says, "a dozen healthy infants, well-formed and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select-doctor, lawyer, artist, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors" (Behaviorism, p. 104).

But while the controversies between determinism and teleology, heredity and environment, still flourish among educational psychologists, similar questions are assuming a new aspect in physics and biology. It is no longer a mark of reproach to mention indeterminism in physics, and the question of nature or nurture is being answered by considering behavior itself as the primary subject of biological inquiry. Thus revised, purposive striving on the part of an individual or group, leading to the discovery of new and indeterminate facts and to the learning of new and indeterminate ways of dealing with facts, is no longer evidence of a mysterious force which shapes ends to fit a prearranged plan. Instead, the formation of behavior, as revealed by the studies of C. M. Child and G. E. Coghill on embryonic development, by K. S. Lashley on experimental neurology and by W. Köhler on the learning of apes and other animals, has become a problem of dynamics. That is, the problem of behavior is no longer defined in terms of a bodily machine, limited in its action to a few degrees of freedom; for the machine itself is a product of behavior developing its own limitations as it behaves.

Thus the psychology of education need not be reduced to conscious contents, associated, apperceived or acted upon by external agencies of mind or body, nor to reflex units in complex combinations that give forced responses to external stimulation. Instead, we have a new conception of the individual and the social group as behaving creatures which by a process of differentiation develop subordinate forms of behavior

each conditioned by the structural nature of the whole organism in its field of action. There must be indeterminateness in the sense that we are not dealing with a world of finite entities which can be counted and their action with one another explained in terms of a calculus of unit forces. Purposiveness also exists, not in the sense of an obscure agency for the attainment of ends but rather as a fundamental pattern the integrity of which is maintained and promoted by its own essential nature as a living, growing form of behavior.

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See: EDUCATION; PSYCHOLOGY; CHILD, section on CHILD PSYCHOLOGY; COMPARATIVE PSYCHOLOGY; MENTAL 'TESTS; BEHAVIORISM; GESTALT; PSYCHO-ANALYSIS; INDIVIDUAL DIFFERENCES; DETERMINISM; TEACHING PROFESSION.

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EDWARD I (1239-1307), king of England. Edward is traditionally known as the "English Justinian"—an appropriate name if one considers his tremendous interest in law and the fact that his statutes summarized and supplemented the teeming and disorderly common law growth of the preceding century; inappropriate if it implies a common law completed or decadent. Edward began with a nation wide investigation of private jurisdictions. This was followed by the writ of Quo warranto, which established the principle that no new franchises should be acquired except by royal grant: thus time would extinguish them. The Statutes of Westminster 1 and II in 1275 and 1285 formulated much unwritten law, and the second contained the enact-

ment (de donis conditionalibus) which made possible the creation of entailed estates and also reorganized the circuit courts, laying down the nisi prius principle. Mortmain in 1279 prohibited alienation of land to the clergy, and Merchants in 1283 made it easier for traders to collect their debts. Winchester in 1285 elaborated the old regulations touching militia service and local maintenance of the peace. In 1290 the Statute of Westminster III, known also as Quia emptores, regulated the sale of land, enacting the new principle that the purchaser should hold of the seller's overlord, thus preventing subinfeudation. Such statutes indicated the passing of the old feudal order and enunciated law some of which holds even to the present. Only two or three other periods of English history are comparable with this for legislative importance. A legal profession developed; and since church influence was withdrawing clerks from state service, laymen had to be trained, and the first traces of the Inns of Court appeared. The Year Books, beginning in 1292, marked vivid interest in law; and the chancellor, soon the center of a new equitable jurisdiction, became the king's chief minister.

Representation of shires and boroughs in central assemblies grew, and in 1295 under stress of war Edward gathered a more complete representative assembly than before—the socalled Model Parliament. The Council became more clearly defined and was the center and nucleus of Parliament. War made the taxing problem acute, customs duties became important and in 1297 in the most notable of all confirmations of Magna Carta the king conceded the principle of no taxation without consent of the taxed. Edward conquered Wales, attempted to conquer Scotland and fought with France to retain the English holdings there; but his reign's greatness—unquestionably the expression of his own qualities—was in the realm of law and the constitution.

ALBERT BEEBE WHITE

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1-25; Jenks, Edward, "The Development of Teutonic Law" in Select Essays in Anglo-American Legal History, 3 vols. (Boston 1907-09) vol. i, p. 34-87.

EDWARDS, JONATHAN (1703-58), American theologian and philosopher. At the age of twenty-three, seven years after his graduation from Yale, he was called as assistant to his grandfather, Solomon Stoddard, influential Congregational pastor of Northampton. The intense fervor of Edwards' religious life, characterized by an overwhelming sense of the glory and sovereignty of God and of the blessedness derived from complete submission to His will, communicated itself to his audiences, resulting in a wave of religious enthusiasm which, temporarily at least, transformed the character of New England Puritanism. Shifting the emphasis of Puritan theocracy from the social and political realm to the inner life of the soul, he stressed with the full force of his dialectical skill and spiritual vigor the necessity of depending entirely upon God's free grace for salvation. Edwards' unusual effectiveness in arousing "experimental religion" in others culminated, with the aid of Whitefield's itinerant preaching and other factors, in the widespread religious movement known as the "Great Awakening" (1736-41) and thus was instrumental in establishing the practises of revivalistic evangelism, which for many generations remained one of the characteristic features of American life. Nevertheless, he disapproved of the violent physical expressions which seemed to be an increasingly prominent feature of the revival meetings and insisted that "the true mark of the work of the Spirit" is to be found in "Christian practise." His critical Treatise on the Religious Affections (Works, vol. v, p. 1-344) is a classic of the psychology of religion. Nor did he sanction the tendency to "separate" from the regular churches. Encouraged by the unusual success of his ministry, Edwards made an attempt to enforce at Northampton certain disciplinary reforms, such as the strict interpretation of the qualifications for communion. His congregation, however, reacting from its recent enthusiasms and preferring the extremely lenient discipline of Stoddardeanism, with which they had been familiar for half a century, resented Edwards' proposed change of policy; and after a protracted dispute Edwards in 1750 was dismissed.

During the next seven years, while serving as pastor and missionary in the frontier settlement of Stockbridge, Massachusetts, Edwards was

more free to return to the abstract problems of metaphysics and philosophy, which in his college days, before his preoccupation with church polity and practical theology, had absorbed his interest and had inspired him to formulate in his "notes," Of Being (Works, vol. i, p. 706-08) and The Mind (Works, vol. ii, p. 664-702), an idealistic philosophy, which was significant because it anticipated later idealistic doctrines. His early idealism was based on Newton, Locke and the Platonists. He now developed his philosophy on a Calvinistic basis, emphasizing the doctrines of the sovereignty and perfection of the divine will and the moral justification of determinism, original sin, election and retribution. His most important works of the Stockbridge period are A Careful . . . Inquiry into the ... Freedom of Will ... (1754) and Two Dissertations (I) Concerning the End for which God Created the World; (II) The Nature of True Virtue (1754), which in the main attempted to provide by metaphysical reasoning a verification of the main tenets of Calvinistic theology. His work resulted in a new school of Calvinism, called the New England or Edwardean theology, which served as a powerful check to the growing liberalism of his time. The carrying out of a final work, which Edwards had contemplated as a summa of his theology and philosophy, was prevented by his acceptance of the call to the presidency of New Jersey College (Princeton) in 1757 and by his death the following year.

HERBERT W. SCHNEIDER

Works: The Works of President Edwards: with a Memoir of His Life, ed. by S. E. Dwight, 10 vols. (New York 1829-30).

Consult: Schneider, H. W., The Puritan Mind (New York 1930) ch. iv, and bibliography p. 283-86; Parkes, H. B., Jonathan Edwards, the Fiery Puritan (New York 1930).

EFFICIENCY in the sense of a ratio between input and output, effort and results, expenditure and income, cost and the resulting pleasure, is a relatively recent term. In this specific sense it became current in engineering only during the latter half of the nineteenth century and in business and in economics only since the beginning of the twentieth. But economics was thoroughly familiar with the concept of efficiency before it took over the term from engineering and business. The concept occurred in embryonic form in Adam Smith, who made clear in the opening paragraphs of his *Wealth of Nations* (1776) that he was addressing himself to the problem of how the produce of "the annual labour" of a

nation could be made to bear the largest possible "proportion to the number of those who are to consume it." But Smith did not analyze the problem of costs thoroughly and he did not examine the problem of minimizing cost. The classical economists, as utilitarians, not merely sought to explain economic phenomena in terms of men's efforts to seek pleasure and to avoid pain but also attempted to discover the form of industrial organization and the economic policies which would enable men to achieve the maximum return with a minimum outlay. In most of the work of the classical economists, however, the concept of efficiency is taken for granted rather than given explicit formulation. Jevons, on the other hand, undertook to develop a "mechanics of utility," and although he did not use the word "efficiency" he described the problem of efficiency as the central problem of economics.

The earliest technical use of the term efficiency occurred in mechanical engineering, where it was applied to the performance of prime movers and machines. The application of the term to human performance followed the realization by leading members of the American Society of Mechanical Engineers that output was affected by methods of wage payment as well as by technical proficiency. The foundation of modern scientific management may be dated from F. W. Taylor's paper A Piece Rate System (London 1805; reprinted in Two Papers on Scientific Management, London 1919), in which he described his pioneer method of establishing standards of job performance at the Midvale steel plant. When such standards were set, it became customary to refer to the ratio of actual performance to the standard performance as the efficiency of labor, a use somewhat different from that of the mechanical engineers, who apply the term to the ratio of actual output to an actual input.

Shortly after the turn of the century there suddenly developed a popular efficiency movement on the basis of the application of the methods of systematic research to the problems of business operation. The development of cost accounting during the last two or three decades of the nineteenth century, together with the use of time and motion study, provided two techniques capable of measuring the effectiveness of managerial policies and methods of production. The impressive results yielded by the early researches into administrative procedure commanded extraordinary interest throughout the

industrial world. Enormous publicity was given to its possibilities when, during hearings before the Interstate Commerce Commission in 1910, Louis D. Brandeis introduced industrial engineers who testified that the railroads could reduce costs \$1,000,000 a day by the use of scientific management. This was the first use of the latter term, which has gradually supplanted the term efficiency as the symbol for the movement for business research. The pioneers in this scientific management movement were F. W. Taylor, whose important Principles of Scientific Management (New York) appeared in 1911, Harrington Emerson and H. L. Gantt. In 1912 the Efficiency Society was organized in New York City with the broad aim of "promoting efficiency in the various activities in which man is engaged." Its membership included many educators, economists and publicists as well as business men. Almost simultaneously the Taylor group of engineers organized the Society to Promote the Science of Management, now the Taylor Society. By 1913 it was possible for Charles Buxton Going, editor of the *Engineering* Magazine, to say that efficiency had become a catchword everywhere.

The application of the idea of efficiency extended from business administration to individual development and political performance. Luther Gulick's The Efficient Life (New York 1907) was a forerunner of popular interest in health and psychology. Josephine Goldmark had made the first important study of industrial hygiene, published as Fatigue and Efficiency (New York 1912). At the same time a widespread demand arose for reform in public administration with emphasis on budgetary control of expenditures. Between 1912 and 1914 the United States government and thirteen states established bureaus or commissions of efficiency and economy. Morris L. Cooke, one of the most distinguished of the original Taylor group of industrial engineers, became director of public works in the Philadelphia reform administration from 1912 to 1915. He was one of the first to employ experts in the conduct of public affairs. The introduction of the city manager form of government dates from this period. At this same time the applicability of the concept of efficiency to agriculture and to the household led to the growth of the farm management and home economics movements.

The efficiency movement early aroused the intense opposition of organized labor. The reasons for the opposition were various. All unions,

even those which favored piecework, were opposed to bonus systems under which compensation did not rise in proportion to output, and which therefore were regarded as rate cutting devices. The claims of increased output which efficiency engineers made for their methods caused unionists to associate efficiency with speeding. The craft unions feared the destruction of their trades by specialization and by the substitution of instruction cards and standard practises for the workman's knowledge and skill. Most important of all, the unions feared and resented the claim of some engineers that scientific research could eliminate most if not all of the necessity for collective bargaining. As a result of labor influence the House of Representatives on August 21, 1911, appointed a special investigating committee to study the Taylor system in the government arsenals. Later Congress prohibited the making of further time studies on government employees. In 1914-15 the Federal Commission on Industrial Relations appointed Professor R. F. Hoxie of the University of Chicago to investigate the claims of the efficiency experts and to study their methods in operation. Possibly as a result of Professor Hoxie's report, which is summarized in his Scientific Management and Labor (New York 1915), and also as a result of the great economic strength of labor during the World War the industrial engineers have abandoned their extreme claims on behalf of time study and conceded the need for collective bargaining. At the same time they are giving more attention to personnel administration and industrial hygiene. The war labor problem focused the attention of many engineers upon the problems of industrial morale and led them to appreciate the fact that friendly labor organizations might become managerial assets. In their turn some of the more far seeing trade union leaders have realized that labor might benefit by cooperating in the application of the principles of scientific management.

Since the war the concept of efficiency has acquired both wider currency and a vaguer meaning. It has been applied not only to the organization of single plants but to the elimination of waste throughout industry and the community at large. It has been used as a slogan in arguments as to the relative merits of small and large scale, public or commercial operation of business. To many people the term has come to symbolize the methods of mass production and machine technique which have had their greatest development in the United States. In this

sense efficiency has become a goal of the statesmen of Soviet Russia as well as of the engineers of Japan and South America. It has been used as a justification for the replacement of representative government by dictatorship. At the same time the term has been subjected to increasingly critical analysis. An efficiency which leads to periodical crises and unemployment stands self-condemned. In recent years there has been evident among many groups a tendency to talk in terms of rationalization and national or international planning as substitutes for or supplements to efficiency.

The tremendous emphasis on efficiency and the widespread use of the term in the sense of business or pecuniary efficiency have obscured the real nature of the term and created the popular belief that efficiency is desirable per se. Hence it has been accepted as an indictment of trade unions to say that they are opposed to efficiency or of public operation of industries to say that it is inefficient. Strictly speaking, efficiency is a purely abstract and colorless term. It relates simply to the ratio of results achieved to the means used. It follows that there is no such thing as efficiency in general or efficiency as such—there are simply a multitude of particular kinds of efficiency. Actions and procedures which are efficient when measured with one measuring stick may be inefficient when measured with a different measuring stick. Consequently it is no more true to say that trade unions are opposed to efficiency than it is to say that business men are opposed to efficiency. The two statements are equally true and equally false, for both trade unions and business men favor some kinds of efficiency and oppose other kinds-but not the same kinds. From the point of view of the business man that method of production is most efficient which yields the largest output at the lowest money cost; from the workman's standpoint that method is most efficient which yields the largest output at the lowest cost in terms of fatigue, monotony, accidents—the lowest human cost. Just as trade unions do not hesitate to oppose methods which reduce money costs at the expense of human costs, so business men often oppose methods which reduce human costs at the expense of money costs. Among the almost numberless kinds of efficiency three stand out as of particular importance: engineering or physical efficiency, the relationship between physical quantities consumed and physical quantities produced; pecuniary or business efficiency, the relationship

between dollars spent and income obtained; and social or human efficiency, the relationship between human costs incurred and human satisfaction or benefits produced.

SUMNER H. SLICHTER

See: Scientific Management; Waste; Cost; Engineering; Expert; Industrialism.

Consult: Drury, H. B., Scientific Management: a History and Criticism, Columbia University, Studies in History, Economics and Public Law, vol. lxv, whole no. clvii (3rd ed. New York 1922); Devinat, P. E., Scientific Management in Europe, International Labour Office, Studies and Reports, ser. B, Economic Conditions, no. xvii (Geneva 1927); International Management Congress, Fourth, Paris, 1929, Mémoire (Paris 1929); American Engineering Council, Waste in Industry (Washington 1921); Hamilton, W. H., and Wright, H. R., The Case of Bituminous Coal (New York 1925); Florence, P. S., Economics of Fatigue and Unrest (London 1924); Foreman, C. J , Efficiency and Scarcity Profits (Chicago 1930); Veblen, Thorstein, The Engineers and the Price System (New York 1921); Borsodi, Ralph, This Ugly Civilization (New York 1929); Hobson, J. A., Incentives in the New Industrial Order (London 1922); Münsterberg, Hugo, Psychology and Industrial Efficiency (Boston 1913); Allen, W. H., Efficient Democracy (New York 1907); Moley, Raymond, The State Movement for Efficiency and Economy (New York 1918).

EFFICIENCY PAYMEN'TS. See Labor, Methods of Remuneration for.

EFIMENKO. ALEXANDRA YAKOV-LEVNA (1848-1919), Russian economic historian. Upon completing her secondary education Alexandra Efimenko taught school in Kholmogori in the province of Archangel. The work on local historical records which she began at this time under the influence of her husband, Peter S. Efimenko, a well known student of indigenous legal customs, opened for her a career of historical research which soon engrossed her entire attention. In 1907 she was appointed professor of Russian history at the St. Petersburg school for women of university rank. She was killed during the civil war by a peasant mob in the Ukraine.

Alexandra Efimenko's work was inspired by an idealization of folk justice, and she stressed particularly the importance of the labor principle in the local customary law. Her writing possessed a degree of literary charm rarely found among academic historiographers. Her most important contribution is a collection of essays on land tenure in the north, Izsledovaniya narodnoy zhizni (Studies of folk life, Moscow 1884). A study of private deeds of Archangel convinced her that northern land tenure in the

sixteenth and seventeenth centuries was based on the principle of owning ideal shares to which corresponded the actual possession of strips in the several fields of the village. This system of share ownership developed later in some localities into a form of private property vested in the family and in others into communal land tenure with periodic redistributions. Her work on southern Russia, Yuzhnaya Rus (2 vols., St. Petersburg 1905), was based in part on original investigations of church brotherhoods in the south and west in relation to land tenure and of the forms and procedures of folk tribunals, but most of her writing on Ukrainian history remained on the level of a brilliant compilation. This is true also of her Istoriya ukrainskago naroda (History of the Ukrainian people, 2 vols., St. Petersburg 1907), which went through several editions.

V. MIAKOTIN

Consult: Simkhovitch, V. G., Die Feldgemeinschaft in Russland (Jena 1898) ch. i.

EGERTON, HUGH EDWARD (1855-1927), English historian. Egerton was educated at Rugby and Oxford and called to the bar in 1880. In 1885 he was appointed assistant private secretary to Edward Stanhope, M.P., who in 1886 became secretary of state for the colonies in Lord Salisbury's government. His interest in the colonies thus awakened, Egerton devoted all his spare time for several years to research in colonial history. Its results appeared in his Short History of British Colonial Policy (London 1897, 8th ed. 1928), a book which proved his mastery of a field which historians had hitherto neglected. Other books followed and when in 1905 Alfred Beit endowed a new chair of colonial history at Oxford, Egerton was called by common consent to be the first professor. Neither his lectures nor his books, except his first, were very popular; but he exerted, none the less, a profound influence on the study of the British Empire. Both lectures and books were models of industrious scholarship and cool academic judgment, which appear at their best in his published course, The Causes and Character of the American Revolution (Oxford 1923). Thus he gave the new chair at its outset a tradition of solid learning in a subject which lent itself all too easily to superficial or partisan treatment; and it was largely due to him that serious students of the history and problems of the empire could free themselves from the suspicion of political propaganda. In his later phase, moreover (e.g. in

British Colonial Policy in the Twentieth Century, London 1922), Egerton, although conservative by upbringing and instinct, showed an understanding of the post-war development of interimperial relations and likewise a reasoned sympathy with dominion nationalism which deeply influenced the wide circle of his pupils, friends and readers.

R. COUPLAND

EGGLESTON, **EDWARD** (1837-1902),American novelist and historian. Suffering from ill health in childhood, he was largely self-educated and in his adult years followed a varied career as Methodist circuit rider, journalist, editor, novelist, biographer, resident clergyman and historian. His widely read novel, The Hoosier School-Master (New York 1871), was the first to exploit realistically the literary materials afforded by mid-western pioneer life. This was followed by other novels, The Circuit Rider (New York 1874), Roxy (New York 1878), The Hoosier School-Boy (New York 1883) and The Graysons (New York 1887), which portray with greater literary skill a similar background. The historical labors which occupied his later years were colored by this preoccupation with the life of common folk and by his removal from the middle west to New York, where he was better able to obtain a comparative view of American civilization. In 1880 he projected a comprehensive History of Life in the United States, only two volumes of which, however, were completed before his death: The Beginners of a Nation (New York 1896) and The Transit of Civilization from England to America (New York 1900). Written at a time when American historians of the new scientific school envisaged history mainly as "past politics," these volumes offered a rich synthesis of colonial life in its varied aspects as affected both by its European background and its American environment. Compared with the contemporary historical work of J. B. McMaster, who was animated by a somewhat similar ideal, the material in Eggleston's volumes was more philosophical, less political, better digested and more gracefully written. The fullest formulation of his historical creed appeared in his address as president of the American Historical Association in 1900 under the significant title "The New History" (in American Historical Association, Annual Report for 1900, 2 vols., Washington 1901, vol. i, p. 35-47). In this he adjured historians to neglect "drum and trumpet history" for a conception more vital, "the history of culture, the real history of men and women."

A. M. SCHLESINGER

Consult: Eggleston, G. C., The First of the Hoosiers (Philadelphia 1903).

EGOISM. See ALTRUISM AND EGOISM.

EGYPTIAN PROBLEM. Egypt by virtue of its geographical position has during the last two thousand years provided a fruitful field for the successive operations of Greek, Roman, Arab, Georgian, Turkish, French and British exploiters. It was in turn a province of the Greek Empire, of which it was the art gallery; of the Roman Empire, of which it became the granary; and of the Ottoman Empire, of which it was the gold mine. At the time of its national renaissance Egypt had no national legend, no national literature, not even a national language. The Copts, or "Gypts," the survivors of the ancient Egyptians, belonged to the despised Christian religion and clerical class, and were reduced by Islamic persecution to less than one milliona tenth of which population was Moslem, mostly of Nubian stock and speaking Arabic. The ruling class were Mamelukes, Arnaut Janizaries or Turkish pashas and spoke Turkish.

The system of the Mamelukes (male white slaves) was instituted by Saladin, himself a slave by birth. These slave guards, like the Roman practorians or the Byzantine Varangians or the Ottoman Janizaries, by virtue of non-assimilation with the native population and by continually recruiting their ranks from the Georgian race, were able to establish themselves as a ruling class which continued to govern Egypt for five centuries. The rise of the Ottoman Empire resulted in a temporary diminution of the prestige and position of the Mamelukes but did not succeed in permanently destroying their political power. Gradually as the Ottoman power declined they recovered most of the influence they had lost.

For centuries these praetorians of the Islamic state barred European expansion eastward. But economic pressure for reopening the direct route between Europe and the East through Egypt at last made further isolation of Egypt from Europe impossible. The wars of the French Revolution and Napoleon's dreams of an eastern empire made Egypt a battle ground between British naval and French military forces. Napoleon organized Egypt as the base for the establishment of an eastern empire, effectively destroyed the

power of the Mamelukes and brought Egypt for the first time into direct contact with western civilization. But his plans ended in failure. The French evacuated Egypt in 1801 and after the British withdrew in 1803 Egypt again became a province of the Ottoman Empire. But these events paved the way for the first steps in the emergence of Egypt as a modern state under Mehemet Ali.

Mehemet Ali was the founder of modern Egypt and he is considered to be the father of the Egyptian national movement. This first expression of Egyptian nationalism was not cultural as in the case of most other national movements of the nineteenth century but military. For Mehemet Ali was himself a foreigner; by sheer audacity and ability he made himself pasha of Egypt in 1805 and both his own rule and that of his successors presented all the characteristics of alien domination. He did, however, organize within the Islamic state the first of the new reconstructed nations of the East and thus established a national tradition for the subsequent and more genuine national movements.

Mehemet Ali is generally described as having Europeanized Egypt. But he was an oriental autocrat; his state was thoroughly Islamic; and his experiments in state socialism were inspired rather from the East than from Europe. When he made himself sole titular landlord, sole tax farmer and sole foreign trader for all Egypt he did so under the authority of Islamic law. His system of state monopolies succeeded sensationally as long as they concerned only marketing, but in respect to production they failed. So long, however, as he controlled them, they gave him an economic basis for a no less sensational expansion of political power. With the aid of French experts he had soon organized an army and a fleet on European models that enabled Egypt to break the Wahabi Empire over Arabia in 1816, to conquer the Sudan, to crush the Greek rising in 1825 and to lead an Egyptian army through ten years of campaigns in Syria and Asia Minor to the walls of Constantinople in 1833. Nothing but the armed intervention of Palmerston and the British fleet saved the reforming sultan, Mahmud 11, from his rival.

After Mehemet Ali's death in 1849 European expansion in the latter half of the century made Egypt a diplomatic battlefield between British and French imperialism. Under Mehemet Ali's successors, Abbas (1848–54), Sayyid (1854–63) and Ibrahim (1863–79), the system of monopolies became a cesspool of corruption. Egypt, like

Turkey, Algiers, Tunis, Morocco and Persia, ran rapidly through the early stages of Europeanization—first reconstruction, next corruption and extravagance followed by foreign control, financial and then political. Under Sayyid the French were dominant and de Lesseps secured for them the construction of the Sucz Canal; this although a vast benefit to the world was disastrous to Egypt. His successor Ismail succeeded in making Egypt practically independent of Turkey and acquired the title of khedive in 1873. But on the other hand he pawned Egypt to European financiers for loans from the Goschens in 1862, 1864 and 1866, from the Oppenheims in 1873, the Bischofsheims in 1870 and the Rothschilds in 1879. Never was there such a spoiling of the Egyptians. Then ensued the usual series of debt commissions and controls, in which the British took the lead. The Anglo-French dual control of 1876 did not take long to cause Ismail's deposition in favor of Tewfik (1879-92).

The last quarter of the century was characterized by the growing ascendancy of the British over the French and by a growing antagonism between British alien authority and native nationalism. This nationalism was composed of three elements—an Islamic renaissance led by Jamalal-Din and Mohamed Abdu, a Europeanizing constitutionalism led by Sherif Pasha and Nubar, and a purely Egyptian reformation led by the fellah Arabi and other officers. This Egyptian reformation came into collision with Anglo-French imperialism, by which it was completely misread and misrepresented. The French pushed matters to a rupture between European imperialism and Egyptian nationalism but after a change of government declared against active intervention, and the British Liberal government found itself forced by financial interests and imperialist opinion into armed intervention. A British army under Wolseley landed in Egypt in 1882, scattered the forces of Egyptian nationalism and definitely established British occupation of Egypt. Egypt was not annexed to the British Empire, but an arrangement was worked out whereby its status as an autonomous province within the Ottoman Empire was preserved, active control to be exercised by the British consul general, who ruled in the name of the khedive.

The first Egyptian nationalist movement having thus failed, the British set about the restoration of Egyptian finance in the interest of the foreign bondholders. That Egypt was saved

from bankruptcy and restored to prosperity is due as much to the industry of the native peasantry as to the intelligence and integrity of such British proconsuls as Cromer and Dufferin. By 1886 the budget was made to balance and, although the sufferings of the peasantry from excessive taxation were severe at first, by the end of the century they were sharing in the general prosperity. But the British throughout were hampered by the political character of their control, which subjected it to an Islamism and an internationalism both of which had lost vitality. Being merely alien advisers of an Islamic autocracy they were constrained to conserve Islamic institutions intact; while being merely an associate of other powers they were obliged to preserve all the privileges of foreigners consecrated by the Capitulations (q.v.), which were exploited by their French rivals so as to impede as far as possible all progress. Indeed, in order to purchase the tolerance of other powers the British had not only to collect their bondholders' extortionate claims but even to extend their "capitulatory servitudes," as, for example, by giving the mixed tribunals an interpretative veto in legislation. The situation was at last simplified by the Anglo-French agreements of 1904, by which in principle the French left Egypt to the British in return for Morocco.

Under these conditions it is not surprising that the constitution planned by Lord Dufferin was not carried into effect and that the political and social education of the Egyptians was neglected in the effort to give them political peace and economic prosperity. In this their success was such that Egyptian nationalism in opposition to British rule only revived with the rise of a new generation. With the young khedive Abbas Hilmi (1892–1914) and with the young journalist Mustafa Kamil nationalism entered a new phase of politicians and publicists. This movement became formidable under Cromer's successor, Sir Eldon Gorst (1907-11), whose policy it was to develop self-government. Unlike the earlier nationalist movement led by Arabi, which was chiefly agrarian in character, this second phase was an expression of a growing bourgeois intellectual class drawing its inspiration chiefly from French sources and attempting to use the pan-Islamic movement for its purposes. But this movement never struck deep roots in the country and almost disappeared again under Kitchener, who ruled Egypt as an oriental auto-

The World War inaugurated the third and last

chapter of Egyptian nationalism. During the Italo-Turkish War (1911–12) Egypt although still nominally under Ottoman suzerainty had been kept neutral by the British. But when the Turks joined the Central Powers on November 5, 1914, the British riposted with the proclamation of a protectorate over Egypt on December 18. The subsequent campaigns consisted of an unsuccessful Turkish offensive against the canal in February, 1915, an equally unsuccessful British offensive against Gallipoli in 1915 from Egypt as base, a second Turkish offensive against the canal that failed at Kantara in August, 1916, and a final successful British offensive in Syria under Allenby in 1917.

This defense of the canal, the spinal column of the empire, which immobilized as many as 200,000 men in Egypt, combined with war prices for cotton, poured some £200,000,000 into Egypt, about doubled the country's wealth and increased land values about sixfold. But it did not purchase Egyptian consent to the British protectorate. On the contrary, grievances accumulated. The constitution set up by Kitchener as an instalment of self-government, with a representative legislative assembly and provincial councils and municipalities, had been suspended during hostilities. All political activity had been suppressed and the prisons filled with suspects. A fierce and foolish press censorship prevailed. The khedive Abbas Hilmi, a pro-Turk and nationalist, had been deposed and replaced by Hussein Kamil, who was given the oriental title of sultan. The British officials had multiplied fourfold. The commandeering of cattle, camels and corn, the controlling of cotton and commerce, and enforced contributions to the Red Cross all combined to cause discontent. Last but not least came the grant of more selfgovernment to India, which had not contributed to the war in the same proportion as had Egypt.

Post-war Egyptians were moreover very different people from the pre-war effendis and fellahin. The population had doubled under British rule and had grown to thirteen millions. Its wealth had trebled. The old ruling class of Georgian, Arnaut and Turkish landlords and of Armenian and Syrian lawyers had been replaced by the intelligentsia of a professional and commercial middle class of Egyptians. This class had leaders of whom the ablest was a pure Egyptian of fellah stock—Sa'd Zaghlul. No sooner was the Armistice signed than Sa'd Zaghlul requested leave to submit Egypt's case in London, which was curtly rejected, although

the high commissioner, Wingate, supported it, for which he was soon after recalled. As a result Zaghlul united in support of his "Wafd," or "delegation," all political elements for an independence movement. The Wafd in fact became and remains an organization of practically all nationally conscious Egyptians. The only local opposition to Zaghlul disappeared when Rushdi's war government resigned over a dispute with the British as to the new constitution.

Hostilities began with the arrest of Zaghlul and his lieutenants and their deportation to Malta on March 8, 1919. Rioting followed in the chief cities and within a week had become a revolt. Much public property was destroyed and some British officers murdered. But neither then nor later was there any real fighting. Allenby, arriving as high commissioner, soon restored order, released Zaghlul, reinstated Rushdi-and reasserted the protectorate. At once trouble broke out again and Egypt had to be governed under martial law. The Milner mission from December, 1919, to March, 1920, at last recognized Egyptian independence in principle and led to negotiations which broke down rather from mishandling than from misdirection: a draft treaty that gave the Wafd practically all it asked was rejected by the Wafd because it was concluded with a pro-British ministry under Adli. More riots followed and Zaghlul was again deported, this time to Seychelles in December, 1921. The deadlock was finally broken by Allenby's declaration of February 28, 1922. Egypt was therein accorded full independence with four points being reserved for negotiation, viz. the canal, the garrison, the Capitulations and the Sudan. Fuad, who had succeeded Hussein, was then proclaimed king and proceeded to negotiate a constitution with the Wafd.

At the first election the Wafd swept the country and Zaghlul took office in January, 1924. But his negotiations with the first British Labour government on the reserved points broke down over Egypt's claim to the Sudan in September, 1924.

The terrorists in Egypt had meanwhile gone on murdering officials and officers; Zaghlul himself had been wounded by them. But now they succeeded in assassinating Sir Lee Stack, governor of the Sudan and Egyptian commander in chief, on November 19, 1924. The British demanded an indemnity and the withdrawal from the Sudan of Egyptian troops, which had recently mutinied. The indemnity was paid but evacuation refused. Alexandria was accordingly

occupied and the evacuation of the Sudan enforced. Zaghlul resigned, the parliament was dissolved and the king ruled by decree. Egyptian politics thereby entered a new phase, which still continues. The conflict with the British receded and the main conflict came to be between the king and the parliament, the latter represented by the Wafd. Since the death of Zaghlul in 1927 left the Wafd leaderless, the king has gone his own way and in 1930 amended the constitution so as to secure a docile chamber.

The second Labour government of 1929 concluded a fresh treaty with the king's ministers, which conceded all disputed points to Egypt except its claim to the Sudan. The high commissionership has been converted into a diplomatic post and the British garrison is eventually to be transferred to the canal zone.

Under this treaty the Anglo-Egyptian condominium in the Sudan is nominally restored. But practically the Sudan has become a British protectorate and will remain so. There is no racial or regional bond between Egypt and this vast area. The Egyptian claim is one of conquest and has been superseded by its reconquest first by the Mahdi and then by the British. The Egyptians are incapable of governing it, still less of developing it, and their legitimate claim to the waters of the Nile is to be secured by international guaranties.

GEORGE YOUNG

See: Empire; Islam; Capitulations; Ottoman Debt; Imperialism; Europeanization; Nationalism; Pan-Islamism; Pan-Turanism; Dominion Status.

Consult: Young, George, Egypt (London 1927); Kohn, Hans, Geschichte der nationalen Bewegung im Orient (Berlin 1928), tr. by M. M. Green (New York 1929) ch. vii; Chirol, Valentine, The Egyptian Problem (London 1920); Hasenclever, Adolf, Geschichte Ägyptens im 19. Jahrhundert, 1798-1914 (Halle 1917); Cromer, Evelyn Baring, Modern Egypt, 2 vols. (London 1908); Burns, Elinor, British Imperialism in Egypt (London 1928); Newman, E. W. P., Great Britain in Egypt (London 1928); Adam, Juliette, L'Angleterre en Egypte (Paris 1922); Low, Sidney, Egypt in Transition (London 1914); Symons, M. Travers, Britain and Egypt (London 1925); Gaulis, B. G., Le nationalisme égyptien (Paris 1928); Royal Institute of International Affairs, Survey of International Affairs, for 1925, 3 vols. (London 1927-28) vol. i, 189-271, and for 1928 (London 1929) p. 235-84; Foreign Policy Association, "Egyptian Nationalism and British Imperial Interand "Egypt, a Decade of Political Development" in Information Service, vol. iii (1927-28) no. 11, and vol. vi (1930-31) no. 22.

EHRENBERG, RICHARD (1857-1921), German economist. After working in a bank and a Leipsic book concern and serving for ten years

as secretary of the Altona chamber of commerce he became professor of economics first in Göttingen (1897) and later in Rostock (1899). Illuminated by his thorough knowledge of practical economics his lectures were unusually stimulating. His short books, Der Handel (Jena 1897) and Handelspolitik (Jena 1900), presented many new points of view and his IIandelshochschulen (3 vols., Braunschweig 1897-98) influenced the development of higher schools of commerce in Germany. He was of special importance as an economic historian, writing on early modern history and on the development of large enterprises. His Zeitalter der Fugger (2 vols., Jena 1896; incomplete translation by H. M. Lucas as Capitalism and Finance in the Age of the Renaissance, London 1928) attracted wide interest both in Germany and abroad. At Rostock he studied the works of Johann Heinrich von Thünen, who had drawn for the support of his theories largely from agricultural bookkeeping records. Ehrenberg developed the view that economics could be made an exact science by studying the accounts and other records of individual commercial enterprises. To this end he founded the Vereinigung für Exakt-Vergleichende Wirtschaftsforschung, supported by industrialists and landowners, and in 1904 began and frequently contributed to the Thünen-Archiv (changed in 1906 to Archiv für exakte Wirtschaftsforschung, 9 vols.). Although Ehrenberg sometimes overestimated the reliability of his material and the value of the comparative method he had proposed, his work and that of his students contributed significantly to our knowledge of economic history. He stressed the importance of the entrepreneur, opposed the notion of the class struggle and emphasized the idea of community of interest between capital and labor. He criticized the tendencies of the socio-political school, attacking their methods as unscientific; the hostility which he thus aroused among the socialists of the chair hindered the systematic formulation of his ideas. In later years he occupied himself with agricultural problems, particularly those of land settlement in Germany.

RICHARD PASSOW

Other important works: Die Fondsspekulation und die Gesetzgebung (Berlin 1883); Hamburg und England im Zeitalter der Königin Elisabeth (Jena 1896); Grosse Vermögen, ihre Entstehung und ihre Bedeutung, 2 vols. (Jena 1902–05; vol. i, 3rd ed., vol. ii, 2nd ed., 1925); Die Unternehmungen der Brüder Siemens (Jena 1906); Sozialreformer und Unternehmer (Jena 1904); Heimatpolitik (Rostock 1908); Terrorismus in der Wirtschafts-

wissenschaft, Gegen den Katheder-Sozialismus series, no. 2-3 (Berlin 1910). He also compiled Landarbeit und Kleinbesitz, 11 vols. (Berlin 1907-11).

Consult: Eickstedt, Claus von, in Deutsches biographisches Jahrbuch, vol. iii (Berlin 1927) p. 77-80.

EHRENBERG, VICTOR (1851-1929), German jurist. Ehrenberg taught at Göttingen, Rostock and Leipsic. His strong social bent led him into the field of insurance law, in which he became the most prominent figure of the past fifty years. He has been called the father of German insurance law. He exerted great influence as a writer of books and articles, as legislative counsel, as adviser to the state insurance supervisors and as private consultant. He and Wilhelm Lexis were the first two directors of the Göttingen seminar for the science of insurance established in 1895. Later he created and directed the institute for the science of insurance in Leipsic University. The German union for the science of insurance enjoyed his cooperation for thirty years. Particularly in the field of reinsurance Ehrenberg may be considered a real pioneer; he was the first German to present a scientific analysis of this internationally significant material. Ehrenberg's contributions extend, however, beyond the sphere of insurance in noteworthy writings on German legal history and on German commercial law. He was the editor of the Handbuch des gesamten Handelsrechts, which began to be published at Leipsic in 1913.

ALFRED MANES

Important works: Die Rückversicherung (Hamburg 1885); Versicherungsrecht (Leipsic 1893); Das künftige Rückversicherungsrecht (Berlin 1908); Privatversicherungsrecht, Enzyklopaedie der Rechts- und Staatswissenschaft, Abt. Rechtswissenschaft, vol. xiii (Berlin 1923).

Consult: Die Rechtswissenschaft der Gegenwart in Selbstdarstellungen, ed. by Hans Planitz, vols. i-ii (Leipsic 1924-25) vol. i, p. 59-85.

EHRENREICH, PAUL (1855-1914), German ethnologist and student of comparative mythology. Ehrenreich after making extended ethnological expeditions to Brazil became interested in folklore and centered his attention upon historical and interpretative studies of mythology. He believed that primitive mythology was an extended allegory of natural phenomena in which mention of the hero's spear, for example, indicated the sun's rays, of warts, the moon spots, and in which test themes represented the setting of the sun and its rising in the east. His extreme allegorical hypothesis has noteworthy adherents.

but more trustworthy mythological investigations now emphasize rather the importance of diffusion and the degree to which the cultural life of a people motivates their tales and is reproduced in them. Ehrenreich's mythological studies, however, were always based on careful comparative abstracts of the tale throughout the area of its distribution and his work on South American mythology therefore remains the great compendium of known distributions in that continent.

Besides his work in mythology Ehrenreich published several linguistic studies on Brazilian languages. He traveled widely in Egypt, India, eastern Asia and the United States. From 1910 until his death he was editor of the Baessler-Archiv.

RUTH BENEDICT

Important works: "Die Mythen und Legenden der südamerikanischen Urvolker und ihre Beziehungen zu denen Nordamerikas und der alten Welt" in Zeitschrift für Ethnologie, supplementary vol. xxxvii (1905); "Götter und Heilbringer" in Zeitschrift für Ethnologie, vol. xxxviii (1906) 536-610; Die allgemeine Mythologie und ihre ethnologischen Grundlagen, Mythologische Bibliothek, vol. iv, pt. i (Leipsic 1910); Die Sonne in Mythos; aus den hinterlassenen Papieren herausgegeben, ed. by Ernst Siecke, Mythologische Bibliothek, vol. viii, pt. i (Leipsic 1915).

Consult: Baessler-Archiv, vol. v (1915–16) i; Mitra, Monatsschrift fur vergleichende Mythenforschung, vol. i (1914–20) 157–58.

EHRLICH, EUGEN (1862-1922), Austrian jurist. Ehrlich, one of the founders of sociological jurisprudence, received his legal education at Vienna and in 1897 became professor of law at the University of Czernowitz in Bukovina. His European influence was lessened by a contentious personality and by the unreliability of his technical writings. His growing American influence was set back by the World War. Building on the solid achievements of the Germanist historical jurists Ehrlich sought to establish a "sociology of law" which would be for legal practise what medical science is for medical practise. He held that the objectives of such a theoretical science should not be the bloodless provisions of codes which merely tell judges how to decide controversies but the norms of "living law," the unformulated rules of conduct which are recognized in any organized human grouping (Verband) as the ones which should be observed and which are usually observed a distinction he did not always clearly mark. The legal sociologist's first task should be to bring together and systematize the norms of social groupings which juristic analysis has scattered among a multitude of individual rights and individual duties.

With rare insight Ehrlich sketched in his Grundlegung der Soziologie des Rechts the outlines of living law in family, in factory, in commercial groupings. Aware of the dangers of casual observation, he established a seminar of living law and sent his students to investigate the practises and attitudes of nearby communities, using an original but rather primitive personal interview questionnaire. He thus showed, for example, how widely familial customs of diverse racial groups of Bukovina differed from each other and from the supposedly sovereign Austrian code. As other data for the study of living law he suggested the facts of judicial reports and collections of private documents. His influence is seen in the increasing emphasis of legal scholars upon extralegal data and upon studies organized social-groupwise rather than legal-rulewise.

As a leader in the "free-law" movement, Ehrlich traced the fallacies of current juristic logic to the exaggerated importance of the state. Although the state created some law (e.g. as to the army, taxation, social insurance), juristic theory fictitiously assumed that all law emanated from the state, hence that the judge was bound by a preexisting legal rule and thence that the law was a complete, gapless and self-consistent system, affording a single solution of any litigation. Arguing that the legislature furnished a rule of decision only for clashes of interest which it foresaw Ehrlich contended that judicial citation of authority was often rationalization of a decision reached by an intuitive balancing of interests. Juristic logic thus obscured the cardinal fact that justice is guaranteed solely by the personality of the judge. In his preference for judicial intuition and in his glowing emphasis upon living processes as contrasted with logical concepts Ehrlich displayed affinities with Bergson and James.

EDWIN W. PATTERSON

Important works: (Grundlegung der Soziologie des Rechts (Munich 1913); Die juristische Logik (Tübingen 1918, 2nd ed. 1925); Freie Rechtsfindung und freie Rechtswissenschaft (Leipsic 1903), partly tr. by Ernest Bruncken in The Science of Legal Method, Modern Legal Philosophy series, vol. ix (Boston 1917) p. 47–84.

Consult: Page, W. H., "Professor Ehrlich's Czernowitz Seminar of Living Law" in Association of American Law Schools, *Proceedings*, vol. xiv (1914) 46-75; Pound, Roscoe, "The Scope and Purpose of

Sociological Jurisprudence" in Harvard Law Review, vol. xxv (1911-12) 512-16; Sander, Fritz, Staat und Recht, Wiener Staatswissenschaftliche Studien, n.s., vol. i (Leipsic 1922) p. 907, 945-77.

EICHHORN, KARL FRIEDRICH (1781–1854), German jurist. Eichhorn taught at Göttingen, Frankfort on the Oder and Berlin. In his academic career there was an interlude during which he served as captain in the cavalry in the War of Liberation in 1813–14. Later because of failing health he was compelled to give up his brilliant career as a teacher and withdraw into the country. In 1832 he returned once more to Berlin but in 1834 he finally had to leave the university. From then until 1847 he held a number of offices, including one of high judicial rank. In the last years of his life after his retirement from service he sank into deep melancholia.

Eichhorn's fame rests upon his Deutsche Staats- und Rechtsgeschichte (4 vols., Göttingen 1808-23; 5th ed. 1843-44), in which he laid the foundations of the science of German legal history. The work is the first comprehensive account of the development of German law, based upon the study of original sources, integrating political and juristic history and imbued with the historical spirit. Indeed, after his friend and colleague Savigny had developed the program of the historical school, Eichhorn became its acknowledged leader in the Germanistic field. He joined Savigny in the editorial direction of the journal of the school, the Zeitschrift für geschichtliche Rechtswissenschaft, contributing many important articles to its pages. Eichhorn's adherence to the historical school was determined, however, as much by a profound natural feeling of historical continuity as by theoretical views of legal origins. His attraction toward Germanic law was a manifestation of the same impulses that led him to interrupt his work to participate in the War of Liberation.

Eichhorn's masterpiece has long since been superseded. No doubt it had certain weaknesses to begin with, and probably because of Eichhorn's ill health it was not kept up to date. But it long remained unequaled in its arrangement and composition, in its clarity of exposition and in its originality and grandeur of conception, in which historical understanding and constructive power were nicely balanced. Along with Grimm's *Deutsche Rechtsaltertümer* (1828) it laid the firm basis upon which in the nineteenth century Germanistic legal science was brought to a par with Romanistic legal science.

In his other works, in which he sought to give separate dogmatic treatment to some of the branches of law which he had treated historically, there is evident a waning of his early power. The Einleitung in das deutsche Privatrecht mit Einschluss des Lehnrechts (Göttingen 1824, 5th ed. 1845) is not as original as his first work but it surpassed the preceding efforts of all others in showing for the first time real historical grasp. It demonstrated the inner relationship between the civil law which happened to be in force at the time and the more permanent basic elements of German law. It thereby led the historical school to further progress. Eichhorn's last work, Grundsätze des Kirchenrechts der katholischen und der evangelischen Religionspartei in Deutschland (2 vols., Göttingen 1831-33), showed high scientific qualities but was less successful than either of his other works and was soon outdated.

RUDOLF HÜBNER

Consult: Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 253-77, with bibliography; Hubner, Rudolf, in Festschrift für Heinrich Brunner (Weimar 1910) p. 807-38; Small, Albion W., Origins of Sociology (Chicago 1924) ch. iii.

EIGHT HOURS MOVEMENT. See SHORT HOURS MOVEMENT; HOURS OF LABOR.

EIGHTEENTH AMENDMENT. See Prohibition; Liquor Traffic.

EINARSEN, EINAR (1868–1913), Norwegian economist. For the greater part of his life Einarsen was engaged in practise as a barrister at law. In 1897-98 shortly after his publication of the Begrebet kapital i ökonomien (Christiania 1895), a deductive treatise in which he conceived capital as "that part of an economic subject's wealth which is destined to satisfy his future needs," he became assistant professor of economics at the Norges Landbrukshöiskole. In 1904-05 he occupied the same position at the University of Copenhagen. Einarsen's chief contribution to economics was his Gode og duarlige tider (Christiania 1904), containing the results of his investigations into the causes of business cycles and based on statistical data relating to Norway, Denmark, Germany and France, particularly during the period between 1850 and 1899. After classifying his data as "common" and "special," according as they represented features characteristic of all these cycles or peculiar to some of them, he dismissed all theories

which were supported only by special data. Thus he found that variations in the quantity of money in circulation could be regarded not as a final explanation but only as a factor modifying the strength of business fluctuations. The actual cause of such fluctuations was embedded in the "paradoxical nature of the value phenomenon," which Proudhon had emphasized. "A rise in values is a sign of greater scarcity, greater poverty; a decline in values a sign of increasing plenty, of growing wealth Therefore depression must by an inevitable law succeed prosperity, just as rain follows sunshine." Einarsen's work, although brilliant and for its time most modern in approach, has never been translated.

WILHELM KEILHAU

EISELE, FRIDOLIN (1837-1920), German jurist. Intending at first to devote himself to theology Eisele studied Semitic languages, the knowledge of which later proved very valuable to him. Turning to the law he entered upon a judicial career and a few years later published his Die materielle Grundlage der Exceptio (Berlin 1871), on the basis of which he was called to Basel and some years later to Freiburg, where he remained until his retirement in 1911. Almost without exception Eisele's literary activity was in the field of Roman law, in which his work was extremely varied. But modern scholars in Roman law regard Eisele as especially significant as one of the two founders of the modern interpolation study. His celebrated essay on interpolations, written in 1882 and published in 1886, together with Gradenwitz' book on the same subject in the following year paved the way for what has been the outstanding contribution of the twentieth century to Roman law. Through the identification of stylistic expressions, lexicographical and syntactic peculiarities Eisele showed that much that had been attributed to the classical jurists was the work of Justinian's codification commission; in this and later works he set forth the criteria for the discovery of interpolations, and as a result there is no scientific work of the present day that can omit an analysis of texts from the point of view of interpolation. It does not detract from Eisele's early work that his interpolations had in great part been discovered centuries before by Antoine Favre; Eisele not only rediscovered this method of dealing with the texts but in company with Gradenwitz convinced the scholarly world of its significance.

A. ARTHUR SCHILLER

Important works: "Zur Diagnostik der Interpola-

tionen in den Digesten und im Codex" in Zeitschrift der Savigny-Stiftung fur Rechtsgeschichte, Romanistische Abteilung, vol. vii (1886-87) 15-31; Die Compensation nach römischen und gemeinen Recht (Berlin 1876); "Correalität und Solidarität," and "Zur Lehre von dei Klagenkonkurrenz" in Archiv für die civilistische Prats, vol. lxxvii (1891) 374-481, and vol. lxxix (1892) 327-405.

Consult: Lenel, Otto, in Zeitschrift der Savigny-Stiftung fur Rechtsgeschichte, Romanistische Abteilung, vol. xli (1920) v-xiv, which contains a chronological bibliography of Eisele's works; Albertario, E., in Istituto di Diritto Romano, Bullettino, vol. xxxii (1922) 328-31.

EISELEN, JOHANN FRIEDRICH GOTT-FRIED (1785–1865), German economist. After studying theology and philosophy in Erlangen, tutoring in a noble family and serving in the War of Liberation in 1813–14 Eiselen lectured on political science in Berlin, then became professor at Breslau and from 1829 until his death was professor of political science at Halle.

He published several books, the most important being Die Grundzüge der Staatswirthschaft oder der freien Volkswirthschaft und der sich darauf beziehenden Regierungskunst (Berlin 1818), Die Lehre von der Volkswirthschaft in ihren allgemeinen Bedingungen und in ihrer besonderen Entwickelung (Halle 1843) and his Handbuch des Systems der Staatswissenschaft (Breslau 1828). He wrote little that had not already been propounded by Adam Smith, his only original contribution being an effort to explain the grain scarcity. His attempt to apply the results of economic theory to practical life was altogether abstract; he even ignored the influence of the state on the working of economic forces. The introduction to his work on the Prussian state contains some interesting reflections on the use of statistics in the social sciences; he regarded figures as not altogether to be trusted and he placed emphasis on the significance of imponderables. In his later years he became active politically, serving as member for Halle in the Herrenhaus. He also wrote political and historical works, Preussen und die Einheitsbestrebungen in Deutschland (Halle 1850), Der preussische Staat (Berlin 1862) and Die Geschichte des lützow'schen Freicorps (Halle 1841).

WILHELM STIEDA

Consult: Roscher, W., Geschichte der Nationalökonomik in Deutschland (Munich 1874); Kähler, W., "Die Entwickelung des staatswissenschaftlichen Unterrichts an der Universität Halle" in Festgabe für Johannes Conrad, ed. by H. Passche (Jena 1898) p. 1130-82; Inama-Sternegg, K. T. von, in Allgemeine deutsche Biographie, vol. v (Leipsic 1877) p. 764-65.

EISNER, KURT (1867-1919), German journalist and revolutionary. Eisner was born in Berlin, the son of a Jewish trader. After studying at the University of Berlin and writing for the Frankfurter Zeitung he went to study under Hermann Cohen in Marburg. The Kantian philosophy which he learned there became the basis of his socialistic conceptions. Eisner's socialism had little connection with Hegelian thought; every commonwealth, in his view, must measure up to Kant's ethical ideals in order to vindicate its cultural claims. After nine months in jail for lese majesty he joined the Social Democratic party in 1898 and in a short time became editor of the Vorwärts and wrote a series of able editorials, feuilletons and pamphlets. He resigned from the Vorwärts in 1905, and wrote Der Sultan des Weltkriegs (Dresden 1906), which was a forecast of the World War, and Das Ende des Reichs (Berlin 1907), a comprehensive, well documented history of Germany in the period of the French Revolution which tended to deflate the orthodox patriotic estimate of the role of Prussia established by Ranke. In 1907 he edited the Social Democratic Fränkische Tagespost in Nuremberg. In 1910 he moved to Munich, becoming political expert and dramatic critic on the Social Democratic Post, and wrote a series of articles under the title of "Arbeiter Feuilleton." On the outbreak of the World War he at first took a position opposed to Russian autocracy but with the publication of the German White Book and the entrance of France and England he took a pacifist position which brought him into sharp opposition to the government and the Social Democratic party. He wrote against the war until, in January, 1918, he was arrested in Munich for organizing a munitions workers' strike. Released in October he became a candidate for the Reichstag. He agitated among the soldiers and on the night of the eighth of November led the Munich Council of Workmen, Soldiers and Peasants in proclaiming a Bavarian free state, of which he was the first prime minister. He advocated a policy of Franco-German friendship and international peace and supported the Wilsonian program. Early in February, 1919, he attended the International Socialist Congress in Berne, where he arraigned the official policy of imperial Germany as well as the majority socialists for their support of the war. His domestic policy was never clearly outlined. He relied on the support of the particularist "Bauernbund" and the comparatively small proletariat. The Entente Powers gave him

no backing and his regime, functioning in makeshift manner through a democratic parliament and the Council of Workmen, Soldiers and Peasants, rapidly disintegrated. Nationalistic elements raised a hue and cry against him, erroneously labeling him a traitor to his country, and he was assassinated by Count Arco-Valley on February 21, 1919.

PAUL KAMPFFMEYER

Chief works: Eine Junkerrevolte (Berlin 1899); Wilhelm Liebknecht, sein Leben und Wirken (Berlin 1900, 2nd ed. 1906); Der Geheimbund des Zaren (Berlin 1904); Die Feste der Festlosen (Dresden 1905); Taggeist (Berlin 1901); Das Ende des Reichs (Berlin 1907); Die neue Zeit, 2 vols. (Munich 1919); Gesammelte Schriften, 2 vols. (Berlin 1919).

Consult: Michels, R., "Kurt Eisner" in Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung, vol. xiv (1929) 364-91; Fechenbach, F., Der Revolutionär Kurt Eisner (Berlin 1929); Grassmann, J. von. Deutsches biographisches Jahrbuch, 1917-1920 (Berlin 1928) vol. ii, p. 368-78; Kampffmeyer, P., "Der Ethiker und Politiker Kurt Eisner" in Sozialistische Monatshefte, vol. lxviii (1929) 119-26; Got, Ambroise, La terreur en Bavière (Paris 1922).

ELDON, FIRST EARL OF, JOHN SCOTT (1751–1838), lord chancellor of England. Eldon was the son of William Scott, a coal factor of means, another of whose sons became Lord Stowell, eminent as judge of the Prize Court during the Napoleonic wars. Eldon gained an enormous practise as an equity lawyer, leaving at his death a personal estate of almost £700,000. He was knighted on becoming solicitor general. He was also attorney general and chief justice of the Court of Common Pleas before his accession to the chancellorship, which except for a short interruption he held for a quarter of a century.

Despite his judicial duties Eldon also played a preponderant role in public affairs during the half century between his entry into Parliament in 1783 and the passing of the Reform Bill in 1832. Beginning his career in politics as one of the "King's friends," he supported the monarchy to the very end. In Parliament he gave a general and independent support to Pitt. As law officer of the crown in the midst of the French Revolution, he became responsible not only for prosecutions for treason and libel but also for such legislation as that between 1793 and 1795 relating to treason, sedition and the suspension of habeas corpus. It was Eldon who advised and supported the seizure of the Danish fleet at Copenhagen in 1807 as well as the British orders in council in answer to Napoleon's Milan and

Berlin decrees. The mutual dislike of Canning and Eldon colored a considerable part of the politics of the period. In nearly every cabinet in which Eldon sat his was the paramount influence. His policy was based primarily on two ideas: his stern opposition to every measure of constitutional and legal reform and his zeal against the Roman Catholics.

It was in the Chancery, however, that Eldon found, both as counsel and as judge, the arena best suited to his special genius; there he displayed to the full not only his zeal in exhausting all possible aspects of a case but his capacity for drawing distinctions and considering niceties and subtletics. He was so notoriously slow and deliberate in the hearing and deciding of causes that the delays of Chancery were sharply and justly criticised. It was, however, not entirely Eldon's fault, for the procedure of the court had long made for dilatoriness and its work was increasing in volume. Some relief was given to Eldon during his second chancellorship by the appointment of a deputy speaker in the House of Lords and the creation of a vice chancellor in the Court of Chancery; but to the very end Eldon was far too slow in the dispatch of cases partly as a result of vacillation in his mind over the correctness of his views, although he was nearly always right in his judgment on questions of equity, few of his decisions ever being reversed.

Within the field of English law Lord Eldon's great achievement was the completion of the system of equity as distinct from the system of common law. During his long career as lord chancellor he reviewed in the Court of Chancery practically the whole range of equity, which, ever since the later Middle Ages and particularly after Lord Ellesmere had vindicated the independence of the Chancery, had been slowly expanded and systematized by successive lord chancellors, notably by Lord Nottingham and Lord Hardwicke. In reviewing equity Lord Eldon decided many of the cases that are now regarded as constituting the judicial foundations of the system, such as, for example, Howe v. Dartmouth [7 Ves. 137 (1802)], Aldrich v. Cooper [8 Ves. 382 (1803)] and Ex parte Pye [18 Ves. 140 (1811)]. Eldon was not, however, an innovator; he devised no new equitable doctrine. The chief significance of his work is that he revised equity and reduced its main rules and principles to a coherent and ordered system capable of further development at the hands of later judges and yet in general unalterable in its

main structure save by the action of Parliament. Lord Eldon's life work as a judge was thus the completion of the historic system of equity. But in the broader realm of the whole English legal system Eldon's unrelenting Toryism long delayed reforms needed as far back as Blackstone's time. It was characteristic of the man that the solitary legal reform which he suggested was the abolition in 1819 of the archaic procedure of appeals of treason and felony and trial by battle. Not until after Lord Eldon's grip on the judicial system had ceased and a new era had been inaugurated by the Reform Act of 1832 was the epoch making legislation of the nineteenth century possible.

H. D. HAZELTINE

Consult: Twiss, Horace, The Public and Private Life of Lord Chancellor Eldon, with Selections from His Correspondence, 2 vols. (new ed. London 1846); Surtees, W. E., A Sketch of the Lives of Lords Stowell and Eldon (London 1846); Campbell, J. C., Lives of the Lord Chancellors and Keepers of the Great Seal of England, 10 vols. (new ed. by J. A. Mallory, London 1874-75) vols. viii-ix; Kerly, D. M., An Historical Sketch of the Equitable Jurisdiction of the Court of Chancery (Cambridge, Eng. 1890); Birkenhead, F. E. S., Fourteen English Judges (London 1926) p. 224-54.

ELECTIONS. Election is the process of selecting the officers or representatives of an organization or group by the vote of its qualified members. It is to be distinguished from the alternative methods of selection by appointment or by lot. With the widespread adoption of the initiative and the referendum the term election has, in the United States especially, been extended to the decision by the electorate upon measures submitted to them. While functionally such procedures are more strictly termed direct legislation, they present many of the same administrative problems as the election of officials.

Elections are almost universally used by voluntary organizations or groups—social, political or economic. They are also rather frequently used in church organizations, membership in which acquires a certain compulsion from individual conscience or belief. In the state, membership in which is compulsory, the widespread use of the principle of election has come only with the development of democracy and the recognition of the right of all to share in the determination of policies and the choice of officials. With the spread of democratic government popular elections for public office have come to be practically universally used, although the methods employed, the officials chosen, the frequency

of elections and the regulation by law vary greatly.

The history of democratic elections has been most closely identified with that of representative government. Representative bodies, with a few minor exceptions, have always been popularly elected. The election of executive and administrative officers is not so fundamental a principle of democracy. The kings of Poland, Hungary and, before the nineteenth century, of Germany were elective, while in many modern democracies the people do not elect the nominal or even the actual chief executive. In countries with cabinet government the vote of the people in parliamentary elections determines the general policy of the executive but only within varying limits the actual executive personnel. Even in the United States the city manager movement, which would make the chief executive in city government appointive rather than elective, has shown considerable strength, while the provisions for the recall of public officers, enacted during the movement for greater popular control of public officers, have rarely been used.

Elections for representatives and for executive and administrative officials differ fundamentally in their implications. Representatives need not be experts in governmental affairs or specially trained or equipped. While it is desirable that legislative bodies contain the leaders of the communities, persons qualified by experience and ability, the bodies should be "representative" or typical of the mass of citizens. Their function is to control legislation and governmental affairs in line with the wishes of the majority of the citizens. In the election of executive and administrative officials the voter is not called upon to select someone to represent him but rather to pass judgment upon the ability, integrity and qualifications of the several candidates for each office. Especially in modern society, where the functions of government have grown very technical, special qualifications for these offices have become increasingly important. The average voter is not in a position to make such choices wisely and is forced to rely upon the recommendations of his party leaders, his newspaper, a civic organization or voters' league or upon mere hearsay and rumor. The difficulty of the task is greatly intensified in the United States by the large number of such offices elected at one time-in some states as many as fifty at a single election.

Elections are generally regarded as the ulti-

mate and most important means by which government in general and legislation in particular are subjected to popular control. Yet even in countries where elections are free and fair the ballot box is a very imperfect device for registering the opinion and desires of the voter with regard to his government. He is limited to a choice between candidates none of whom he may want elected or to a yes or no vote upon measures. This limitation of the power of the individual voter finds its frankest expression in the system of parliamentary elections in Fascist Italy. The voters are given the right only of approving or disapproving a full roster of deputies prepared by the Grand Council of Fascism on the basis of nominations made by the various syndicates in Italy.

The nineteenth century witnessed the spread of political democracy and the broadening of the electorate. Between 1800 and 1830 most of the states of the United States abolished property and religious qualifications and established adult male suffrage. The new states admitted to the union practically all came in with adult male suffrage and influenced the older states to abolish their restrictions. Other countries followed the same course although somewhat later. Universal adult male suffrage became the standard basis for elections. Some types of unequal voting were not eliminated, however, until well into the twentieth century. The system of voting under which the electorate was divided into three classes, each of which paid one third of the total taxes and chose one third of the electors, was abolished in Germany only by the Weimar constitution; similar inequalities persisted in Russia until the revolution of 1917 and in Japan until the reforms of 1925. Property qualifications of various kinds persist in many countries. The twentieth century witnessed the extension of the franchise to women in most western democracies. Although the franchise is generally regarded as a public obligation as well as a right, very few countries penalize the failure to vote.

To diminish somewhat the evils of this broadening of the suffrage some countries provided systems of indirect or double election whereby the whole body of voters elect an intermediate body of electors, who in turn elect the officials or representatives. In France members of the National Assembly were elected in this way from 1791 until 1830 and the system is still used for the election of senators. United States senators were elected by the state legislatures until 1913

when popular or direct election was provided by the Seventeenth Amendment; the president and vice president of the United States are nominally chosen by an electoral college, which, however, merely ratifies the popular choice already expressed by the voters. Election of the president by one or both houses of the assembly is provided for in France, Czechoslovakia, Austria and Latvia. Contemporary Russia with its hierarchical system of soviets presents the most far reaching modern example of an indirect system of elections. Indirect elections have considerable theoretical merit but in actual practise they have been attended by many evils. The history of the election of United States senators is replete with cases of bribery, deadlock, political manipulation and distraction of attention from legislative business. The spread of democracy has tended toward the elimination of indirect elections.

Regular elections are held at intervals fixed by the constitution or by electoral laws, at the expiration of the term of the assembly or of particular offices. In countries whose constitutions provide for the dissolution of one or both houses of parliament by the chief executive on the order of the cabinet, on his own initiative or as a result of a plebiscite, general elections for the legislature may be held although the term of office of the parliament has not yet expired. In cases of dissolution the constitution usually provides that the order for dissolution shall set the time for the new elections. In addition to these regular and general elections, special elections or by-elections are held in England, France and many states in the United States to fill individual vacancies in the legislative assemblies. In the United States primary elections are used to nominate the candidates of the several parties and frequently to elect certain party officers.

Elections are sometimes classified as partisan and non-partisan. In the former each person, unless standing as an independent, stands as the candidate of a party, the name of which appears on the ballot after his name or at the top of the column in which his name appears. In non-partisan elections, which are widely used in the United States for municipal, judicial and school officers, no party designations appear on the ballot. The theory of such elections is that national party lines and issues should play no part in local elections, and that the voters should choose on the basis of the fitness of the candidates alone. Non-partisan elections have gener-

ally although not uniformly resulted in freeing the offices involved from party influence.

Ordinarily the candidate receiving the highest vote is elected, or in case of a number of candidates to be elected the highest on the list to the number required. To this plurality system has been raised the objection that when the candidates are numerous those elected may receive only a small percentage of the votes; this is true particularly of the direct primaries in the United States, but it applies also in final elections in multiparty countries without proportional representation. To overcome the objection one of several devices may be used. A second election may be required, at which either a plurality is sufficient or only the two highest candidates (for multiple offices, twice the number to be elected) are permitted to run. This is widely used in non-partisan elections in the United States and in France since 1927 and was common on the continent before the general adoption of proportional representation. In Italy, if the electorate rejects the slate submitted by the Grand Council of Fascism a second election is held, at which a number of lists of candidates may be proposed. In several of the southern states of the United States, where victory in the Democratic party primary is virtually equivalent to election, a second or run-off primary between the two highest candidates is provided. Because of the expense and inconvenience of a second election a number of states have adopted the preferential system of voting, whereby the voter indicates a first, second and third choice. Where the law provides that in case no candidates receive a clear majority of first choice votes no candidates shall be eliminated but the second votes shall be merely added to the first votes, the voters by expressing a second choice may negate their first choice. Under such a system the number marking a second and third choice becomes very small. Many states which adopted preferential voting of this type have now abandoned it. A number of Canadian provinces as well as some countries use the alternative vote, in which the voter expresses a second and third choice. If no candidate receives a clear majority, the lowest is eliminated and his votes transferred as indicated by the second choices; thus the voter's second and third choices are not counted so long as his first choice stands a chance of being elected.

Representatives to legislative bodies may be chosen on the basis of one member from a single-member district (scrutin d'arrondissement) or of a number of members from a large district (scrutin

de liste). These two types of election have been the subject of much public debate in France, Italy and other European countries. France has changed frequently from one system to the other. Proportional representation is often used with the list system to provide representation for minority groups. Cumulative voting, such as is used in the election of the assembly of the Illinois legislature, aims at the same end. The electoral unit is the three-member district; each voter has three votes, which he may apply as he chooses to one, two or three candidates.

The problems of greatest interest in connection with elections today are administrative, such as election machinery, frauds, ballot laws, regulation of expenditures, registration of voters and election abuses. On these matters the history of elections throws little light. The administration of elections was largely overshadowed by questions of suffrage, democracy and the reform of representation in legislative bodies.

In ancient Greece, judging from the Athenian practise, only a few offices requiring special qualifications were filled by election. All other public officers were selected by lot, which was deemed essential to a democratic government. Voting was usually by a show of hands except in cases of ostracism and in lawsuits, which were decided by a secret ballot or by the use of pebbles. The Roman citizens elected important public officers and also voted upon public measures. At first the vote in the different assemblies was taken by a division; the citizens were counted as they filed past officials. A series of laws between 130 and 107 B.C. provided, however, for the secret ballot to offset the influence which the patricians exercised over the plebs.

During the mediaeval period the practise of holding elections was widely followed, but few details are extant. The suffrage was severely restricted and often looked upon not as a privilege but as a burden. The freemen in the early Teutonic tribes possessed the right of choosing their king, and indirect elections through electoral colleges were used to a limited extent later in the choice of the Germanic emperor. The city of Venice employed a highly complicated system of indirect election of the doge, which involved the use of lottery in the selection of the electoral body. Other communes also used the lot.

The history of elections in England is closely identified with that of the British Parliament. In 1254 when Henry III desired a special contribution for a military campaign in Germany he required each sheriff to see that two knights, good

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and discreet men, should be sent from each county to consider what aid should be given to the king. Eleven years later Simon de Montfort summoned a Parliament, calling for representatives from the boroughs as well as the counties. The method of selection of the representatives was not prescribed by statute in the early history of Parliament. Doubtless custom and tradition required a different practise in different counties, and such elections as were held were very informal and irregular. It seems probable that the election was usually conducted at a mass meeting after the sheriff read the writ.

During its early history positions in the House of Commons were not sought after; as their importance increased, the inequalities of representation and suffrage and election abuses became acute public questions. From 1750 until the passage of the Reform Act of 1832 elections for the House of Commons were marked by flagrant bribery, treating and fraudulent practises. In 1872 the Ballot Act was passed providing for the Australian ballot, which had been one of the Chartist demands. Registration laws, corrupt practises acts and a stricter regulation of elections were also enacted.

In the American colonial settlements some public officers were popularly elected almost from the first. The early Virginia charters provided for councils to meet in England to manage the affairs of the colony; in 1621 the council placed legislative power in Virginia in the hands of a council of state and an assembly, the latter to consist of some two hundred burgesses popularly elected. The governor had, however, already called an assembly in 1619 without legislative sanction. In Plymouth a governor and assistants were elected annually beginning in 1620. In Massachusetts the charter of 1628 provided for the popular election of the governor and eighteen assistants, although it appears that the governor was not so elected until 1632. The other colonies, with the exception of New York under the Dutch rule, also provided for the popular election of the legislative assembly and frequently of other officers. Early in American history the number of officials elected was already often quite large.

The method of conducting elections in the colonies was borrowed in large measure from the prevailing practise of England, although variations quickly appeared, particularly in the New England colonies. The details of the administration of elections cannot now be traced with any great degree of certainty, for the actual practise

was not prescribed minutely by statute, as it is now, and what statutes there were on the subject were not always followed.

Elections were in practically all cases conducted by the local officers, such as the sheriff, coroner or mayor. Provision was early made in Pennsylvania for the election of judges and inspectors to assist the sheriff or his deputy, and similar provisions were made in other colonies. By 1634 Massachusetts, influenced probably by the practise in church elections, broke away from the English practise of viva voce voting and adopted paper ballots for the election of governor; the neighboring colonies followed. The paper ballot was unofficial and had to be provided by the voter, who usually brought it with him to the polls. The development of proxy voting, which in reality amounted to the division of the colony into towns or electoral districts instead of requiring all the electors to appear at the colonial seat to elect general officers, pointed the way to modern election practise.

There is little information concerning corruption, violence, bribery and fraud at the polls in the colonies. The silence of the statutes on the subject in New England indicates perhaps an absence of these forms of electoral abuse. Most of the other colonies prohibited bribery and other forms of misconduct at the polls and enacted various provisions designed to safeguard the polls against fraud. Bribery was prevalent in those colonies without the paper ballot and constituted in all probability the worst abuse in colonial elections.

Nine of the ten state constitutions framed between 1776 and 1780 required the paper ballot for the election of certain officers, but viva voce voting continued in some states, particularly in the south. Arkansas used this form of voting until 1846, Missouri and Virginia until the Civil War and Kentucky until 1891. Nevertheless, abuses under the unofficial paper ballot tended to become fully as great as under viva voce voting. Because of the constantly increasing size of the ballot it became the practise for the political parties to print ballots for the convenience of their voters; these unofficial ballots rather than ballots written by the voter himself were held valid in Massachusetts in 1829. Each party printed its ballot upon colored paper so that it could be instantly recognized and bribery made more effective. These abuses led to the widespread adoption of the Australian ballot between 1889 and 1900.

With the rise of large cities following the Civil

War and the influx of immigration election frauds became rampant. As early as 1800 Massachusetts enacted a registration law which was designed to prevent illegal voting. The other New England states followed within a few years, but elsewhere registration laws were delayed until after the Civil War. Between 1860 and 1890 practically all of the states adopted some form of registration of voters, although in a number of states the requirement was and still is limited to cities. The early, weak registration laws were easily circumvented, and repeating and colonization became quite common in the large cities. Stronger registration laws and the creation of special election and registration commissions for the large cities usually tended to clean up the elections for a few years; but eventually these offices fell into the hands of the party organizations and election frauds were again committed with impunity. As late as 1900 it was estimated by well informed observers that as many as 60,-000 fraudulent votes were cast in hotly contested elections in Philadelphia.

Since 1900 the tone of elections in the United States has very definitely improved. This has been brought about by stricter registration laws, more detailed regulations of the conduct of elections, the requirement of the signature at the polls in many states and in recent years by the enfranchisement of women and the passing of the open saloon, both of which have tended to prevent violence, drunkenness and corruption at the polls.

While elections in the United States are for the most part honest, they are not capably handled. Every election contest brings to light gross inaccuracies, irregularities and slipshod practises. Cumbersome and antiquated administration makes the cost of elections in many American cities exorbitant. The election costs in 1929 in New York City, for example, were \$2,187,925,18, an average cost of \$1.26 per vote cast; while this cost is high, it is not as great per vote cast as that in some other cities. That these costs are excessive is shown by the very low cost in certain smaller cities. Salt Lake City recently conducted a city primary and election with a total vote of 52,137 at a cost of \$5,270.49, or ten cents per vote. Costs can be reduced and the handling of elections improved by eliminating spoils politics, increasing the size of voting precincts, reducing the number of precinct election officers and simplifying the procedure at the polls.

By custom and in many states by law the conduct of elections is turned over to the two party

organizations, which name all the election officers. This practise has grown up because of the bipartisan tradition and because of the belief that the most effective way to secure honest elections is to provide for official representation of both political parties in the conduct of elections. The practise has proved ineffective. In many large cities the theory that the two parties are opposed to each other is largely a fiction. Appointments are made not for ability or integrity, but on the basis of party service. The patronage of these positions is very great because of the large number of persons required and is used by the party organizations to build up their strength. Election positions are frequently awarded to the bitterest partisans, who are personally interested in the outcome; the vast majority of election frauds are committed by the election officers themselves. In the sections of the country where elections are best conducted the officials are appointed without regard to the recommendation of the party machines and in a few states without regard to party affiliation.

For polling purposes the constituencies and governmental units are in practically all countries divided into election districts, each with a separate set of election officers. Occasionally, as in Lithuania, the districts are determined by a maximum distance from the voters' homes; usually, however, division is on the basis of the number of voters in the district. In some cities in the United States the average number of voters to the election district or precinct is as low as 200, in others as high as 1000. The number of precincts in the largest cities runs into the thousands. With improved transportation facilities and the widespread use of the automobile such small precincts are no longer necessary in the United States, but they are retained largely for political purposes.

The polling place is generally located in or near the election district and is usually in a public building, such as a school building or a fire station. In some communities in the United States private shops (particularly tailoring and cleaning establishments) are rented for the occasion. Occasionally churches or private residences are employed. Rent for polling places was formerly a source of considerable spoils for the political machine, but the failure of the rental paid for polling places to rise with rents in general has made this a less profitable source of spoils. A few cities, particularly Rochester, Cleveland and New York City, use portable houses, which are set up prior to the election upon vacant lots or in

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the streets. Public buildings, especially school buildings, are the most satisfactory polling places. The cost is nominal; the polling place is always located in the same place and the space, light, ventilation and general surroundings are better than in rented shops. Where the state law does not require that the polling place be within the boundary of the precinct, many cities locate a number of polling places within a single building. In some European and Canadian cities the voting for the entire city takes place at one polling place—a large hall with a number of polling divisions. This makes possible a more careful supervision of the conduct of elections.

Elections are advertised by notices published in the newspapers and posted in the election districts before the elections. In a few states in the United States this notice takes the form of a reproduction of the ballot. In Lithuania and in the canton of Zurich, Switzerland, every elector receives, five days before the election, the different party lists, one of which he deposits in the ballot box on election day; generally he receives the official ballots only in the polling place. Elections usually last only one day; Lithuania and Egypt are exceptions to the rule. By custom Tuesday has come to be used generally in the United States; Sunday is the most common day on the continent. In many American states election day is a legal holiday on which banks and public offices are closed. In some states and countries the laws provide that all employers shall permit their employees time off during the day in order to vote. The hours of election are fixed by statute, usually from six or seven o'clock in the morning until from five to eight o'clock in the afternoon. Late closing gives the workers a chance to vote and obviates the necessity for costly holiday or time-off provisions. At the close of the election the ballots are counted in the presence of authorized watchers of the political parties or the candidates, and a tabulation of the vote, along with the hallots and other supplies, is returned to the officer in charge. In the principal elections in the United States the precinct officials may have to work most of the night to complete the count; because of the long ballot and the general incompetence of election officials mistakes in the count are quite common.

Voting machines, which eliminate the tedious and often inaccurate count, were first used in the United States in 1892 in the city of Lockport, New York. In 1896 Rochester experimented with them and within a few years they were widely adopted in the state. The voting machine

now generally in use contains ballot labels on its face corresponding somewhat to the printed paper ballot. The voter indicates his choices by pulling down levers or keys, which are connected with counters in the back of the machine. At the close of the polls the election officials unlock the cover of the machine and read off the totals recorded on the counters. The machine is set to prevent the voter from voting for more than the right number of candidates or more than once. A series of locks and seals protect the machines against tampering, and the keys controlling the inner mechanism of the machine are retained by the custodian at all times and are not turned over to the precinct officers. The merits of the voting machine are accuracy, avoidance of the tedious count, economy in the hours of election officers and in the number of officers required, quick returns and the virtual elimination of expensive recounts. The objections to voting machines are the original cost of installation, which amounts to over a thousand dollars per precinct; the dislike for them felt by some voters; the danger of their going out of order; and the cost of storage, of setting for an election and of drayage. Machines are used practically throughout New York state; they are in use in Connecticut, Indiana, Pennsylvania, Wisconsin, Iowa, Washington, California and Michigan chiefly in the more populous cities; Ohio has authorized their use. A number of large cities including Chicago, Jersey City, Newark, Milwaukee, Minneapolis, Denver, Salt Lake City and Portland, Oregon, have tried out voting machines and have abandoned them for a variety of reasons.

Despite the implications of the common expression "ballots vs. bullets" elections have frequently been the occasion for resort to violence rather than peaceful persuasion. This is true not only of politically backward countries, such as Egypt and Poland; as late as 1868 the nomination at Blackburn, England, was marked by fighting, while elections in some sections of the United States still result in occasional sluggings, kidnapings and even killings. Occasionally a great power may act as policeman for the elections of less advanced countries, as the United States in Nicaragua. The League of Nations has been called upon by minorities to protect them against electoral violence and oppression, as in the case of the German voters in Poland in 1931.

Provision is usually made for contesting the validity of the election or the accuracy of the returns. In the United States a recount is generally allowed at the demand of a defeated

party or candidate, but in a few states the law requires that before a recount will be ordered fraud must be proved before a court. Since it is usually impossible to do this without opening the ballot box, such provisions make recounts virtually impossible and permit the precinct election officers to make fraudulent returns with impunity.

Aside from the problems of administration certain larger problems in connection with elections have attracted attention within recent years. It is increasingly recognized that the long ballot defeats the very purpose of elections by imposing upon the voter an impossible task. The tendency throughout the United States is to shorten the ballot by making administrative officers appointive instead of elective. This requires amendment of the state constitution in many cases, a difficult proceeding. No country except Switzerland approaches the United States in the frequency with which the voter may be called to the polls. In some states in the United States as many as six elections may be held within a single year. There is a definite trend toward fewer elections, secured largely through increasing the term of public officers. Another trend is toward the separation of national, state and local elections, in order that local elections shall not be overshadowed. These trends are somewhat opposed to each other; much remains to be done toward a definite grouping of elections so that the voter will not be called upon more than once or twice a year to cast his ballot and will not be called upon to elect officers for various governmental units at the same time.

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See: VOTING; SUFFRAGE; DEMOCRACY; REPRESENTA-TION; PRIMARIES, POLITICAL; PARTIES, POLITICAL; CAMPAIGN, POLITICAL; PROPORTIONAL REPRESENTA-TION; INITIATIVE AND REFERENDUM; BALLOT; ABSENT-VOTING; BY-ELECTIONS; REGISTRATION; CORRUPT PRACTISES ACTS; CONTESTED ELECTIONS.

Consult: Botsford, G. W., The Roman Assemblies (New York 1909); Porritt, Edward and Annie G., The Unreformed House of Commons, 2 vols. (Cambridge, Eng. 1903); Lo, Lung-chi, Conduct of Parliamentary Elections in England (New York 1928); Bishop, C. F., History of Elections in the American Colonies (New York 1893); Ludington, A. C., American Ballot Laws. 1888-1910 (Albany 1911); Evans, E. C., A History of the Australian Ballot System in the United States (Chicago 1917); Harris, Joseph P., Registration of Voters in the United States (Washington 1929); Seymour, Charles, and Frary, D. P., How the World Votes; the Story of Democratic Development in Elections, 2 vols. (Springfield, Mass. 1918); Merriam, C. E., and Gosnell, H. F., American Party System (rev. ed. New York 1929); Sait, E. M., American

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ELECTRIC POWER. The production of electricity on a commercial scale is comparatively recent; it dates from about 1880, and only after 1910 did electric power begin to penetrate the general economic structure of the world. One can distinguish three main periods in this development: a largely experimental period covering the years 1880 to 1910; a period of development and penetration from 1910 to 1920, when industrial enterprises tended more and more to use electric power in preference to any other form of energy; and a period of very rapid expansion, when the conversion of manufacturing processes to the use of electric power was accelerated and the industrial and economic expansion of the principal countries became more and more dependent on the increase in construction and equipment required for the production of electricity or the utilization of electricity in industrial enterprise. This third period, which includes increasing electrification of the home, covers the years 1920 to 1930 for the most advanced countries; namely, the United States, Canada, Germany, Switzerland, Italy and to some extent also Great Britain, Holland, Belgium and Russia. A fourth period has probably set in when, the work of conversion to electricity being complete, electricity consumption will be dependent on the general economic advance or regression of the principal industrial countries.

In the early years of development electricity came into competition with other forms of power already strongly established, and its advance was dependent upon its capacity to take hold of new enterprises arising from the growing industrialization of the world. On a purely cost basis it could not at this time compete with the direct transmission of power from steam reciprocating and similar engines, and its use was confined to special applications where the service electricity performed had a value independent of price. The principal service in this category was that of illumination, and so the first power plants were devoted almost exclusively to the provision of electric power for lighting. They were usually extremely small units serving limited areas. The demand on generating plant for lighting purposes was spasmodic and unevenly distributed and was concentrated in certain periods of the day and year; supply plants had to be equipped for the maximum demand, or peak load, while average demand, or load factor, was only 10 percent, resulting in much idle capacity and high overhead costs and rates. For these and other technical reasons production in large volume could not be undertaken; this circumstance explains in some measure why the technique of electric power transmission and distribution did not develop with greater rapidity. To alter the situation it was necessary to raise the load factor by combining fluctuating demands, and this could be done only by increasing and diversifying consumption and by interconnecting central stations to distribute and level the peak loads. Something was accomplished in that direction by the growth of electric traction.

During this period not only was growth of demand for electricity slow but it was confined to the large centers of population, and the only three countries of any importance electrically were Great Britain, Germany and the United States. The chief influence in the growth of electricity supply continued to be electric light and traction, supplemented by slowly increasing industrial demands. One factor retarding expansion was the comparatively slow rate of world economic advance which characterized these years. From 1910 onward, however, a change took place in the situation. The depression of 1908 and 1909 had given way to an upward movement in industry generally and the improvement in the world situation encouraged the installation of new manufacturing capacity, especially in the United States and Germany; electricity was given its first great opportunity to penetrate industry and open up a whole range of potentialities which had not been previously considered. Technical advance, especially in the design of large generating units and in the utilization of water power resources, pointed to a better conception of the principles governing main transmission; and the control of electrical energy brought the electrical industry into closer contact with industrial requirements, cheapened the cost of power and destroyed in this way many of the obstacles which had held back electrical progress. Manufacturers increasingly recognized the economy and efficiency of electricity; it was clean and noiseless, it freed the upper part of the factory from belts and shafts, improving light and ventilation, and it permitted more efficient arrangement of machines

with individual motors, easily adjustable speeds and better routing of material. After 1914 practically all the increase in factory power equipment in the United States was in the form of electric motors. A whole series of industrial processes arose which used electricity in the process itself and not simply as auxiliary power, as in the electro-chemical and electro-metallurgical industries.

In addition, power finance stimulated electrification, principally in the United States, Germany and South America. Power finance had always been a factor governing the growth of the industry because of the fact that from the beginning electrical manufacturing interests saw that some special support would be required if the industry were to be expanded to its full economic potentialities. Electricity supply companies, especially in Germany and the United States, came under the control of electrical manufacturing interests and their banking affiliates working through power finance groups or holding companies, and it was on this basis of financial penetration coupled with control that Germany and the United States were able to develop a great part of their export trade in electrical products, notably in the East and in South America. From 1910 onward the combination of technical advance and more effective handling of power finance did much to accelerate electrification, while, in the United States especially, deliberate publicity and advertising campaigns on a grandiose scale were carried out with success. It was during the period 1910 to 1914 that some of the most important industries in Great Britain, such as iron and steel, paper manufacture and chemicals, were converted to the use of electric power, while in the United States the great expansion of industrial production was based largely on the greater availability of electricity at a low price. In Germany progress was so rapid that a position of intensive electrical development in the heavy industries had been reached in 1913.

The World War interrupted this trend and diverted new productive capacity chiefly into war industries thus disturbing the economic balance as between industry and industry in the national and international spheres. In 1920 therefore, when the war period came definitely to an end, there was in most countries excess productive capacity in the heavier industries and incomplete mechanization and modernization in industries producing consumption goods. There had also been during the war period an inter-

ruption in the process of industrialization outside Europe and the United States. The depression of 1921 served to retard the installation of new manufacturing plants, but from 1923 to 1930 an extremely rapid upward movement took place, especially in the principal industrial countries, because of the necessity for improving competitive efficiency. An increasing tempo of electrification was made possible by more rational methods of electricity production, cheapening of costs and the closer study of economic conditions governing the transmission and distribution of electrical energy. In these post-war years electricity ceased to be a competitor of other forms of power in the sense that it had to struggle against them to define its position. The conviction was general, especially among the managers of the more important industries, that higher competitive efficiency depended on electrification; and the problem was now not so much to convert opinion to the necessity for electrification as to supply industrial executives in a period of severe business fluctuations with the necessary capital to carry out the work of conversion.

The post-war period has been characterized also by the extension of electricity to purposes other than those associated with illumination and with industrial power, above all to domestic uses, commercial lighting and rural electrification. The experience in a number of countries, particularly Switzerland and Italy, with ambitious railway electrification schemes immediately before and after the war led to widespread discussion of the electrification of transport. Railway electrification schemes of considerable magnitude were evolved for such countries as the United States, Great Britain, Germany, France, Italy, Switzerland, Austria, Hungary, Japan, India, South Africa, Australia, New Zealand, Argentina, Venezuela and Brazil. The consummation of this movement toward railway electrification can be found in the report issued in 1931 by a committee of the British government, which recommends as economically justified the electrification of all the main railway transport systems of Great Britain.

These post-war developments produced an extraordinary expansion in the electric power industry. From 1920 to 1930 generating plant installed in the main industrial countries represented a greater capacity than all the plant installed prior to 1920. In the United States the output in 1912 by central electric stations, including electric railways, amounted to 17,600,000,000

kilowatt hours; in 1920 to 44,000,000,000 kilowatt hours and in 1929 to 97,000,000,000 kilowatt hours—an increase since 1912 of 450 percent and of 120 percent from 1920 to 1929. The increase for each year since 1924 has been more than 25 percent of the total output of 1914. In Canada the total water power capacity of all plant installed in 1910 was about 730,000 kilowatts, in 1921 it had risen to 1,080,000 kilowatts and in 1929 to 4,280,000 kilowatts. In central electric stations alone the increase in the output of electricity rose from 5,895,000,000 kilowatt hours in 1920 to more than 18,000,000,000 kilowatt hours in 1929. In Switzerland the capacty of generating plant was in 1910 about 604,000 kilowatts; in 1920, 840,000 kilowatts; and in 1929, 1,690,000 kilowatts. In Great Britain the output of electricity from public supply systems was, in 1907, 1,432,000,000 kilowatt hours; in 1913 about 2,500,000,000 kilowatt hours; and in 1930 about 11,000,000,000 kilowatt hours. No satisfactory statistics are available for France or Italy, but in their case also progress has been at least as rapid as in the United States or in Great Britain. In Germany, according to the German Federal Statistical Bureau, the output rose from 20,308,000,000 kilowatt hours in 1925 to 30,661,000,000 kilowatt hours in 1929.

Electrification has reached the stage where it enters into practically every economic activity in modern society. It has been estimated that more than 90 percent of all the prime movers installed in the world since 1920 have been devoted to the production of electricity. The conversion of world manufacturing processes to electric drive is therefore almost complete. Industrial electrification in 1929 represented in the United States 79 percent of all power used (compared with 4 percent in 1899 and 37 percent in 1914), in Germany about 77 percent, in Great Britain about 65 percent; while in Canada, Switzerland, Italy, Japan, New Zealand, to mention a number of scattered countries, it has now risen to go percent and in certain countries, notably in the newer parts of the world, it is responsible for all manufacturing processes. One can establish a world estimate of industrial electrification of about 72 per cent.

Electrification of the home proceeds almost as rapidly as industrial electrification, the tempo varying in different countries. In the United States in 1929 domestic consumers spent \$604,-217,000 on electrical energy compared with \$1,212,885,000 spent by industrial and com-

mercial consumers, respectively 31 percent and 62 percent of the total. The balance was accounted for by street lighting and electric traction. Domestic consumers, however, used much less current than the revenue figures indicate, as they paid higher rates than industrial and commercial consumers. As industrial electrification achieves an equilibrium, domestic consumption, especially if encouraged by lower rates, may be expected to increase and account for a larger share of the total output.

Table I shows electricity production in 1928, the year for which the most recent reliable statistics are available. For the 26 countries mentioned and China the total plant capacity in 1929 was 98,200,000 kilowatts and the output of electricity 279,000,000,000 kilowatt hours. One can establish for the world as a whole in 1929 a plant capacity in excess of 100,000,000 kilowatts and an output equivalent to at least 300,000,000,000 kilowatt hours. In 1925 the world output as estimated by the German Institut für Konjunkturforschung was 187,000,000,000 kilowatt hours.

TABLE I
THE PRODUCTION OF ELECTRICITY IN THE PRINCIPAL
INDUSTRIAL COUNTRIES, 1928

	GENERATING PLANT CAPACITY (in 1000 kwts.)	PRODUCTION OF ELECTRICITY FROM ALL SOURCES (in 1,000,000 kwt. hrs
United States	35,400	114,000
Germany	11,102	27,870
Great Britain	8,608	15,600
France	6,850	13,500
Italy	3,740	10,000
Japan	3,878	10,700
Canada *	3,460	16,337
Norway	1,686	8,000
Switzerland *	1,590	3,600
Belgium	1,511	3,725
U.S.S.R.	2,155†	6,465†
Sweden	1,100	4,412
Austria	1,000‡	2,400
Poland	933	2,320
Holland	761	1,501
Argentina	639	800
Brazil	503	1,200
Finland	462	1,333
Hungary	350‡	610‡
Denmark *	255†	536
Rumania	250	530
Portugal	136	217
Jugoslavia	100‡	270‡
New Zealand	163	575†
South Africa	474†	2,300†
Australia	599†	2,195†
Total	87,705	250,996

^{*} Figures for central stations only.

It is difficult to give any reliable estimates of the total capital invested in electricity supply, since conditions vary from country to country. As a general rule water power plants are more costly than steam power plants and predominantly water power countries would show a much heavier capitalization per kilowatt installed than countries relying on steam power. It is, perhaps, best to select a number of representative countries and from them attempt a world estimate.

In the United States, according to the calculations of the National Electric Light Association, the total capital invested in the electricity supply industry was in 1930 \$12,500,000,000, equivalent to \$382 per kilowatt installed. In Great Britain in the year ending March 31, 1930, the total capital invested amounted to £,327,070,000, equivalent to \$240 per kilowatt installed. In Canada in 1928 the total capital expenditure was \$956,920,000, equivalent to \$278 per kilowatt installed. Currency depreciation has rendered calculations for countries like Germany, Belgium, France and Italy artificial and untrustworthy as a measure of expenditure in gold values, which in the case of France was for 1928 as low as \$65 per kilowatt installed. However, in countries with a stable currency throughout the post-war period, such as Switzerland, Denmark and Sweden, one finds capital cost per kilowatt of \$163 in Switzerland, \$203 in Sweden and \$455 in Denmark. A fair estimate of a world average would lie between \$230 and \$250 per kilowatt as applied to public stations only. It would probably be slightly less in industrial plants, so that an average of about \$200 can be taken. This would give \$20,000,000,000 as the world investment in the electrical supply industry.

The differences in capital cost are due partly to the capacity of the individual stations, partly to price levels at the periods when greatest progress was made and partly to the predominance of distribution as a factor in total capital expenditure compared with generation and transmission. Both in the United States and in Great Britain distribution has become a very large factor in total cost; generation and transmission alone represent a figure not much in excess of \$100 to \$120 per kilowatt installed. This is a figure which can most usefully be compared with that given for Switzerland, where power is exported in bulk, and also to some extent with that for Sweden, where a very large percentage of the demand goes into electro-

[†] For the year 1928-29. Estimated.

Source: Compiled from official sources.

chemical and electro-metallurgical works situated close to the power stations.

Some clue to differences in capital cost is provided by the capacity of individual stations in the different countries. The average plant capacity per generating station ranged from 12,000 kilowatts in Great Britain and 7350 kilowatts in the United States to 785 kilowatts in Norway and 238 kilowatts in Denmark. In countries using water power exclusively, such as Switzerland, Norway, Sweden, Austria and Spain, although the average capacity per generating station is very much smaller than in the large industrial countries, the growth of interconnection and long distance transmission has in some measure brought such small plants into line with the much larger installations from the point of view of economic results.

According to estimates made by the Dresdener Bank in its publication The Economic Forces of the World (rev. ed. Berlin 1930, p. 50-51), the total water power resources of the world in 1927, as far as can be ascertained, amounted to 497,000,000 h.p., based on a 90 percent utilization factor. Consideration of figures for separate countries would indicate that this estimate is probably too low. Thus the figure given by the bank for the United States is 35,000,000 h.p., while the last estimate of the United States Geological Survey in 1930 was 38,110,000 h.p. This would bring the total for the world up to 500,000,000 h.p. The estimates for Switzerland, Spain and Italy are obviously too low, those for Switzerland and Spain being given as 4,000,000 h.p. and that for Italy as 3,800,000 h.p. A more reasonable figure for Italy would be probably twice this figure. Insufficient importance is also given to Rumania and Austria, the most recent estimate, 1929, giving the Rumanian resources as 4,470,000 h.p., while the water power resources of Austria are in excess of 3,200,000 h.p. The most important countries are the Belgian Congo with 90,000,000 h.p., Asiatic Russia with 40,900,000 h.p., the United States with 38,110,000 h.p., the French Congo with 35,000,000 h.p., India with 27,000,-000 h.p., Brazil with 26,000,000 h.p., European Russia with 21,500,000 h.p., China with 20,-000,000 h.p. and Canada with 18,300,000 h.p. In the case of Canada a correction must be made to cover more recent figures, which have been given as 20,347,000 h.p. in the 1930 estimate based on an 80 percent utilization factor. The total capacity actually utilized in the world, without any allowance for reserve plant but

with calculation based entirely on the maximum load, is given as 33,400,000 h.p. in 1927. According to the United States Geological Survey 14,885,000 h.p. were developed in the United States by the end of 1930, while in Canada the developed power was, in the beginning of 1930, almost exactly 4,000,000 h.p. Other countries with a high standard of development are Switzerland, France, Norway, Sweden and Italy. In those countries the more accessible sites have already been developed and, especially in Italy, there has been in recent years a very rapid increase in the installation of steam generating and internal combustion engines.

In Table II is shown the capacity of all water power plants in the principal countries for which statistics are available, the output of electricity

TABLE II ELECTRICITY PRODUCTION FROM WATER POWER

Country and Year	CAPACITY OF WATER POWER PLANTS (in 1000 kwts)	OUIPUT OF ELEC- TRICHY (in 1,000,- 000 kwt hrs.)	FQUIVA- LENT IN COAL ‡ (in 1000 long tons)	
United States, 1930	8,660	29,030	23,328	
Germany, 1929	1,280*	3,566	2,286	
Great Britain 1930-31†	150*	000 *	482	
France, 1927	1,955	5,057	4,064	
Italy, 1929	3,346	10,000	8,036	
Japan, 1927	3,100*	8,586	6,900	
Canada, 1928	3,320	16,106	12,942	
Norway, 1929	1,691	8,900	7,152	
Switzerland, 1929	1,690	3,700	2,973	
Sweden, 1929	1,195	4,660	3,745	
Austria, 1929	611	1,760	1,414	
New Zealand, 1929-30	226	652	523	
Total	27,224	92,617	73,845	

from these plants, and the actual equivalent in coal of such an output assuming that 1.8 pounds of coal would have been necessary for each unit developed in a steam power station. Since for these twelve countries, representing about 80 percent of the world's output of electricity, the total saving in coal is no less than 75,000,000 to 80,000,000 (long) tons annually, for the world as a whole one would expect a saving equivalent to about 100,000,000 tons a year. In the case of the United States, Canada, France, Switzerland, Italy and Japan allowance must be made for private industrial plants not contained in these figures; but the proportion represented by such plant would be very small and would probably not increase the estimates already given

^{*} Estimated.
† Including British Aluminium and Grampian Power Company.
† Based on coal consumption per unit generated of 1.8 lb.
*Source: Compiled from official sources.

by more than 10 percent. One must also take note of the very rapid development of water power in European and Asiatic Russia, regarding which no reliable statistics have yet been compiled. According to the plan of the Soviet Union a whole series of large water power stations are either under construction or completed—in six stations alone a total ultimate capacity of 768,500 kilowatts will be available before the end of 1933.

A further saving of high grade fuel is effected through the consumption of brown coal and peat in power stations. In Soviet Russia, for example, rather more than 30.6 percent of the total electricity production from central electric stations is obtained from stations using peat as a fuel, 2.2 percent from brown coal and 36.1 percent from fuel oil. Russia is the only important country in the world using peat as a fuel in power stations. The two countries which have developed the use of brown coal to the greatest extent have been Germany and Russia. In Germany in the public supply stations alone brown coal plants in 1929 had a capacity of 1,623,000 kilowatts, while in the same year the output of electricity from both private and public plants using brown coal was equal to 10,316,000,000 kilowatt hours, or slightly more than one third of the total national output.

Fuel oil is an important source of power production only in the United States, where about 10,000,000 barrels of fuel oil were consumed in electricity production in 1929, compared with 11,000,000 in 1919. In other countries plants consuming fuel oil are largely used as reserves to take peak loads and to deal with breakdowns in water power systems. The only country in which intensive electrification based on oil has been discussed is Rumania, where it is calculated that, out of a total prime mover capacity of 871,000 kilowatts in 1929, 38 percent were driven by gas and by fuel oil. It is considered probable that oil on a large scale may be used in European Russa within a few years. In the United States, while the use of fuel oil appears to be declining, the use of gas increased from 21,406,000,000 cubic feet in 1919 to 77,174,-000,000 in 1929.

The generation of electricity is becoming more and more concentrated in large steam power plants using coal as fuel or in hydroelectric installations connected with centers of consumption by main transmission lines operating at very high pressure. At one time it was thought that electrical development, if it was to

be carried out cheaply and economically, would depend largely on the exploitation of water power resources. Up to the present costs of water power have been lower than those of steam power. For water power plants capital cost decides the total operating cost with only a very small additional running charge to cover maintenance, lubrication and wages. Thus a water power plant costing \$300 per kilowatt installed would have annual capital charges per kilowatt of about \$25 with a running charge probably not exceeding at most .20 cent per kilowatt hour generated. If the hours of utilization per kilowatt during the year amounted to 4800 hours the total cost per kilowatt hour, including capital charges, would be .50 cent plus .20 cent or in all .70 cent. In very large water power installations developed at comparatively low cost a figure of .50 cent and even .30 cent per kilowatt hour is obtainable; and it is this much lower cost that has made economical the important electrochemical and electro-metallurgical works located in the United States, Canada, Norway, Sweden, Switzerland, France, Italy, Spain and Tasmania.

Hitherto it has been extremely difficult for the steam power plant to compete in cost with such figures. Although in its case the capital cost of the installation may be less than one third of that of water power plant, its operating charges are high owing to the necessity of burning fuel and of maintaining generating units in a high state of efficiency. The total working costs of an efficient modern steam power plant would equal from .36 cent to .40 cent per kilowatt hour generated with capital charges amounting to an additional .20 cent to .30 cent, allowing for an initial capital cost of about \$90 per kilowatt installed and an annual utilization factor of about 3000 hours. Thus the total cost in the modern steam power plant would be at least .56 cent to .70 cent per kilowatt hour. Such a price difference would at present give the advantage to the water power installation, but progress in technique and scientific invention are rapidly increasing the efficiency of the steam power plants. Efforts are being made to improve the overall thermal efficiency of steam power plants, cut down their fuel consumption per unit generated and through concentration in large units cut down the initial capital cost per kilowatt and with it the annual capital charges. Interconnection of steam plants over wide areas serving many diversified industries and commercial activities has eliminated the necessity for a high percentage of reserve plant and

spreads capital charges over a wider output. In a short time much lower figures than those already quoted may be expected.

At the same time developments have on the whole been unfavorable to reduction in cost of water power plants. The water turbine has already been developed almost to the maximum efficiency, while with the fuller exploitation of water power resources the more accessible sites have been used up and it has become more and more difficult to develop projects at a low capital cost. The average cost per kilowatt installed for water power plants is now about \$200 compared with figures as low as \$75 per kilowatt for steam power plants. In addition to this, water power possibilities not yet utilized are less accessible to the centers of population and power consumption and necessitate a greater mileage of main transmission lines. The tendency therefore is for the water power plant to lose its competitive advantages as against steam power plant. In the United States from 1924 to 1928 there was a larger increase in current generated by water power than by fuel, but while the former was stationary in 1929 the latter increased 18 percent; in the same year water power accounted for only 35 percent of the total output of electricity.

Three main tendencies may be distinguished in the production of electricity: steady reduction in the amount of fuel used for a given quantity of electricity; the increased concentration of production in very large units and as a result the widening of areas of transmission and distribution; and the adoption of the principle of interconnection not only between steam power plants but between water and steam power plants, whereby the former will be used to the maximum and periods of greatest demand will be met by the latter.

These tendencies are symptomatic of the trend in all modern industrial organization based on mechanization and rationalization. The most spectacular of the three tendencies is undoubtedly that represented by economies in the use of fuel. Economies in materials are not a feature peculiar to the generation of electricity; and it would be unwise, for example, to attribute the reduction in the utilization of coal merely to electrification. Parallel reductions have taken place in the utilization of coal in chemical processes, in the production of steam for industrial purposes, in railway transport and even in domestic consumption. In electricity, however, by reason of the complete nature of the records

maintained and the simplicity of the final product it is possible to follow year by year the process of fuel economy. This process has been characterized by three important features: the substitution of water power for steam produced power; the construction of very large generating units; and the elaboration of closely interconnected giant power stations.

The economies due to water power development have already been discussed. It remains to give some statistical indication of what economies have been effected in the utilization of coal, by means of research and plant improvement. In 1920, the earliest year for which reliable statistics are available, the average consumption of coal per unit generated in Great Britain and the United States was about 3.2 pounds. In 1930, this figure had fallen to 1.8 pounds—a saving of almost 45 percent in ten years. This saving, if applied to the world production of electrical energy in steam power plants, would represent a reduction in the annual consumption of coal of at least 140,000,000 tons. One must add to that the 100,000,000 tons representing the amount of coal displaced by water power development—a grand total of 240,000,000 tons, equivalent to about one fifth of the present annual coal production of the world.

The construction of large generating units up to 130,000 kilowatts in a single unit or 200,000 kilowatts in a compound unit— has been a factor of very great significance in this connection. Where a small generating unit of 1000 to 2000 kilowatts would consume from 18 to 20 pounds of steam per kilowatt hour generated, a modern large unit would consume less than 8 pounds, equivalent to about 1 pound of coal. Widespread adoption of the large generating unit has taken place in the United States, where the average capacity per unit of many power stations is in excess of 60,000 kilowatts. In Great Britain the unit capacity adopted for the selected stations in the national power scheme is 50,000 kilowatts and units of 67,000 kilowatts to 75,000 kilowatts are being constructed. In Germany units of more than 80,000 kilowatts are already in operation. A parallel tendency is the increased concentration of production in very large power stations. Even ten years ago a power station with a greater capacity than 40,000 kilowatts might have been regarded as unusually large, but many stations now are several times that capacity. There are power stations with a capacity ranging from 300,000

to 770,000 kilowatts in the United States and from 300,000 to 450,000 kilowatts in Great Britain, Germany and France. In the United States the number of power plants decreased one third, from 6355 to 4335, between 1922 and 1927. This trend has tended to reduce the consumption of fuel; at the same time it has raised a series of new and difficult economic problems.

Concentration of production in such enormous aggregations has made necessary elaborate widespread transmission and distribution schemes, which cover no longer a single town but branch out through the nation. These schemes depend upon the linking up of large or superpower stations and distribution networks by means of high tension transmission lines. There are transmission lines operating at 100,000 volts in Italy, at 132,000 volts in Great Britain and at 220,000 volts in the United States and Canada: in Germany the Rheinisch-Westfälisches Elektrizitätswerk has linked up the Ruhr with Baden by a line at 380,000 volts, the highest in the world. In 1900 it was possible to transmit only 60,000 volts for distances of 50 miles; in recent years it has become common to transmit 222,000 volts for 200 miles and over. The industry is rapidly achieving the transmission of electricity for unlimited distances, perhaps by radio. The increase of transmission efficiency permits high voltage primary transmission from power stations at pressures of 100,000 to 200,000 and more volts to strategic supply points, from which a new series of transmission lines at 60,000 to 100,000 volts covers a much wider area, whence low voltage distribution proceeds to individual consumers. Interconnection, moreover, distributes and levels peak loads, increases the load factor (now as high as 40 percent in the United States) by carrying a more unvarying load and permits lower rates, which are based on average load factor, thereby increasing and diversifying consumption.

It is possible to trace three stages in the elaboration of interconnected systems, all of which illustrate the evolution toward the very large aggregation which is perhaps the outstanding characteristic of electricity supply economics. Originally an undertaking with an area of supply limited to several hundred square miles would link up its generating stations with a view to eliminating interruption of supply resulting from breakdowns. One station would be able to take over temporarily an additional load sufficient to tide over the period of difficulty. In

the most progressive modern power zones this first phase has practically disappeared, because of the centralization of production in very large plants and the development of the composite undertaking consisting of several enterprises merged together under one control. In countries like the United States, where private enterprise is responsible for practically the entire production of electricity, in spite of a measure of political opposition amalgamations or mergers have taken place without serious complications other than those of a financial nature, with the consequence that areas of supply are no longer confined to hundreds of miles, but cover many thousands of square miles.

Interconnection has moved therefore into its second phase; namely, that of the creation of superpower zones where many large plants operating together feed into a widespread system. This widespread system may cover many states without, however, covering the area of an entire country. Examples of such interconnection to cover entire states are provided chiefly by the United States, Canada and Germany. It is impossible to give a detailed account of every superpower zone in the United States, but two main areas may be selected for consideration; namely, the Pacific coast and Michigan and the Great Lakes district. The whole of California is served by two companies. The Pacific Gas and Electric Company extends over 500 miles from north to south with the almost exact center at San Francisco, links up in the north with the Colorado Power Company and in the south near Santa Barbara with the Southern California Edison Company, which centers round Los Angeles, while since its acquisition in 1930 of the San Joaquin system it is linked up with the San Joaquin valley at Santa Maria and taps therefore one of the most important oil bearing areas in the United States. This great Californian power zone has plants with a capacity of 2,100,000 kilowatts and an annual output in excess of 8,000,000,000 kilowatt hours. In the superpower zone represented by Michigan and the district of the Great Lakes the principal undertakings which are linked up have points of connection with other undertakings further to the east and to the north; therefore no particular section can be isolated. Beginning in the north the Detroit Edison Company is linked up with the Consumers Power Company near Lansing in the west and at Cement City in the southwest. In the north it links up at three points with the Michigan Electric Power Company, which cov

ers the area bounding Lake Huron and Saginaw Bay. On the west of Lake Michigan interconnection centers on the Commonwealth Edison Company of Chicago and the Public Service Company of Northern Illinois. The undertaking connecting the Commonwealth Edison Company with the Consumers Power Company is the Northern Indiana Public Service Company, while through a whole series of interconnections it is now possible for Chicago to supply electricity direct to New York. Further east the systems created round Lake Ontario, notably by the Hydro-Electric Power Commission of Ontario and the Buffalo Niagara and Eastern Power Corporation, are also examples of interconnection on the very largest scale. The American Niagara system links up with the Hydro-Electric Power Corporation at Niagara Falls. In the southwest it connects with the Penn Public Service Corporation, on the east with the Adirondack Power and Light Corporation and on the north with the Northern New York Utilities Company. It is also linked up by a series of interconnections with New York. The Hydro-Electric Power Commission, in turn, which serves the whole of southern Ontario with main transmission lines stretching from Paugan Falls in Quebec in the extreme east to Windsor, at that point comes into contact with the system of the Detroit Edison Company, thus almost completing the series of great power systems round the Great Lakes. Further east an important superpower zone covering Quebec includes three systems; interconnection runs from Windsor into Quebec, so that if account is taken of connections round the lakes both on the American and Canadian territories this whole area can be regarded as the most important power zone in the world, with an annual output greater than the total annual production of Canada alone.

In Germany rapid progress has been made toward the formation of one unified power system covering the whole country; four interconnected superpower zones bring almost the entire production from public supply works into one supply system operated by a number of undertakings of a varied type. Two systems may be distinguished in Switzerland, one of which connects with Germany and Italy and the other with France, interconnected for the export of electricity. Italy provides a remarkable example of interconnected zones covering the whole of Lombardy, Venetia and Piedmont, with extensions to Florence, Rome and Naples. In northern and eastern France zones of a similar nature

have been created, the most striking developments being the linking up of the Massif Central with the power stations at Paris and the creation of a superpower zone in the Pyrenees.

The third phase, that of definitely designed national power schemes, the simplification of control and the entrance of the state into the coordination of electricity supply, has already been brought into existence as a logical outcome of the second. In the past few years government ownership of municipal plants has declined steadily because of the development of large generating plants, high tension transmission and superpower zones. But the operation of these same forces has compelled intervention by the state on a national scale extending beyond the regulation of rates, especially as private enterprise has made no attempt to introduce an element of conscious control. This third phase has been rendered necessary by fundamentally conflicting types of power organizations among other factors. In Great Britain private enterprise in the power companies is responsible for only about 37 percent of the production from public supply systems, local authorities and municipalities supplying the remainder. The difficulty of forming an amalgamation of a power company and a local authority would appear to be insuperable even if legislative issues alone are considered, and so a form of coordination has been imposed by the state, largely with the consent of the supply enterprises themselves.

The most striking and most scientifically designed scheme of coordination is that of the "Grid" in Great Britain, which was recommended in 1925 and brought into legislative existence by the Electricity Supply Act of 1926. The work of coordination is entrusted to the Central Electricity Board, a public utility independent of political control or interference but responsible to the ministry of transport, which appoints its executive. This board might be regarded as a compromise between public ownership and private enterprise; in its actual operation and financing it conforms closely to the practise of an efficient private company but is not allowed to make profits and in certain matters bearing on public policy is responsible to the government. The purpose of the national power scheme in Great Britain is to construct a main transmission system operating at 132,000 volts and linking up about 150 selected stations in one unified power zone under centralized control and capable of supplying the entire national demand for electricity from public

undertakings. The concentration of electricity output means closing down about 320 unnecessary and comparatively inefficient stations and a very considerable simplification and standardization in the utilization of selected power plants. Economies effected by such coordination are estimated to bear easily annual charges represented by expenditures on the scheme and cause a considerable reduction in the average price of electricity supply. It is estimated that in 1942 production from the national power scheme will be in excess of 25,000,000,000 kilowatt hours, and such an output may make it the greatest example of interconnection and superpower operation in the world.

A similar scheme of national coordination is to be found in Belgium, where a single holding company has been created to link up activities of other regional coordinating companies responsible between them for almost the entire output of electricity from public supply and industrial networks.

In other countries the state itself has played an important part in the large scale production of electricity. Thus in Sweden state owned undertakings in the central Swedish power bloc are responsible for more than 40 percent of the output of the country, their production in 1929 amounting to 1,900,000,000 kilowatt hours. In New Zealand the state is responsible for almost the entire production from 38 water power stations with an annual output of 710,000,000 kilowatt hours. State coordination of electricity supply has been initiated in Hungary, Egypt, China and to some extent in Japan. In Germany coordination of electricity supply has been carried out partly by the individual states, partly by the German government itself and partly by supply companies in which public authorities have a minority capital holding. The two most important coordinating elements in Germany are the German government, whose undertakings are centralized in one company, the A.-G. für Deutsche Elektrizitätswirtschaft, and the Rheinisch-Westfälisches Elektrizitätswerk. Each of these undertakings is responsible for the control of networks producing annually more than 3,-000,000,000 kilowatt hours. It is estimated that in Germany 70 percent of the output of public supply undertakings is controlled by the Reich, the states, the municipalities and communes. The tendency in Germany has been for the state to control generation and transmission, with private enterprise taking care of distribution to consumers; the state and private enterprise occasionally participate jointly in "mixed" companies. In France the state actively assists the electric power industry, particularly in the development of power zones and rural electrification.

Soviet Russia provides another example of a deliberately planned national power scheme under the most rigid form of state control covering generation, transmission and distribution. In a number of countries coordination has been carried out by individual states or counties, notably the Electricity Supply Commission of South Africa, which was created by the Electricity Supply Act of 1922; this organization with the addition of one power company is responsible for almost the entire output of electricity in South Africa. A further example of the same type of organization is that provided by the State Electricity Commission of Victoria in Australia, which was constituted in 1918 and had an output in 1929 of almost 580,000,000 kilowatt hours. Tasmania provides a further example of such coordination, the state hydroelectric department owning a power plant at Waddamana with an output in excess of 300,-000,000 kilowatt hours used principally for zinc manufacture. Perhaps the most important example of electrification attempted by a single state is that of the Hydro-Electric Power Commission of Ontario, which has an annual output in excess of 4,000,000,000 kilowatt hours.

In the United States there has been no formation of power zones on the basis of national planning; coordination has been usually determined by competition and has been carried out principally by large financial groups controlling a number of supply companies through a system of mergers, including gas companies as well. The United States especially lends itself to this form of centralization because almost the entire output of electricity is produced by privately owned public supply companies, the local authority or the municipality playing an unimportant part. It is impossible at this stage to discuss fully the American public utility situation (see PUBLIC UTILITIES). Briefly, the system is based on the extensive development of power finance, which, as already indicated, originated with the electrical manufacturers but has since become largely independent of them. The concentration of control has been accomplished largely by use of the holding company (q.v.), which permits pyramiding of control, and by interlocking directors. The financial interests most powerfully represented in the United States are the Electric

Bond and Share Company, which in 1929 had assets of \$1,210,000,000 and dominated subsidiaries with an output approximately equal to one fifth of the national total. The next most powerful are the Insull group (represented mainly by the Commonwealth Edison Company of Chicago and the Middle West Utilities), the Northeastern Power Company, North American Company and Standard Gas and Electric Company. These five finance, service and holding companies and their subsidiaries, according to the Electrical World, controlled in 1927 almost one half of the American electricity output; ten other companies, including two Pacific coast companies, the New York Edison Company and Stone and Webster, Inc., controlled 29 percent. By 1929 concentration was much greater. The Middle West Utilities Company and the Commonwealth Edison Company have an annual output now in excess of 8,500,000,000 kilowatt hours. The organization in 1929 by J. P. Morgan and Company of the United Corporation introduced a new and dominating factor into the power industry. Within one year the new corporation had assets of \$539,000,000; the assets of its subsidiaries and their affiliates exceeded \$5,000,000,000. The United Corporation interests spread along the Atlantic coast from north to south; one of its subsidiaries, the Niagara Hudson Power Corporation, controls 70 percent of New York state's water power resources.

The final centralization of control is accomplished by the great banking houses. J. P. Morgan and Company and their affiliated banks, First National, Bankers Trust and Guaranty Trust, are represented on the directorates of electrical companies (excluding the United Corporation) with assets approaching \$8,000,000,-000. The National City and Chase National banks are represented on the directorates of power companies with assets exceeding \$5,000,-000,000. Some or all of these banking houses are represented on the directorates of the General Electric Company, the Westinghouse Electrical and Manufacturing Company, the Radio Corporation of America and the American Telephone and Telegraph Company—an integration of interests representing financial control over the electrical manufacturing, power and communication industries.

In Canada two main groups are represented in public utility finance and production, the Holt-Gundy and the Nesbitt-Thomson groups. The total capacity of generating plant owned by these two groups is now about 1,400,000 kilowatts, with an annual output in excess of 6,500,000,000 kilowatt hours, or 36 percent of the Canadian output. American interests in Canada are represented predominantly by the International Power and Paper Company, which controls the Gatineau Power Company and in the United States the New England Power Association. Including American subsidiaries this group has an annual output of 3,500,000,000 kilowatt hours.

Power finance and holding companies with their electrical manufacturing and banking affiliates dominate electricity supply in Europe. Although weakened by the growth of public undertakings under state supervision there are important finance companies in Germany under control of the Allgemeine Elektrizitäts-Gesellschaft and the Siemens-Schuckert combine. Important finance and holding companies operate in France, Belgium, Switzerland and Italy; in France one combination controls 70 percent of the output of electricity.

The influence of finance and holding companies spreads beyond national frontiers. Special finance companies are organized for foreign countries by electrical manufacturers to create and control markets for their equipment. Electricity supply in Latin America is dominated by the American and Foreign Power Company, which also has important interests in India, China and Europe. It is a subsidiary of the Electric Bond and Share Company and in 1929 it had assets of \$756,000,000. The International Power Securities Corporation, the American European Utilities Company and Italian Superpower Corporation are American companies which have large interests in electricity supply undertakings in Europe. The International General Electric Company, a subsidiary of the General Electric Company, has interests in German and French electrical manufacturing enterprises which in turn are affiliated with power finance and holding companies. Well over \$1,000,000,-000 of American capital is invested in foreign electricity supply enterprises. The leading European electrical manufacturers and their banking affiliates maintain power finance and holding companies for operation in foreign countries. The tendency is for the dominant American and European companies to interlock and define their interests, in many cases working harmoniously together for the elimination of competition.

Consideration of the large power groups and the centralization of control leads inevitably to discussion of the possibility of the creation of

international superpower networks. Such a network is slowly but surely being created between Canada and the United States; in 1929 Canada exported to its neighbor 1,604,000,000 kilowatt hours of electrical energy. But the most remarkable example of what can be achieved is that represented by the Alpine power bloc centering about Switzerland. Recent extensions have made it difficult to confine the bloc even to the Alps, since the extensions of German systems have been such that countries many hundreds of miles away from the Alps have been brought into connection with water power plants operating in them. Electricity is exported by cable from Sweden to Denmark. In 1929 Switzerland, Germany, Austria and France exported 1,450,000,-000 kilowatt hours to each other and to Italy, Czechoslovakia and the Saar. The total exchanges for all the countries mentioned would amount to about 3,000,000,000 kilowatt hours, or 6 percent of their total output. In the case of Switzerland its exports of 1,000,000,000 kilowatt hours are equivalent to 27 percent of the national output and occupy a fairly important position in the balance of trade, being valued in 1929 at about 21,000,000 Swiss francs.

The export and import of electricity open up the problem of making power available from countries with large fuel and water power resources to less favored countries, which is bound up with the larger problem of the international flow of raw materials. It also makes imperative unified legislation and standardization. The problem has already produced legislation and treaty conventions among the countries affected, but they constitute only a beginning.

As a consequence of its high degree of mechanization electricity supply is an industry which employs a comparatively small body of men. Output per worker in the United States has increased approximately 300 percent since 1902. This is particularly apparent in the central stations, where the number of employees has shown a steady relative decrease owing to the introduction of more efficient units and of labor saving devices, such as the mechanical stoker in steam plants; in automatic and partially automatic hydraulic plants labor has been almost completely eliminated. There has, however, been a relative increase among outside workers engaged in transmission and distribution because of the expansion of transmission networks, the growth in customers and the fact that comparatively little has been done to introduce labor saving devices except in the case of automatic substation opera-

tion. In 1927 in the United States electric power companies had 95,917 salaried employees and 138,796 wage earners; the average yearly salary and wage was \$1734 and \$1450 respectively. For the industry as a whole wages were smaller than fuel costs and interest payments; in the period 1922-27 the increase in the wage bill was considerably smaller than the increase in net income. Employment is comparatively steady. While the power companies have done much to reduce hazards, these are still high; some of the most important safety devices are not being introduced because of their cost. The linesman's occupation is particularly hazardous, and the increase in high tension lines has offset to some extent the effect of the safety work.

In most of the European countries labor is represented by strong central organizations capable of dealing directly with the employers. In the United States, however, mechanization and concentration have been accompanied by the decline of unionism. The mechanical stoker almost wiped out the central station membership of the International Brotherhood of Firemen and Oilers. The International Union of Steam and Operating Engineers is not representative of the wage earners, the members being under the control of the management. Moreover, neither union has any strength in the power industry. Somewhat stronger is the International Brotherhood of Electrical Workers; its members in the power industry are almost exclusively linesmen and it has made no impression on central station workers. Before the World War power companies refused to deal with unions, but in recent years they have encouraged company unions and engaged in elaborate welfare activities. Employee stock ownership has not been enthusiastically taken up although encouraged by the companies; in 1929, according to the National Electric Light Association, 23,197 employees in companies representing one third of the industry owned only 2.3 percent of the total stock.

Electrical development, through its concentration on large productive units, the interconnection of main transmission lines of such units and the economies effected by technical and scientific advances, has served to create new industrial areas and to give an economic status to countries which previously, through lack of fuel resources, were unable to enter the manufacturing field; it has converted Switzerland and northern Italy, central and southern France, northern Spain and a large part of Norway and Sweden into important industrial regions, many

of them active in the creation and expansion of new industries based on electro-chemical and electro-metallurgical processes. In Switzerland, Austria and Italy electrical development has accelerated the expansion of a number of primary industries, chief among them being textiles and engineering. Cheap electric power plays an important role in the rapid industrialization of the southern states of the American union. Even in countries with fuel resources, such as Canada, the industries which have grown most rapidly have been those which, like paper and pulp, are dependent on a cheap and constant volume of electrical power.

The industrialization of new countries, and among those new countries should be mentioned Japan, New Zealand, Australia, Russia and China, is perhaps the most spectacular aspect of electric power development. This has already played an important part in the foreign trade of the world and can be measured in export and import returns. A second important result, which might have been regarded as inevitable even if no change had taken place in the economic status of any country, has been the diversification of industrial enterprise. In Great Britain the exporting industries are ceasing to be dominant and are giving way to an enormous number of comparatively small industries which have arisen to supply the requirements of the consumer once met by imports. Electricity has the beneficial economic result of spreading out more completely industrial activity over the area of the country, of loosening and rendering more flexible the entire industrial configuration and of stimulating local activities, in some cases of a purely agricultural type. The mechanization of agriculture, for example, has been dependent on electricity as a primary source of power, although internal combustion engines may have been most important in the actual cultivation processes. Rural electrification is fundamentally bound up with the more effective distribution of economic and industrial activity, and in this sense electricity operates to create a situation different from that which obtains in its own production. It tends to break up the large central manufacturing units into their constituent parts and to encourage the entrance of new enterprises into industry, while it renders unnecessary in many types of industrial enterprise the formation of very large plants.

The development of agricultural electrification and the extension of electricity to rural areas have progressed very far in certain parts of the

United States, notably California and the Pacific states. It has been estimated by the National Electric Light Association, for example, that on December 31, 1930, 644,421 farms, or 10.2 percent of all the farms in the United States, were electrified. The capacity of electric plant used directly in agriculture in the United States is about 2,000,000 h.p. In France, 24,717 communes were electrified at the beginning of 1929, while it is estimated that at the beginning of 1930 this figure had risen to 27,500, or 73 percent of the total number. Much of this work in France has been carried out through direct subvention by the French government; from 1923 to 1930 the government advanced nearly \$40,000,000, in the form of loans with interest not exceeding 3 percent, to cooperative societies created by the farmers and rural interests, agricultural collective groups and trade associations. In Germany out of 1,526,000 farms of more than two hectares, equivalent to 82.5 percent of the agricultural area of Germany, 1,166,000, or 76 percent, were linked up with power supply networks; while it was estimated that for the whole of Germany in 1929 the consumption of electricity for purely agricultural purposes amounted to 629,-000,000 units, equivalent to 968,000,000 units generated, or 6.7 percent of all central station output. In Sweden about 45 percent of the cultivated area is provided with electricity, 5 percent of the national output, or 243,000,000 units, being used in 1929 for purely agricultural purposes. The consumption of electricity per acre varies considerably from country to country. It is highest in the United States and lowest in France, Belgium and Holland, with a tendency toward steady increase.

Three main movements can be seen in operation. The industrialization of new countries and the improvement of the manufacturing status of older countries which had been deprived of fuel resources have produced a definite change in the economic balance of power in the world; the more effective territorial distribution of industrial enterprise within the old industrial countries has tended to increase the volume of economic activity, render exports less important and increase the power of resistance of the country to international economic depression; the growth of rural electrification and the diversification of industrial enterprise have made more flexible the economic configuration of a country and accelerated in this way the general economic

It is now generally recognized that the elec-

tricity supply industry has become so important a feature in national and even international economic life that it cannot be left entirely to the free play of economic forces. Through its very nature it has enjoyed in practically every country a monopoly position, and one of the consequences of such a position is the state's intervention in the general policy governing electricity supply. With state recognition of the monopoly position has come a certain measure of state supervision, which is most marked in the allocation of concessions for water power development. Thus even in the United States the Federal Power Commission has a strong legislative position with regard to hydro-electric concessions and in almost every hydro-power country, even in comparatively undeveloped countries like Rumania, a state commission has been created to control water power development. It is difficult therefore to believe that further participation of the state will not become necessary, if only to avoid political complications. There is a marked tendency throughout the world for coordination through some form of controlled body created either by the industry itself, as in Belgium and to some extent Great Britain, or by definite state control, as in Germany, China and Russia. The reason for this development is sufficiently clear. The enormous expansion of the superpower zone has served to break down local restrictions and impose a national conception of electricity. We have seen also that through unification of control a considerable measure of simplification and of standardization can be achieved, and such changes have tended to increase the economic strength of the industry.

The final situation, where the entire manufacturing organization of the country will be dependent on electricity, is one which must be considered very carefully in the near future. It would be dangerous for the motive power required for industrial production to be in the hands of a small number of groups which may or may not have a clear understanding of their responsibility. The expansion of main transmission at very high voltages has made such a consideration much more urgent than a few years ago; and the participation of the state in electricity supply, above all in the highly industrialized countries like Germany and Great Britain, has been rendered imperative not through any political theory of public ownership, but through the necessity to safeguard adequately the entire economic structure of the country and in harmony with emerging conceptions of national economic

planning. Proposals in the United States for a giant power system of interconnected and unified superpower zones coincide with proposals for the planned control of electrical development to decentralize industry and to combine industry and agriculture.

HUGH QUIGLEY

See: Power, Industrial; Industrial Revolution; Electrical Manufacturing Industry; Coal Industry; Gas Industry; Oil; Waterways, Inland; Public Utilities; Municipal Transit; Holding Company; Rate Regulation; Government Ownership; Socialization; Cooperative Public Boards.

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ELECTRICAL MANUFACTURING DUSTRY. This comprises plants manufacturing machinery and apparatus used in the generation, storage, transmission and utilization of electric energy. It is not a sharply defined branch of production. On the financial and marketing side it is sometimes difficult to separate electric manufacturing from industries whose equipment it supplies—the electric light and power and the electric communication industries; many establishments in the latter fields are financed and operated by the firms in the electrical manufacturing line. On the technological side too the manufacture of electrical equipment is sometimes carried on under the same auspices as machine and tool making and production of other mechanical equipment. Thus machine shops using electrical appliances often manufacture the necessary parts; conversely, numerous electrical enterprises manufacture machines and tools in which electrical parts are only accessories. The production programs of the different firms in the electrical manufacturing industry are determined less by technological than by economic and historical considerations, such as the conditions of competition, the financial strength of the enterprise, the ownership and lease of patents, the tradition and past experience of the firm. A single firm may be found to manufacture a considerable variety of products, and the output of one firm may differ greatly from that of another as to type of product. The output of the industry as a whole includes among other things heavy current products such as electric generators and motors, transformers, accumulators and storage batteries, cable and wire transmission equipment and installation material, incandescent lamps, electric cooking and heating apparatus; and light current products such as telegraph and telephone instruments and equipment, wireless telegraph and telephone apparatus, broadcasting equipment and radio receiving sets and electrotherapeutic apparatus.

The early development of the electrical manufacturing industry is closely connected with the progress of the scientific knowledge of electricity. As the invention of the electromagnetic telegraph between 1833 and 1844 was the first practical result of scientific research in the field of electricity, the electrical industry first concerned itself

with the further practical adaptation of electromagnetism in telegraph and telephone communication and the development and improvement of the required control and signal appliances. The necessary low voltage current was obtained chemically. The real development of the industry, based on utilization of high voltage current, followed the discovery of induced current by Faraday in 1831 and the discovery and application of the electro-dynamic principle. The substitution of mechanical for chemical generation of electric energy made it possible to obtain greater quantities of current more cheaply. Further improvement along this line was signalized by the invention of alternating current machines and the replacement of the piston steam engine by the steam or water turbine, developments which made possible an enormous increase in plant capacity and which provided the technological and economic bases for the modern electric power industry. The developments in transmission were equally important. The erection of transforming stations and high tension lines and the elimination of formerly unavoidable leakages of current and other uneconomical conditions made practicable the transmission of current over long distances and thus provided the necessary conditions for extending the use of electric current from a few small areas such as large cities to every part of the country.

The use of electric energy instead of other types of power in the factory and in the home is conditioned not only by the provision of current at sufficiently low rates but equally by the development of machines and appliances adapted to the effective utilization of electricity. This has been accomplished by the ingenuity of many individual inventors and the systematic research work carried on by the electrical manufacturing industry itself. It was thus that the carbon filament lamp, the basic invention of Edison, was developed into the gas filled tungsten lamp and the consumption of energy per unit of candle power greatly reduced. The development of telephony and telegraphy was enormously facilitated through the invention of automatic appliances. The progress in electric traction, both local and long distance, has been particularly striking. Apart from equipment adapted to meet special requirements in generation and transmission for traction purposes the electrical manufacturing industry has developed electric locomotives which equal the steam engines in mechanical power and surpass them in some respects. The most significant technical achievement of the

industry is undoubtedly the perfection of the electric motor, a power machine of the greatest importance, which can be used in small and large manufacturing plants and in agriculture. In many cases the electric motor first made mechanization possible for small scale industry and enabled it to compete with medium sized and even large plants. It was therefore important to produce motors of almost every size, even types with a capacity less than one horse power.

The interdependence found between the developments in generation and in transmission is equally characteristic of the improvements in the electric machine and appliance field. Neither the electric lamp nor the electric motor could be used without important adaptations of switching, installation and measuring apparatus. And on a different plane the supply of electric current to large areas could not be concentrated in single power stations without the development of electrical communications which make possible the necessary coordination and unification of control.

Technical progress in the electrical industry was concomitant with the enormous expansion in other branches of production, of which it was both a cause and an effect. The growth of the international economic system during the nineteenth century, both as to geographic scope and as to the strength of economic ties which underlay it, called for extension and improvement in the electrical communication services. The rapid expansion in commodity production and the invention of new production processes and devices demanded an immense increase in disposable motive power and an increased efficiency in its application, which were furnished by electric energy and the electric motor engine. The development of electrochemistry created a demand for electric energy not only as motive power but also as an essential auxiliary material. The rise in the standard of living and the increased employment of women outside the home were met by the growing use of electric lighting and of electrically driven household equipment.

When about 1840 the production of telegraph apparatus was first undertaken, electrical manufacturing was merely a supplementary branch of the production of precise mechanical instruments. Only after the middle of the century did enterprises appear whose major line of production was telegraph equipment and which for the rest limited themselves almost entirely to the manufacture of other electrical appliances. The

heavy current electrical manufacturing which began with the construction of dynamo machines in the seventies and eighties of the last century had matured by 1890 into an independent industry and has since then forged steadily to a position of considerable importance in the economic structure of the world.

Electrical manufacturing companies originated in the control of inventions and patent rights. The fortunes of the pioneering German firm of Siemens und Halske were closely linked in the beginning with the inventions of one of its founders, Werner Siemens; in 1879 this company demonstrated the first electrical railway, the development of which was of prime importance in the growth of the power industry. Inventions and patent rights also constituted the basis of the important American companies. The Westinghouse Electrical and Manufacturing Company, organized in 1872, drew its strength from control of alternating current patents and other patents which it originated or purchased and improved. A company organized in 1878 to exploit Edison's incandescent lamp patents was the predecessor of the General Electric Company, which also secured control of the Thomson-Houston patents; and the Edisongesellschaft organized in Germany in 1883 provided the foundation for the Allgemeine Elektrizitäts-Gesellschaft. Research laboratories early became a feature of the electrical manufacturing industry and the acquisition and control of patents constituted an important policy which produced considerable litigation until the dominant companies resorted to the exchange of patents and of technical experience.

The original capital for electrical manufacturing was supplied by the mechanical industry, which undertook the production of telegraph apparatus as a supplementary line. The first independent enterprises, such as Siemens und Halske, did their own financing, largely out of profits. But the industry's rapid expansion, its large profits and large capital requirements soon attracted the financiers. The great German banks early took an active part in the development of electrical manufacturing and soon dominated the industry. Much of the \$50,000,000 capital of the General Electric Company, organized in 1892 as a combination of several large companies, represented accumulated profits; but the investment banking house of J. P. Morgan and Company participated in its organization, and their relations since have been of the most intimate character.

The capital requirements of the electrical man-

ufacturing industry are extremely large. Construction of machinery and apparatus for the telephone, the telegraph, power plants and distribution systems requires an immense capital equipment possible only in enterprises with the strongest financial resources. These requirements are further increased by the fact that in order to keep its giant plants busy and to meet the competition of gas and steam the industry has adopted the policy of creating markets for its products and undertaken the financing of power plants, street railways and other enterprises using electrical equipment. An extension of this policy has been the organization and financing of electrical supply and communication enterprises in foreign countries. At first the financing of domestic and foreign subsidiaries was done directly by the manufacturing company but as it assumed larger proportions the task was specialized and taken over by autonomous banks, finance and holding companies, in the control of which the parent manufacturing company participated.

Electrical manufacturing, stimulated by the increasing electrification of other industries and the policy of encouraging the consumption of electric energy, expanded rapidly. The American output of electrical products, for example, increased from \$92,434,000 in 1899 to \$335,-170,000 in 1914; in 1927 the output was valued at \$1,798,000,000 and in 1929 at \$2,273,000,000. Allowance must be made of course for the war and post-war decline in the purchasing power of the dollar, which is reflected also in the prices of electrical products. The growth of electrical manufacturing was a basic factor in the prosperity which prevailed in Germany between 1890 and 1902. In 1913 the German industry produced 34 percent of the world output of electrical products compared with 29 percent for the United States. Since the war, however, Germany's proportion of the world output has declined to 25 percent while that of the United States has increased to 50 percent. In the year 1928-29 Germany had an estimated output of nearly \$1,000,-000,000; this figure is based on American prices for electrical products, which in 1931 were about 20 percent above the German. Electrical manufacturing in Great Britain developed more slowly than in Germany or the United States, in part because of the slower tempo of technical progress and in part because of the comparative neglect of the capital requirements of home industry by bankers who emphasized the export of capital. The output of the British industry in 1928 was valued, according to an estimate by the British

Electrical and Allied Manufacturers' Association, at approximately \$400,000,000; this figure is based on English prices, which are somewhat higher than American, and includes the value of mechanical parts of some electric machines. The British electrical manufacturing industry is pursuing at present a program of electrification, the success of which will offer a powerful stimulus to a rapid expansion of the industry; this program includes development of superpower generation and transmission, the encouragement of basic industries to electrify equipment, main line electrification as part of a transport reorganization scheme, and the direction of foreign investment to power supply companies in order to facilitate electrical exports. France, which was not an important producer before the war, has since substantially increased its electrical production under pressure of intensified industrialization and a comprehensive program of electrification.

The expansion of the electrical manufacturing industry may be measured also by the increase in the generation capacity of the equipment which it installed. In the United States 29,600,000 kwts. were installed in public utility power plants in 1928; the corresponding figure for 1912 was 7,700,000 kwts. In Germany 4,800,000 kwts. were installed in private industrial power stations and 6,300,000 kwts. in public plants in 1928, while in 1900 only 150,000 kwts. were installed in public plants. The capacity of English public power stations rose from 2,600,000 kwts. in 1920 to 5,900,000 kwts. in 1928.

In all the leading countries electrical manufacturing is concentrated in a few giant enterprises, although side by side with these there are hundreds of small enterprises manufacturing specialized electrical appliances. Generally speaking, three types of enterprises may be distinguished: the largest produce equipment for whole plants; others manufacture a great variety of special apparatus used in one or two distinct fields; while a third group manufactures only a few products, either electrical appliances or simply accessory parts.

Concentration in electrical manufacturing is facilitated by the character of the industry's production, its heavy capital requirements and the control of basic patents. The great companies early adopted the policy of cooperative action in the control of markets and prices. Three companies in the United States and two in Germany are responsible for most of the world output. Concentration has not been so highly developed

in Great Britain and France; but in recent years British electrical manufacturers have been pressing for combination, while amalgamation has been going on in France encouraged by the banks. Industrial concentration is supplemented by financial centralization and control: the various divisions of the electrical industry—manufacturing, power supply, telephone, telegraph, cable and radio companies—are bound together into a community of interest by means of holding and finance companies, interlocking directorates and through the influence of the great banking houses.

In the United States the largest enterprise in the field of light current production is the Western Electric Company and the companies closely allied with it. It is impossible to define exactly the production program of this enterprise, which with the allied Electrical Research Corporation and Bell Telephone Laboratories, Inc., employed some 85,000 persons in 1929; yet it is quite clear that it manufactures substantially everything produced in the field of light current engineering, although it is not limited to that field. The capital of the Western Electric Company was \$150,000,000 in 1929 and its holdings in other companies some \$63,000,000; its turnover exceeded \$410,000,000. Characteristic of corporate relationships in the electrical industry is the connection of the Western Electric Company with companies using the apparatus it manufactures; 98 percent of the capital stock of the Western Electric Company is in the hands of the American Telephone and Telegraph Company, which directly or through the associated Bell Telephone companies operates the largest telephone enterprise in the United States. In addition to being the manufacturing subsidiary of the American Telephone and Telegraph Company the Western Electric Company buys for that company all products not produced by itself and engages in the manufacture of radio and talking picture apparatus.

Another subsidiary of the American Telephone and Telegraph Company is the International Telephone and Telegraph Corporation, operating in the foreign field. This corporation, organized about 1921, operated at first only as a service and construction company for telephone and telegraph enterprises (including wireless) but it later turned to the manufacture of light current products and became the holding company of the Western Electric Company's foreign manufacturing subsidiary, which became the International Western Electric Company and later the

International Standard Electric Company. There is no evidence that a stockholding relationship exists between the latter company and the Western Electric Company; but the control is unified and the exchange of patents and experience probably takes place, such arrangements being common among big enterprises in the electrical industry.

The great American enterprises in the field of heavy current production are the General Electric Company and the Westinghouse Electric and Manufacturing Company, including their subsidiary companies. The General Electric Company, excluding subsidiary companies, had in 1929 a capital of \$42,929,000 special stock and \$180,287,000 common stock, holdings in other companies of \$183,778,000 and net profits of \$67,290,000. One of its subsidiary companies is the International General Electric Company, in which are concentrated the parent company's export business and holdings in foreign enterprises; it had in 1929 a gross income of \$5,200,-000 and a net profit, available for the payment of dividends, of \$1,700,000. The General Electric Company's holdings in power and light and other electrical enterprises are largely concentrated in a holding company, the Electric Bond and Share Company, and it also has large investments in the Radio Corporation of America. The Westinghouse Electric and Manufacturing Company, inclusive of three subsidiary companies, had in 1929 a capital of over \$129,000,000 common stock and some \$3,999,000 preferred stock; its turnover was \$216,000,000 and the net profit \$27,000,000. Since 1896, when they agreed on an exchange of patents and division of markets, the General Electric Company and the Westinghouse Electric and Manufacturing Company have worked in close cooperation emphasized by common financial affiliations.

In Germany the largest enterprise in the light current field is Siemens und Halske A.-G. and its subsidiary companies. Its position in Germany is similar to that of the Western Electric Company in America. As the communication services in Germany are in the hands of the state, Siemens und Halske cannot establish relations with enterprises using its products similar to those existing between the Western Electric Company and the American Telephone and Telegraph Company; nevertheless it supplies under contract two thirds of the telephone equipment used in Germany.

The two most important German enterprises in the heavy current field are the Allgemeine

Elektrizitäts A.-G. and the Siemens-Schuckert-Werke A.-G. Both of these enterprises have a large number of manufacturing and financial subsidiaries and control the major share of Germany's electrical manufacturing output. Siemens-Schuckert is a combination of the Elektrizitäts A.-G. vorm. Schuckert & Co. and the heavy current production plants of the Siemens und Halske A.-G. Siemens-Halske owns 51 percent of the Siemens-Schuckert capital stock; the two enterprises constitute the Siemens Konzern, the largest electrical manufacturing group in Europe. This combination had in 1929 capital stock of \$54,090,000 and assets of \$206,500,000. In the same year the Allgemeine Elektrizitäts A.-G. had capital stock of \$47,640,000, assets of \$138,040,000 and holdings in subsidiary and affiliated companies of \$30,720,000.

In France two groups, both manufacturing similar heavy current products, account for the major share of the total electrical output. The larger group consists of the Société Thomson-Houston, a subsidiary of the American General Electric Company, and the affiliated Société Alsacienne de Constructions Mécaniques; it controls a number of smaller companies, including the Compagnie des Lampes. The other group is composed of Schneider et Cie and the Forges et Ateliers de Constructions Électriques du Jeumont. Schneider et Cie, formerly producing only iron, steel and munitions, has since the war become an important producer of heavy current electrical products; its association with other iron and steel firms assures a ready market. The two groups control jointly an important light current enterprise, the Société des Lignes Télégraphiques et Téléphoniques.

Electrical manufacturing in Great Britain is distributed among a larger number of major companies than in other countries: twenty-one firms or groups in 1927 produced approximately 60 percent of the output, among them the British General Electric Company, Metropolitan-Vickers Electrical Company and British Thomson-Houston Company. Several dominant groups are emerging, however, owing to a recent series of mergers and amalgamations. In 1929 the Metropolitan-Vickers Electrical Company became the Associated Electrical Industries, Ltd., and acquired control of the British Thomson-Houston Company, the Edison Swan Electric Company and a number of smaller enterprises; the three major companies in this group have a combined capital of \$83,426,000.

Among the numerous firms which manufac-

ture all the machines and apparatus used in a special field or specialize in a single type of product some are quite important in spite of the limited character of their output. Such enterprises are the American Electric Storage Batteries Company, the German Osram G.m.b.H. (incandescent lamps) and the Telefunken-Gesellschaft, the Dutch firm of Philips (incandescent lamps and radio accessories), the Swiss Maschinenfabrik Oerlikon and the French Compagnie des Lampes. In England there are a number of important specialized firms producing transformers, turbogenerators, electric motors and other electrical products.

The special field and single line firms differ considerably as to technical equipment and experience, control of patents, types of market served and legal and political conditions affecting production and sales policies. A number of small enterprises are able to compete fairly successfully with the large because of lower overhead costs, including smaller expenditures for research; and competition both as to price and quality is at times very keen. Competition is regulated, however, by conventions and such combinations as the international Glühlampen Kartell. It is also significant that the two largest German groups, the Siemens and the Allgemeine Elektrizitäts-Gesellschaft, control several companies in common, among them the Osram and the Telefunken.

The electrical manufacturing industry employed in 1929 approximately 1,000,000 workers as compared with 450,000 in 1913. In the United States the number of wage earners increased from 42,013 in 1899 to 329,361 in 1929, while in Germany there were about 280,000 wage earners in 1929 and in Great Britain about 123,000 in 1924. The composition of the labor force varies according to the character of the output of the different plants. For example, in the field of light current products, such as telephone apparatus, women constitute an appreciable proportion of the labor force. The majority of the workers in the industry are semiskilled or unskilled, and the steady mechanization of the production process tends to increase the proportion of semiskilled at the expense of both the skilled and the unskilled labor; nevertheless, the proportion of skilled workers is still larger than in most other industries. It is probable that American plants have more technical equipment per worker than is found in other countries; in 1927 horse power per wage earner in American plants was 42 percent greater than in 1914 and in 1929 the American industry had twice as large an output as the German, while employing only 18 percent more workers. Accident rates in the industry are somewhat higher than the average for manufacturing as a whole.

Wages vary in different countries; they are lowest in France and highest in the United States. In England the average hourly rate of wages has been in recent years slightly below one shilling. In Germany 85 percent of the skilled and 45 percent of the unskilled had in 1925 weekly earnings ranging from 40 to 50 marks; in 1929 the average of yearly earnings of the 137,000 workers employed by the Siemens Konzern was \$630. In the United States average yearly earnings were \$1302 in 1923 and \$1352 in 1929, a trifle higher than the average for manufacturing as a whole and about \$300 below the automobile industry's average.

While industrial integration and financial centralization are highly developed in electrical manufacturing industry, labor organization-with the exception of Germany—is weak, scattered in craft unions or non-existent. Labor is best organized in Germany: the powerful Metal Workers Union includes many electrical workers and many more belong to other unions. Labor organization is weaker in England, where a minority of the workers are organized in a number of unions, among which jurisdictional disputes often occur; there is noticeable, however, a strong trend toward industrial unionism. In the United States unionism is practically non-existent. The Brotherhood of Electrical Workers is almost exclusively limited to the building trades. Since 1901 the General Electric Company has maintained an open shop policy, although during the war there was a sort of collective bargaining in the company's plant at Schenectady, New York, where part of the workers were organized in different unions. Dissatisfied with conditions, the General Electric Company's workers organized in 1918 an Electrical Manufacturing Industry Labor Federation, which was at first partly successful; but strikes and the depression of 1921 almost destroyed unionism. In 1922 the General Electric Company tried to introduce its Industrial Representation Plan, which was voted down by the employees. In 1924 the management, without calling for preliminary approval by workers, established a Works Council which is virtually controlled by the management. Through the council the company has introduced contributory pension, unemployment relief, thrift and loan plans. The unemployment relief plan, adopted

experimentally in 1931, calls for the contribution of 1 percent of wages by the employees, which the company matches, and relief payment of 50 percent of earnings after two weeks of unemployment. The Westinghouse plants have also experimented with employee representation schemes.

The character of product of the electrical manufacturing industry is such that the principal producing countries are forced to export a large part of their output and to strive constantly for an expansion of export outlets. The initial domestic demand for electric equipment and appliances stimulates the rapid development of the electrical manufacturing industry; after the initial demand has been met the need for additional equipment and appliances, whether for the electrification of new industries and localities or for annual additions and replacements, is not sufficient to keep the industry running at full capacity. Electrical exports show therefore a steady increase; in 1929 they amounted to about \$500,-000,000, approximately one half consisting of electric machinery, telephone, telegraph and radio apparatus, cables and wires. About three fourths of the total exports are by Germany, the United States and Great Britain. Since the World War, which temporarily destroyed Germany's foreign markets, both the United States and Great Britain have increased their share of total exports. American exports have shown a particularly large increase; while the annual average in the period from 1910 to 1914 was about \$20,000,000, the exports were valued at \$85,358,000 in 1926 and at \$121,356,000 in 1929.

TABLE I DISTRIBUTION OF ELECTRICAL EXPORTS AMONG PRINCIPAL EXPORTING COUNTRIES *

Exporting Country	PERCENTAGE OF TOTAL FOR THE FIVE COUNTRIES EXPORTED IN			
	1913	1924	1028	
Germany	48.5	26.7	32.6	
United States	17.7	30.9	30.8	
Great Britain	23.4	30.4	27.4	
France	6.7	8.2	4.9	
Switzerland	3.7	3.8	4.3	

* Approximately 80 percent of the world's electrical exports are represented in the 1028 figures. Certain items, including German electrical products exported as reparation payments in kind, have been eliminated to make the figures comparable.

Source: Adapted from British Electrical and Allied Manufacturers' Association, The Electrical Industry of Great Britain (London 1020).

The importance of foreign markets as an outlet for the industry's output varies from country to country and is not correlated with the magnitude of the industry. The United States, pro-

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DISTRIBUTION OF ELECTRICAL EXPORTS OF GERMANY, UNITED STATES AND GREAT BRITAIN, 1929

Importing Country or Region	GERM	GERMANY		United States		GREAT BRITAIN	
	Amount (in \$1000)	PERCENT OF TOTAL	Amount (in \$1000)	PERCENT OF TOTAL	Amount (in \$1000)	PERCENT OF TOTAL	
Europe	106,281	80.4	21,412	17.6	18,446	21.0	
Great Britain	9,274	7.0	7,431	6.1			
France	9,384	7.1	2,059	1.7	1,686	1.9	
Italy	8,237	6.2	1,970	1.6	2,634	3.0	
Germany	-		1,307	1.1	500	0.6	
U. S. S. R.	5,826	4.4	2,583	2.1	1,603	1.8	
Spain	3,336	2.5	1,999	1.7	2,984	3.4	
All other	70,224	53.2	4,063	3.3	9,039	10.3	
Canada	-		38,645	31.9	2,663	3.0	
United States	2,456	1.9			1,414	1.6	
Latin America	12,154	9.2	34,593	28.5	9,909	11.3	
Asia	9,063	6.8	15,283	12.6	24,620	28.0	
Africa	1,358	1.0	2,535	2.1	9,477	10.8	
Oceania	852	0.7	8,888	7.3	21,384	24.3	
Total *	132,164	100.0	121,356	100,0	87,913	100.0	

* The German and British totals do not include undistributed amounts of \$5,712,000 and \$7,231,000 respectively. The German

The verman and driven totals do not include undistributed amounts of \$5,712,000 and \$7,231,000 respectively. The German total includes \$7.854,000 of reparation payments in kind.

Source: Compiled from the Statistisches Jahrbuth fur das deutsche Reich for 1029, published by the Statistisches Reichsamt, the first volume of Commerce Yearbook for 1020, published by the United States Department of Commerce; and the Annual Statement of the Foreign Trade of the United Kingdom, 1020, vol. 111, published by the British Statistical Office of the Customs and Excise Department.

ducing about one half of the world's electrical goods, exports only 5 percent of its output, while Great Britain exports 25 percent of its output and Germany 14 percent. Nearly one third of American exports in 1929 went to Canada and almost as large a share to Latin America, which is becoming an increasingly important market for the products of the American electric industry. Germany depends to a very large extent upon European markets, while over 60 percent of British exports are absorbed by the British dominions and colonies, practically all of whose imports, except in the case of Canada, originate in Great Britain. Outside of Europe, Latin America offers the most important export market to the electrical manufacturing industry of the world.

After the war the raising of customs tariffs throughout the world put obstacles in the way of normal development of international trade in electrical products. Many countries, such as Japan, Italy, Spain and Canada, have definitely encouraged the development of electrical manufacturing within their borders. Similarly, the development of a self-sufficient electrical industry is basic to Soviet Russia's industrialization plans. Yet customs duties, however high, are not particularly effective in stimulating domestic manufacture in the electrical field, since this industry requires heavy capital outlays. Moreover, the leading export companies take steps

to insure an adequate amount of foreign business by securing control of the existing electrical supply and of communication enterprises abroad and by organizing and financing new enterprises in this field. Such control is obtained either by means of their own subsidiary finance and holding companies or by affiliation with such companies operating in the international field of electrical supply and communication. Thus the International Telephone and Telegraph Corporation controls a network of electrical communications systems in Latin America and other parts of the world, assuring orders to its subsidiary, the International Standard Electric Company, and to its affiliate, the Western Electric Company. The American and Foreign Power Company, an affiliate of the General Electric Company's affiliate, the Electric Bond and Share Company, controls many foreign electric power enterprises. German, French and Swiss companies are similarly interested in foreign electrical supply and communications. In addition, the dominant companies all maintain manufacturing enterprises in the more important markets; an instance of this is the Canadian General Electric Company, a subsidiary of the General Electric Company of the United States.

Combination and cooperation in the control of markets and prices prevail in the international field just as in the domestic, the leading firms being bound together by patent agreements,

interlocking financial interests and division of markets. The Westinghouse and General Electric companies maintain cooperative relations with the International Telephone and Telegraph Corporation, whose subsidiary, the International Standard Electric Corporation, joined in 1929 with the Allgemeine Elektrizitäts-Gesellschaft to establish the Standard Elektrizitätsgesellschaft for the control of important light current plants in Germany. The Westinghouse and Siemens companies have strengthened their prewar relations, which involve the exchange of patents and experience and the division of markets. In 1930 the General Electric Company purchased \$10,000,000 of Siemens und Halske debentures; in the previous year the American company secured a 16 percent interest in Osram, the largest European manufacturer of incandescent lamps, controlled jointly by Siemens and the Allgemeine Elektrizitäts-Gesellschaft. In 1931 the International Telephone and Telegraph Corporation established cooperative relations by an exchange of stock and interlocking directorates with its most important competitor in the telephone field, the L. M. Ericsson Telephone Company, a large Swedish concern which operates eight telephone companies in Argentina, Mexico, Italy, Turkey and Poland, and maintains in continental Europe and in England sixteen manufacturing companies producing telephone, cable and other communications equipment. The relations between the General Electric Company and the Allgemeine Elektrizitäts-Gesellschaft are very intimate; they have long had agreements for the exchange of patents and experience and the division of markets, and the General Electric Company has a considerable stock interest and two directors in the German company. In France the General Electric Company controls the important Société Thomson-Houston, and in 1930 it concluded an agreement for exchange of patents and manufacturing experience with the British Associated Electrical Industries, Ltd. There are also patent agreements in wireless telegraphy between French and German companies and the Radio Corporation of America, in which the General Electric and the Westinghouse companies have substantial interests. A minor group is composed of Brown, Boveri and Company of Switzerland, with subsidiaries and affiliated companies in thirteen European countries, Argentina and the United States. The British electrical manufacturing enterprises constitute an independent group offering competition in the world markets

and resisting penetration by American capital.

In the foreign as well as the domestic field the

In the foreign as well as the domestic field the future of the electric manufacturing industry is dependent upon a steady opening up of new markets and expansion of old. New generating and distributive plants must be built in hitherto undeveloped localities, railroads electrified, telephone and telegraph equipment made increasingly automatic, manufacturing and household equipment of various types better adapted to the use of electric energy, radio broadcasting and talking pictures popularized in new markets, if the industry is to utilize its existing capacity and grow at a normal rate. In a very real sense therefore the future fortunes of the electrical manufacturing industry will be determined by the progress of scientific research and of invention directed and financed by the industry as well as by the rate of general industrial and economic development.

Kurt Neu

See: ELECTRIC POWER; PUBLIC UTILITIES; TELEPHONE AND TELEGRAPH; RADIO; MOTION PICTURES; RAIL-ROADS; MACHINES AND TOOLS; INVENTION; COMBINATIONS, INDUSTRIAL; CARTELS; HOLDING COMPANY; TRUSTS.

Consult: Quigley, Hugh, Electrical Power and National Progress (London 1925); Clark, Victor S., History of Manufactures in the United States, 3 vols. (New York 1929); Gras, N. S. B., Industrial Evolution (Cambridge, Mass. 1930) ch. xiii; Young, O. D., "The Electric Industry" in A Century of Industrial Progress, ed. by F. W. Wile (New York 1928) ch. xxii; Prout, H. G., A Life of George Westinghouse (New York 1922); Dyer, F. L., and Martin, J. C., Edison, His Life and Inventions (new ed. New York 1929); Broderick, J. T., Forty Years with the General Electric (Albany 1929); United States, Federal Trade Commission, Electric Power Industry, 2 vols. (1928) vol. ii; Meyer, M. D., "Study of the Works Council of the General Electric" in Journal of the Electrical Workers and Operators, vol. xxviii (1929) 116-19, 174-75, 218-21; British Electrical and Allied Manufacturers' Association, The Electrical Industry of Great Britain (London 1929); Great Britain, Committee on Industry and Trade, Survey of Industries, 4 vols. (London 1928) vol. iv; Eissfeldt, G., Die Kartellierung der deutschen Elektroindustrie (Berlin 1928); National Industrial Conference Board, Rationalization of German Industry (New York 1931) ch. v; Zentralverband der deutschen elektrotechnischen Industrie, Statistischer Bericht (Berlin 1930); Ehrenberg, Richard, Die Unternehmungen der Brüder Siemens (Jena 1906); Brinkmeyer, H., Die Rathenaus (Berlin 1922); International Labour Office, Studies and Reports, ser. A, no. 33 (Geneva 1930) ch. i; British Electrical and Allied Manufacturers' Association, The Electrical Industry in France (London 1925); League of Nations, Economic and Financial Section, Electrical Industry, C. E. I. 16, 1927 11. 7 (Geneva 1927); British Electrical and Allied Manufacturers' Association, Combines and Trusts in the Electrical Industry (London 1927).

ELGIN, EIGHTH EARL OF, JAMES BRUCE (1811-63), British imperial statesman. After a successful governorship in Jamaica from 1842 to 1846 Elgin became governor general of Canada in 1847. Earl Grey, the new colonial secretary, set him the task of fully establishing Lord Durham's conception of responsible government. Elgin's success placed Canada securely in the path of self-government. Through a severe financial depression, in the face of bitter accusations that he was sacrificing British interests and confronted by outbursts of physical violence he patiently maintained the new role of the impartial governor, willing to establish any party in power if it could control a parliamentary majority. He made it clear that the ultimate decisions rested with his ministers but he guided them constantly by his advice and educated them in the practise of British cabinet government. He also aided Canada economically. After Canada's preferential treatment in Great Britain had been destroyed by the British adoption of free trade, he succeeded in 1854 in establishing a reciprocity treaty with the United States which restored prosperity. He returned to England at the close of that year. Sent to China on a special mission in 1857, Elgin secured by a balanced admixture of diplomacy and force the Treaty of Tientsin of 1858, which provided for commercial privileges for British merchants, protection for missionaries and a resident British minister at Peking. He also secured concessions from Japan by the Treaty of Yeddo. A year before his death he was made viceroy of India. Cool, practical, objective, with balanced sympathies, Elgin possessed an ardent enthusiasm for the strength and solidarity of the British Empire and the welfare of its people.

CHESTER W. NEW

Consult: Letters and Journals of James, Eighth Earl of Elgin, ed. by T. Walrond (London 1872); Wrong, G. M., The Earl of Elgin (London 1905); Kennedy, W. P. M., Lord Elgin (London 1926); Morison, J. L., The Eighth Earl of Elgin (London 1928).

ELIOT, CHARLES WILLIAM (1834–1926), American educator. Eliot, who was born in Boston and educated at the Boston Latin School and Harvard College, began his career as a teacher of mathematics and chemistry. In 1869 he was elected president of Harvard, and in this position, which he held for forty years, he not only transformed the university but exercised a vast influence over the whole field of American education. The most conspicuous change which he introduced into Harvard College was the

elective system, an application of his fundamental principle of the importance of freedom in the development of the individual and society.

The professional schools of Harvard were in a lamentable condition in 1869 and Eliot proceeded at once to regenerate them. The Medical School was put on a new basis by raising requirements for admission, lengthening the period of training, making the courses sequential, introducing written examinations and providing clinical and laboratory opportunities. The Law School was revolutionized by the appointment of C. C. Langdell as dean and the introduction of the case system of studying law. The standards of the Divinity School were similarly raised, and a Graduate School of Arts and Sciences and later one of Business Administration were founded. He changed Harvard from a limited provincial college with two or three weak professional schools into a great modern university, and his policies were widely imitated. The question of standards for admission led him to deal with the curriculum of the secondary schools, and he did much to raise their standards.

Ile took a deep interest in public affairs and during the latter part of his career, especially after his resignation as president, exercised a wide influence on public opinion. He was an enthusiast for civil service reform, an opponent of protection, a supporter of the foreign policies of Woodrow Wilson, a believer in the League of Nations. When he was seventy-seven he made a tour round the world on behalf of the Carnegie Endowment for International Peace. In questions of capital and labor he believed in collective bargaining but opposed the closed shop, and was much interested in schemes of profit sharing. In religion he was a liberal Unitarian and in his social relations thoroughly democratic.

W. A. Neilson

Consult: James, Henry, Charles W. Eliot, 2 vols. (Boston 1930), the official biography, containing bibliography of Eliot's writings. Representative selections from his works are A Late Harvest, ed. by M. A. DeW. Howe (Boston 1924), and Charles W. Eliot, The Man and His Beliefs, ed. by W. A. Neilson, 2 vols. (New York 1926).

ELIOT, GEORGE (Mary Ann Evans) (1819-80), English novelist. She was from early youth an insatiable reader, supplementing her ordinary schooling by private lessons and hard study at home. Her translation (3 vols., London 1846) of David Strauss' Das Leben Jesu was her first literary work and the first expression of her lifelong preoccupation with religion and moral

philosophy. Her unconventional union in 1854 with George Henry Lewes, who because of the English divorce law of the time was unable to free himself legally from his unsuccessful marriage, was the chief event of her later life and an episode of the century. To one of her conscientious nature the strain of her position was extremely severe, but in Lewes she found the compensation of an acute intelligence and a generous encouragement which aided her career at every point.

George Eliot's creative writing was not begun until she was thirty-seven, two years after her alliance with Lewes. Her success as a novelist was instantaneous and second only to that of Dickens in the England and America of that day. Her books interpreted with delicate sensitivity the lives and emotions of a representative section of rural England, familiar to her from her childhood. Through them all runs the undercurrent of her profound belief in man's responsibility to a moral law higher than any represented by orthodox dogmatism. Her father, although a churchman, had sent her to nonconformist schools, and the trends there initiated had later been confirmed by the influence of Charles Bray, a freethinking writer and neighbor, and by her wide reading and friendships, through which she kept in close touch with the most advanced thought of the time.

Living her sequestered life she was aware of the rising woman movement without being fully in touch with it. Her contribution to the movement was her own life rather than anything she thought or said about it. She was baffled by the problem of combining domestic life with creative activities, but although in theory she deemed the problem insoluble she solved it in practise, for she was both a housewife and a professional worker from her sixteenth year. Her vindication of an unconventional union was a similar practical triumph of personality. That she was unaware to the end of her life of what she had accomplished does not detract from the final estimate of it.

KATHARINE ANTHONY

Important works: Scenes of Clerical Life (first published in Blackwood's Magazine, 1857); Adam Bede, 3 vols. (Edinburgh 1859); The Mill on the Floss, 3 vols. (Edinburgh 1860); Silas Marner (Edinburgh 1861); Romola (first published in Cornhill Magazine, 1862-63); Felix Holt, 3 vols. (Edinburgh 1866); Middlemarch, 4 vols. (Edinburgh 1871-72); Daniel Deronda, 4 vols. (Edinburgh 1876); Essays and Leaves from a Note-book, ed. by C. L. Lewes (Edinburgh 1884).

Consult: George Eliot's Life as Related in Her Letters

and Journals, ed. by J. W. Cross, 3 vols. (Edinburgh 1885); Deakin, M. H., The Early Life of George Eliot, University of Manchester, English series, no. iv (Manchester 1913); Stephen, Leslie, George Eliot (London 1902); Haldane, E. S., George Eliot and Her Times (London 1927); May, J. L., George Eliot (London 1930); Pond, E. J., Les idées morales et religieuses de George Eliot (Paris 1927).

ELIOT, SIR JOHN (1592-1632), English parliamentarian and political thinker. Eliot was a member of the House of Commons in the Parliaments of 1614, 1624, 1626 and 1628-29. At first loyal to the government, he quarreled with the favorite Buckingham's incompetent management of affairs in 1626 and to assert Parliament's right to determine ministerial responsibility demanded his impeachment. He was active in promoting the Petition of Right in 1628. After Buckingham's death Eliot gave the powerful support of his eloquence to the Commons' claim to grant or withhold customs revenue and to criticize innovations in religion. He was the hero of the tumultuous scene of the adjournment in March, 1629, when the speaker was held down while Eliot's three resolutions on religion and taxation were put to the House. Two days later he was imprisoned for the fourth time; and since he refused on the ground of a member's privilege to admit the right of the courts to question his conduct in Parliament he was sent back to the Tower, where three years later he dicd.

Eliot's views as a political theorist are not always free from obscurity. He is a much fiercer advocate of popular liberties, which he associates closely with parliamentary privileges, in the spoken than in the written word. If the thoughts committed to paper during his last imprisonment represent his mature opinions, it is doubtful whether or not he realized the revolutionary path along which the example of his public acts and martyr's death would carry the opposition. The state exists, he writes, for the benefit of the people. Its prince is bound in conscience by virtue of his office to promote the public utility and good, to dispense justice impartially, to provide well considered laws. Legislation, which must be reduced to the minimum in order to retain the utmost liberty for the subject, is enacted by the ruler on the advice of his counselors, viz. Parliament. Eliot does not concern himself with the principle of popular representation. His ruler, a powerful magistrate laboriously defined by reference to the writers of antiquity and the sixteenth century controversialists, retains full sovereignty. There is no contract between him and his people which can be conceived of as nullified should he break his oath. The powers of the monarch are in fact sanctioned by the laws of God and of nature.

A. V. JUDGES

Works: The Monarchie of Man, ed. by A. B. Grosart, 2 vols. (London 1879); An Apology for Socrates, and Negotium posterorum, ed. by A. B. Grosart, 2 vols. (London 1881); De jure maiestatis, and the Letter-Book of Sir John Eliot, ed. by A. B. Grosart, 2 vols. (London 1882).

Consult: Forster, J., Sir John Eliot, 2 vols. (2nd ed. London 1872); Gardiner, S. R., History of England, 1603-42, 10 vols. (new ed. London 1893-95) vols. v-vii.

ELIZABETH (1533-1603), queen of England. A writer of the generation after Queen Elizabeth said of her, "For her own mind, what that really was I must leave, as a thing doubly inscrutable, both as she was a woman and a queen." Yet the reign of Elizabeth is to be explained only by a comprehension of this double personality and of its reaction to the problems presented to her. As a woman Elizabeth possessed physical vigor, mental alertness and courage and at the same time personal vanity, niggardliness and, most marked of all, a difficulty in reaching decisions. These inherited characteristics were but little changed by her childhood surroundings, her early training in caution and fifty years of court life. Her emotional experience was narrow, since for most of her life she had neither lover, husband, father, mother, child, brother nor sister. Most if not all of her so-called love episodes were only distant approaches or political negotiations. Her mental powers were mediocre notwithstanding her excellent education and a certain quickness of apprehension, and she was without originality or ambition.

As a queen she inherited the almost despotic position of the Tudor monarchs and shared their devotion to their royal duties as well as their attachment to their subjects. In the course of her long reign with its crowding problems she became to a large extent politically minded. In governmental affairs her attitude was almost entirely negative. She made no effort to initiate policy or volunteer action. She always awaited the impact of events or the advice of her ministers and even then was little impressed by the former or influenced by the latter.

The larger questions of Elizabeth's reign were in internal affairs the coinage and financial

policy, enclosures, the national food supply, pauperism, religion, trade and the fortunes of individual persons; in external affairs her marriage, her rivalry with Mary Queen of Scots, colonization, piracy and relations with Spain, France, the Netherlands, Scotland and Ireland and the more distant countries with which England was brought into contact by the activities of its merchants. With most of these questions the queen had little to do except to approve or sometimes to disarrange the efforts of her ministers; but with the last group, foreign relations proper, she was necessarily closely concerned. Her policy in these matters was mainly one of procrastination, partly perhaps from deliberate choice but mainly from congenital indecision—a characteristic which probably explains also her avoidance of marriage. She had, however, a real desire to avoid war and to spare the expenditure of money for public purposes. She extended some help to the Protestant party in France and the Netherlands and gave continuous but grossly inadequate support to her forces engaged in the reconquest of Ireland.

In the last eighteen years of her reign she was drawn into a desultory war with Spain, of which the defeat of the Invincible Armada was a striking but by no means a typical episode. During this war and indeed during her whole reign her policy of postponement was often justified by results. Under the circumstances of the time the problems often settled themselves by delay. The reign of Elizabeth was a great period in English history. This was due in the main to the vigor and gifts of the people and to the important world events in progress; in a minor degree to the fulfilment by the queen of the high demands of her position.

E. P. CHEYNEY

Consult: Froude, J. A., History of England from the Fall of Wolsey to the Death of Elizabeth, 6 vols. (new ed. London 1893); Cheyney, E. P., A History of England from the Defeat of the Armada to the Death of Elizabeth, 2 vols. (New York 1914-26); Creighton, Mandell, Queen Elizabeth (new ed. New York 1920); Marcks, Erich, Königin Elisabeth von England und ihre Zeit, Monographien zur Weltgeschichte, vol. ii (Bielefeld 1897); Read, Conyers, "Good Queen Bess" in American Historical Review, vol. xxxi (1925-26) 647-61; Innes, A. D., England under the Tudors (9th ed., London 1929).

ELLESMERE, BARON, THOMAS EGERTON (1540–1617), English chancellor. Ellesmere held the Great Seal either as lord keeper or as lord chancellor for twenty-one years from 1596 to 1617. He thus served both Elizabeth and James

I, enjoying the confidence and favor of both. Ellesmere, like Bacon, held an exalted idea of the prerogative, and took a leading part in organizing the staff and procedure of the Court of Star Chamber and in constituting it a regular and settled tribunal. But Ellesmere's chancellorship is chiefly notable by reason of the settlement of the long standing dispute between the Court of Chancery and the courts of common law which had its beginnings at the close of the fifteenth century.

Almost from the earliest period the common law courts had prevented encroachments upon their jurisdiction by restraining suitors in other courts by the use of writs of prohibition. With the growth of the equitable jurisdiction of the Chancery it became clear that the chancellor would be unable to modify the law on equitable principles unless he could exercise a similar power by means of the injunction, which therefore he used increasingly. With the ever expanding jurisdiction of the Chancery in the sixteenth century the resulting conflict between the two sets of courts became more and more acute. It had moreover a marked political character and gradually merged in the constitutional struggle between crown and Parliament. The common law courts, which from the beginning had been in close alliance with Parliament, had become more and more independent of the crown, while the Chancery as an offshoot from the King's Council continued to be identified in large measure with the exercise of royal prerogative. The two protagonists who stood face to face in this arena of jurisdictional combat were Coke, the representative of common law, and Ellesmere, the representative of equity. The whole matter, which, in Lord Campbell's words, had "produced an explosion which shook Westminster Hall to its centre," was referred to King James himself, who settled the long controversy in favor of the Chancery. Although it lingered on, largely as an academic question, through the seventeenth century, all attempts to reverse the decision by the statute of a Parliament victorious over the king proved unavailing.

There is no doubt that James, inspired as he was by ideas of absolutism, found it both easy and pleasant to decide in favor of the Chancery and thus to maintain his theory that he was himself the supreme arbiter in disputes between his judges. At the same time it is evident from the arguments of Lord Ellesmere in *The Earl of Oxford's Case* [1, Reports in Chancery (1615)] with respect to the jurisdiction of the Chancery,

and not less from the case which he presented to the king in favor of the Chancery's contention, that the lord chancellor although he held high prerogative views based his position, in opposition to Coke's claim that the common law judges were "the superintendents of the realm," far more upon the established practise of the Chancery and the nature of substantive and procedural equity than upon absolutist ideas of royal power.

Chiefly because of his vindication of the powers of Chancery Lord Ellesmere's chancellorship is a landmark in the history of equity. In essence the king's decision established equity as an independent system free from the control of the common law courts. The equity administered by Lord Ellesmere was practically of the same nature as the equity described in Doctor and Student; and yet it can be seen from The Earl of Oxford's Case that the influence of the lawyer chancellors, as opposed to the earlier chancellors who were ecclesiastics and canonists, had already made itself felt. Although the process of reducing the rules and principles of equity to a system had not proceeded far at the time of Ellesmere's relinquishment of the Great Seal, his victory was consolidated by Bacon, his immediate successor.

H. D. HAZELTINE

Consult: Foss, Edward, The Judges of England, 9 vols. (London 1848-64) vol. vi, p. 136-52; Campbell, J. C., Lives of the Lord Chancellors and Keepers of the Great Seal of England, 10 vols. (new ed. London 1874-75) vol. ii, chs. xlvii-l; Holdsworth, W. S., A History of English Law, 9 vols. (3rd ed. London 1922-26) vols. i, v.

ELLSWORTH, OLIVER (1745-1807), American judge and statesman. Ellsworth's early years were spent in the practise of law in his native state of Connecticut. After a short local political career, from 1778 to 1783 he was a member of the Continental Congress. With an intrinsic states' rights point of view, he had, however, no fear of properly circumscribed national authority. He was a member of the Committee on Appeals of the Continental Congress, the first national judicial body. It had appellate jurisdiction in prize cases and during Ellsworth's term of service dramatically demonstrated its inability to enforce its decrees against state opposition. This need for effective jurisdiction in admiralty and prize causes was a large factor leading to the demand for national judicial tribunals with independent powers. After a short but important service as state judge in

the formative period of American common law Ellsworth represented Connecticut at the federal constitutional convention of 1787. As a member of the significant Committee of Detail he had a large though obscure part in the drafting of the constitution. In the first Congress he became chairman of the Senate Judiciary Committee that reported the bill organizing the federal judiciary. In 1796 he became chief justice of the United States, serving nearly four years, until ill health forced his retirement. While chief justice he was sent abroad and negotiated the commercial convention of 1800 with France.

Ellsworth's impress on American life is due primarily to his work as author and sponsor of the Judiciary Act of 1789. The chief contest upon that act revolved about the establishment of inferior federal courts; the alternative was to leave the federal jurisdiction to the state courts in first instance. By pressing for the creation of separate federal courts with a responsible grant of jurisdiction, including a right to remove federal cases from the state courts, and by providing for review by the Supreme Court over state courts in constitutional cases Ellsworth laid down the main structural lines for the creation of the existing federal judicial system. Important modifications in other provisions of the act have been relatively few and have fulfilled rather than reversed the course of development there begun. In its basic outline and indeed in much of its careful phraseology the act of 1789 still governs the area of the exercise of federal judicial power.

J. M. LANDIS

Consult: Brown, W. G., The Life of Oliver Ellsworth (New York 1905); Warren, C., "New Light on the History of the Federal Judiciary Act of 1789" in Harvard Law Review, vol. xxxvii (1923-24) 49-132; The Journal of William Maclay, ed. by E. S. Maclay (New York 1890); Frankfurter, F., and Landis, J. M., The Business of the Supreme Court (New York 1927).

ELM, ADOLF VON (1857–1916), German labor leader. Von Elm was a cigar sorter by occupation and began his trade union career as business manager of the Hamburg cigar sorters' union in 1883 upon his return from a four-year stay in the United States, during which he had become convinced of the importance to the working class of "cooperative self-help." Thereafter, as the only person who held important posts in all three branches of the movement, the trade union, the cooperative and the political, von Elm was a significant influence. In 1891 he

became business manager of the Hamburg tobacco workers' producers' cooperative, which was functioning successfully when in 1909 it was absorbed by the consumers' wholesale society of Hamburg. Von Elm was one of the first working class leaders to recognize the potentialities of consumers' cooperation as a weapon in the hands of the working class. He was one of the founders in 1899 of the Hamburg consumers' society, Produktion, which under his leadership became the model for consumers' societies in Germany; he also served as chairman of the committee for the central union of consumers' societies and in 1912 instituted and directed a cooperative insurance society as a joint enterprise of the trade union and cooperative movements. He was a member of the Generalkommission, the highest tribunal of the German trade unions, substituting at times for its head, Legien. Von Elm himself served as Social Democratic member of the Reichstag from 1894 until 1906. As a revisionist he stressed the participation of the working class in all measures for the reconstruction of the social order. In his various official capacities and as a contributor to socialist and other working class periodicals he stressed the necessity of a militant labor policy. As early as 1892 he insisted on the importance of strong trade union strike and unemployment benefit funds and of cooperation both for consumption and for production as the necessary bases for that economic strengthening of organized labor upon which its political and industrial power must depend.

THEODOR CASSAU

Consult: Sozialistische Monatshefte, vol. xxii (1916) 1055, 1058-60, 1065-67, 1068-69.

ELPHINSTONE, MOUNTSTUART (1779-1859), Anglo-Indian administrator and historian. Elphinstone went to Bengal in 1796 in the East India Company's service. He was soon employed in diplomatic work and served as resident at Poona at a most critical period in British relations with the peshwa, or head of the Maratha confederacy. After 1818 Elphinstone was placed in charge of the political and administrative organization of the annexed territory. He showed himself wisely eager to maintain the traditional mode of administration as far as that was compatible with western ideals, preserving the dignity of local chiefs and encouraging the indigenous system of education. From 1819 to 1827 he was governor of Bombay. The outstanding features of his government were the enact-

ment of a code of law and the promotion of popular education. Through his efforts a systematic investigation of the native customs and usages was begun and all the Bombay regulations were revised and organized into a code. Its section on criminal law prevailed until the introduction of the criminal code. Elphinstone constantly urged upon the government the necessity of educating the natives, so that they should become qualified to hold increasingly responsible positions in the administrative system. Without such an arrangement, he felt, the native population would remain hopelessly degraded. He believed, moreover, that whatever policy England pursued she would probably lose India ultimately. He respected Hindu learning and insisted that it should not be neglected under British rule.

In 1815 he published An Account of the Kingdom of Caubul (rev. ed., 2 vols., London 1839) based on the knowledge he had gathered in the course of a mission to Peshawar in 1809. In 1841 his two-volume History of India appeared (5th ed., 2 vols., London 1866). It was memorable as the first serious attempt to reconstruct the history of Hindu and Moslem India as a whole. The Hindu section has long been superseded by the discoveries of archaeologists, but the Moslem section is still worth reading for the acute judgment of individuals.

H. H. DODWELL

Consult: Selections from the Minutes and Other Official Writings of M. Elphinstone, ed. by G. W. Forrest (London 1884); Colebrooke, T. E., Life of the Honourable M. Elphinstone, 2 vols. (London 1884); Cotton, J. S., Mountstuart Elphinstone (Oxford 1892).

EMANCIPATION is a concept embracing the means by which submerged groups or individuals become divested of some of their disabilities. While the phenomena of emancipation are as old as human enslavement and as varied as the political techniques for exploiting the labor of others, it has been historically notable with respect to slavery and serfdom.

The most widespread forms of emancipation have been individual. In classic Greece and Rome manumission was a normal episode in the institution of slavery. It took place publicly according to prescribed forms as the voluntary act of the owner. Aristotle advised it as a prospective reward for diligence. The commercial pursuits entrusted to slaves in the last century of the Roman Republic provided means by which large numbers compensated for their manumission. Others were set free from vanity, to insure a

following of clients when a senator walked abroad or a splendid funeral at his death. Augustus sought to check an epidemic of emancipation that was turning Rome into a city of freedmen. But as slavery became steadily less advantageous economically, ethical teachers, stoic and Christian, praised manumission as a creditable gesture, while protective legislation facilitated the assimilation of agricultural slaves to the status of coloni. Manumission did not confer citizenship in the ancient world. The freedman became a kind of client with hereditary personal and economic ties to a patron. Freedmen, however, rose to great power in administrative capacities under the Roman Empire. Their status was improved both through social pressure and by imperial decree, and the last of their disabilities were removed by Justinian.

Individual manumission similarly accompanied the plantation slavery of modern times in the Americas. In the Spanish colonies before the nineteenth century it was inculcated as a pious duty; a "protector" furnished facilities for redemption at a fair price, and legal presumptions ran in favor of freedom for claimants who could get the magistrate's ear. In the French, Portuguese, English and Dutch colonies the facilities for manumission were fewer; the more capitalistic the colony, the less the chance of redemption. But manumission by favor or redemption has been everywhere a constant incident of slavery and has been attended by a relatively rapid psychological and economic adjustment of the freedmen.

The emancipation of mediaeval serfs took place also to a great extent through innumerable acts of individual manumission extending over centuries, which commenced almost as early as the recognition of villeinage as a servile status. Collective emancipation conferred at one time upon the servile inhabitants of an entire village or town became notable in twelfth and thirteenth century France and Belgium. In some cases a charter of liberties was wrested from a reluctant lord by an insurrectionary commune. More frequently the grant was secured as the result of a bargain involving stipulated payments, sometimes encouraged by a royal or ecclesiastical overlord. Whether it came as a collective or individual event mediaeval emancipation was partly a recognition of the increased social and economic effectiveness of the peasants, of which population mobility was a striking symptom. And it was partly an adaptation to the rising standards of living of the barons.

There was, however, great regional diversity in the circumstances of the personal emancipation of the serf. In France personal enfranchisement preceded by centuries the complete abrogation of servile tenures. The disabilities removed were especially the lord's right of arbitrary exaction and his control of marriage and inheritance. In England, on the other hand, commutation of services and tenures largely preceded manumission; servitude in many instances simply fell into abeyance or was lost in migrations, while the common law made a presumption of freedom. In the Scottish lowlands servile status was canceled without the villein procuring tenure. In the northwest part of Europe he became a peasant proprietor; in the southern part métayage was the rule. In all regions a minority of the emancipated serfs were able to exploit their freedom to considerable economic advantage, and their activity was an essential factor in the onset of modern economic life. The material benefits to the larger number were less decisive.

Emancipation since the temporary abolition of French colonial slavery in 1794 has been characteristically a collective act, applied simultaneously to large administrative units by a public authority frequently exterior to the social situation involved. The emancipation of the southern Negro is comparable to abolition in the European colonies in that it was sudden, largely unprepared and involuntary. The nineteenth century elimination of servile tenures in central and eastern Europe is analogous. The explanation of this new aspect of emancipation movements is the rise of a public opinion increasingly hostile to legal servitude. This opinion, which modern governments have sought by emancipation decrees to enlist on their behalf in divers political emergencies, such as war and revolution, is entirely modern.

The decline of ancient slavery and mediaeval serfdom concerned only those directly involved. It was not a matter for general public opinion. The stoic and early Christian teachers, who advocated ideas of liberty and humanity, did not inculcate manumission as a duty, for the slave was free in his soul or in the city of God, especially if he did not repine. The eighteenth century first brought currents of opinion widely hostile to servitude. Reason portrayed it as a denial of natural liberty. Sensibility grieved at the wrongs of the oppressed. Economists argued the superior productivity of free labor. Adherents of natural religion joined the Quakers in judging slavery in the light of brotherly love.

Utility drew many tendencies into a rational synthesis, crowning benevolence as chief of the virtues and the good of the greatest number as the goal of legislative effort.

The rising bourgeois classes found the implications of these ideas more congenial as applied to the remnants of serfdom than to colonial slavery, which had brought much mobile wealth. But the opportunities for exploiting free labor by means of the machine gradually rendered them bitter opponents of what they came to view as a rival economic system. Abolition seemed a specially grateful means for demonstrating their political power. Thus emancipation of the slaves came to be linked up with the bourgeois cause of civil and political liberties, and the rise of political democracy meant increasingly vigorous action against slavery.

This mingling of essentially different social processes worked some confusion of attitude. On the one hand, proponents of suffrage extension-and even of national or colonial independence-sought to effect a beneficial transfer of attitudes hostile to slavery by terming their object an "emancipation." At the same time there was a disposition to view the complex problem of social elevation in terms of a mere grant of civil and political rights. This view was entirely congruent with nineteenth century ideas as to the restricted functions of government and to the political aptitude of individuals which was postulated by democratic theory. It proved to be not wholly without justification. For in countries like Cuba, Porto Rico and Brazil, where freedmen were already numerous as the result of redemption and where race friction was slight, the social shock of collective emancipation was minimized. The freedmen were absorbed without serious social or economic disability into the social structure and demonstrated as much political aptitude as other underprivileged classes.

Precisely because of the close identification of the clamor for emancipation with the attitudes of the enterprising classes the psychical and material interests of the submerged were not always clearly envisaged. In central and eastern Europe the emancipation of serfs frequently reflected a desire to gratify the bourgeois spirit, foreign and domestic, without disturbing autocracy. The serf was deprived of much of his holding and set up as individual or collective proprietor of the rest, burdened with debt and unfitted to assume the risks of enterprise. A minority of the peasants were adapted readily to

techniques of petty capitalism. Others fell victims to the money lender. Large estates, new landlord classes and a landless proletariat seeking wages in country and town were consequences of the emancipation which have been assailed in post-war reconstruction.

The experience of the United States with the abolition of Negro slavery was complicated by the attempt to treat the South as conquered territory after the Civil War and to reorganize its political life in the hands of freedmen under the tutelage of adventurers agreeable to a northern clique. Effective political disfranchisement of the Negro followed the collapse of these endeavors, which accomplished chiefly the establishment of the principle of public support for Negro education. With the rise to power of "poor white" demagoguery in alliance with mercantile capitalism, exploiting race antagonism, the Negro was exposed to social and economic handicaps which materially limited the benefits of civil emancipation. Under such circumstances the survival of master-servant relations in many parts of the South served to modify more humanely the effects of an emancipation which was unaccompanied by economic safeguards or preparatory training.

The spirit of emancipation has more recently followed the shifting emphasis of democratic aspiration from political to social and economic objectives. It strikes fresh alliances, here with the ideal of a population buttressed economically by the universal possession of private property, there with movements toward collectivist ideals: now with agrarian programs of land distribution, again with the strivings of industrial proletariats for some measure of control over the conditions of their employment. In inheriting sentiments formed with reference to slavery and serfdom these varied movements of social emancipation recognize that servitude is not a matter of legal disabilities alone. The master-servant relationship is deeply embedded in social habit and is supported by at least some material interest. Attitudes of dominance and subordination answer to basic human urges. Most people learn social and economic responsibility with difficulty, even when it is expected of them. Contemporary efforts to work social redemption of submerged groups wisely emphasize educational techniques and do not neglect the problems of individual adjustment. Legislative measures designed to further social emancipation can succeed only if they effectively encourage or are preceded by readjustments in attitudes and relationships which broaden the chances for vertical social mobility.

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See: Status; Equality; Slavery; Serfdom; Slave Trade; Peonage; Forced Labor; Abolition; Negro Problem; Agrarian Movements; Black Death; Humanitarianism; Democracy; Suffrage; Jewish Emancipation; Catholic Emancipation; Feminism; Civil Liberties; Social Discrimination.

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EMBARGO, a Spanish word, was originally applied to the prohibition of the departure of ships from the ports of a country; it is used in that sense in the American Embargo Act of December 22, 1807. More recently, however, the term has come to be used rather loosely for various prohibitions on otherwise legal trade and shipping. During the World War its meaning and scope were extended so that it approximated blockade. A distinction may be made between civil and international embargoes, the former applying only to the ships of the country levying the embargo, the latter to those of other countries as well. But civil embargoes may have international consequences, as in the case of the American embargoes, while embargoes on foreign ships may fall within the police power of the levying state, as in the case of the arrêt de prince.

International embargoes in the narrow sense have tended to decline considerably in impor-

tance. The arrêt de prince, intended to prevent the spread of information about events in the country levying the embargo, has become obsolete with the development of new means of communication. Largely for the same reason the old practise of embargoing the ships of another country in reprisal and as a means of obtaining redress for some injury committed by that country has largely been abandoned. Ships so seized were released if indemnification was forthcoming; if war followed, they were confiscated as prizes. The related practise of embargoing foreign ships in anticipation of the outbreak of war has been condemned by the Second Hague Conference. Many treaties have been signed which assure alien property a certain period of time in which to leave after the outbreak of war. The right of angary, however, or the right to embargo neutral ships in time of war and compel them to transport arms and munitions, was strongly reasserted during the World War. The decline in the use of these types of embargo is probably largely responsible for the application of the term in international relations to broader types of trade restrictions. The economic sanctions provided in article 16 of the Covenant of the League of Nations may be taken as typical of the broader meaning of embargo in international relations. The article prohibits all intercourse between League members and the covenant breaking state and provides for an attempt to isolate that state completely from all other states.

A civil embargo may be levied for internal reasons alone. The king of England could levy an embargo for a period of three weeks where the good of the public justified such action. In 1766 the departure of ships bearing corn was prohibited; compensation was subsequently accorded the owners of the ships. A similar measure was taken by England in 1926, when ships bearing coal were embargoed on the outbreak of the coal stoppage in May, 1926. During the World War many neutrals forbade the export of certain commodities in order to prevent the depletion of their supply; similar action by belligerents was impelled partly by this reason, partly by a desire to prevent the commodities from falling into the hands of the enemy. In order to prevent this export was forbidden not only to enemy countries but to neutral countries whence they might be reshipped to enemy countries.

Civil embargoes may also be governed by other reasons of international policy. The embargo may be used for defensive purposes, to avoid the

complications arising for a neutral country from attempts by its nationals to carry on trade in war time. The embargo levied by the United States in 1807 was partly intended to prevent the capture of American ships by the British and the French. Some of the neutrals in the World War made similar attempts on a much smaller scale. But the American embargo also represented the only type of offensive policy which appealed to the peace loving Jefferson and was possible for a nation weak in naval equipment. Coupled with the view of Jefferson and the agricultural sections of the country that commerce was unnecessary and undesirable was the hope that suspension of trade might be so keenly felt by the belligerents that they would modify their policy toward neutral vessels. The embargo on grain had been used against Spain by France in the sixteenth century to bolster its weak army; and the threat of an embargo on the export of wheat through the Dardanelles was skilfully used by the Turkish Empire against sixteenth century Venice, with whose naval strength Turkey could not compete. But as an offensive weapon the American embargo was a failure; while it had repercussions upon English trade, it injured New England commerce almost irreparably.

A more or less permanent embargo on particular commodities may be used as a preventive of war, revolution or other undesirable international phenomena. To this type belongs the law empowering the president of the United States to prohibit the export of arms or munitions of war to American countries where conditions of domestic violence exist. First passed in 1912 as a result of the revolutionary disturbances in Mexico, the law was immediately applied to that country by President Taft. In 1922 it was extended by statute to countries with which the United States had treaties of exterritoriality primarily China. The discretionary power given to the president under the law has sometimes been used to discriminate in favor of the established authorities and against the rebels. Proposals have been made to implement the Kellogg Peace Pact by similar provisions for embargoes on munitions of war.

The enforceability of an embargo clearly depends upon such conditions as the character of the commodities principally concerned, the configuration of coast lines, and the forces at the disposal of the country imposing it. In earlier times measures of repression were mostly not observed; both the preponderance in international trade of goods of high value but small bulk and

the weakness and corruptibility of state administration made for that result. The American measures from 1807 to 1811 are examples. In contrast with this stands the virtual isolation of the Central Powers in the World War. A remarkable modern instance of the efficiency of governmental action in this field is the possibility of preventing exports of coin and bullion; the impossibility of enforcing such a measure was considered almost axiomatic in mercantilist times.

Joseph J. Senturia

See: MERCANTILISM; ANGARY; BLOCKADE; CONTINENTAL SYSTEM; ARMS AND MUNITIONS 'TRAFFIC; NEUTRALITY; BELLIGERENCY; OUTLAWRY OF WAR; LEAGUE OF NATIONS; SANCTION.

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EMERSON, RALPH WALDO (1803-82), American philosopher. Although he has been most widely read as an edifying essayist and has latterly come to be valued for his incisive and pattern breaking poetry, Emerson's chief importance is as a thinker. He was not a systematic philosopher and there is little in his metaphysics that cannot be found in Plato and Kant; yet his gnomic wisdoms do sum up to a philosophy and his atomistic utterances cohere somehow into a well defined point of view. While he believed with the transcendentalists in the existence of innate ideas that do not result from but transcend experience, he avoided entangling alliances with the transcendentalist movement as he did also with Unitarianism, Fourierism, perfectionism, abolitionism and all the millennial and humanitarian programs that shot up luxuriantly in the suppressed and crotchety atmosphere of New England society. He wanted freer air to breathe than he could find in any sect, creed, cult or movement. For all his pride in being rooted in his provincial soil, he was more truly a citizen of the world than of Massachusetts. His intellectual coming of age dates from his first trip to Europe, where his exposure to

the thought of Goethe, Carlyle, Coleridge, Wordsworth and Landor vitalized into a Gestalt strands of influence deriving from sources so diverse as Platonism, Protestantism, romanticism, Swedenborgian mysticism, the sacred books of the East and homely Yankee observation. The resulting configuration became, on his return to Concord, a sharp cunciform instrument for valuations which he impressed on the soft clay of contemporary American life.

With a godlike aplomb Emerson set himself to rethink his world afresh; with an almost flagellant anxiety he lay in ambush for his materials, surprising every stray perception and intuition, setting them down in his journals and hammering out of them finally his completed lectures and essays. He became the center of an intellectual renaissance in New England. Displaying a characteristic sanity he sought the sources of new energy within the same confines of American life where he found exhausted traditions and sinister growths. It is that which accounts for the dual aspect of his thought as a criticism of his times and an exploration of the new America. He denounced the spiritual barrenness of American life, its growing materialism and acquisitiveness, the narrowness of sect and party, the deadening effect of institutions, the clinging to European traditions and the obedience to the voice of authority. While he lacked Carlyle's capacity for moral indignation—he substituted for it a peculiarly irritating oracular tone—Emerson must be ranked with him as a great ethical critic of society.

But the whole tendency of Emerson's being lay not toward criticism but toward affirmation. The most insistent note of affirmation that he sounded was an intellectual and ethical individualism-what William James summed up as "the sovereignty of the living individual." Without being aware of it, Emerson was fulfilling in his thought the deepest meaning of the Protestant Reformation—designating the individual as the unit of judgment and interpretation. From this central preoccupation lines may be drawn touching every important doctrine at the periphery of Emerson's social thought. The individual must choose his own calling, guide his own conduct, form his own opinions, construct his own religion, even fashion his own history. Nothing is important except as it is relevant to his purposes; nothing is sacred except his own mind; he can learn nothing except as he himself relives it. Standing at the conflux of time he has at his disposal the social heritage of the past and

before him a future bounded in its possibility only by his own creative imagination.

Doctrine such as this shot like lightning through the dour Calvinist atmosphere of New England; it fitted the mood of a pioneer society in the west; its easy harmonies were welcome in a country threatened by sectional struggle; there were even aspects of it that could be found to meet the needs of an emerging industrial society. In fact, it was the tragedy of Emerson's teaching that it could be turned about to serve purposes he never dreamed of and causes he would have abhorred. That conception of society as dynamic and experimental which is the most permanent and valuable element in his social thought—that at every moment society must start afresh with a clear field and no shackling traditions-was lost sight of. What was chiefly heeded was his buoyant and almost unctuous optimism. His opposition to state coercion, amounting in his own thought almost to philosophical anarchism, has gone to support laissez faire. His emphasis on the sovereignty of the individual has strengthened ballot democracy. His ethical individualism has furnished a basis for economic individualism. His doctrines of self-reliance and opportunity are excellent homilies on the prevailing virtues of a capitalist economy. The denial of the existence of evil and the principle of compensation can be used to bridge inequalities of income and social status. While Emerson was still engaged in building his doctrine the industrial revolution came to America and turned all the social consequences of his precepts topsy-turvy.

Beyond this his chief weakness as a social thinker lay in his overestimate of the role of the individual in the social process and his underestimate of the place of the institution. This vitiates, for example, whatever theory of history may be found implicit in his Representative Men. His English Traits, however, is a brilliant study in the dangerous realm of national psychology and makes a much juster estimate of the force of tradition. But throughout his thinking one feels that his world was not a society but a collection of individuals. He did not offer, nor did he envisage the need of, any mechanisms whereby individual judgments would add up to a social judgment or individual creativeness be translated into social action.

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EMIGRATION is a process by which an individual or a group voluntarily leaves one culture area for the purpose of settling elsewhere. Since it assumes the existence of a culture area with rather clearly defined boundaries out of which the migration takes place, it does not apply to such movements as those of migrating tribes who carry their culture with them. In modern times this area is commonly the national territorial state, although when persons of very limited horizon whose entire culture is located within a single valley or village move to some other place in the same political state they should more justly be considered emigrants out of valley or village than migrants within the larger unit. Emigration assumes a more or less free act of choice, in contrast with such essentially different processes as exile or enslavement, although indentured servants pressed into service and debtors or felons offered the alternatives of emigration or imprisonment are distinctly border line cases. It involves a definite process of uprooting and rerooting, not simply the temporary departure and casual contact of the traveler or trader.

Emigration has been a principal condition of western life since the sixteenth century, making possible the extension of European territorial empires and areas of cultural influence, permitting reassortment of populations in response to geographical or cultural factors and offering at least a partial solution for countless national and personal problems. Since the war of 1914–18 the

free flow of populations has been largely checked by the restrictive measures of various governments; and the world, so long accustomed to international mobility, is forced to adjust itself to a condition where such mobility has been very greatly reduced.

Emigration most commonly occurs when a condition of maladjustment arises. It is characteristically an act of escape. In very rare cases the motive may be a patriotic or missionary one, to extend an empire or propagate a faith, but the overwhelmingly dominant influence is the thwarting of an individual or group. Those who emigrate are those who are badly adjusted to the culture pattern of their home group. The successful do not emigrate. The very terms in current use attest this fact, for when persons of position make their home abroad-writers or artists in Paris, professors in foreign institutions -they do not become "emigrants"; shunning the social stigma attached to that term they call themselves instead "expatriates." Nor do the satisfied emigrate. Only those able to conceive of something more desirable than that which their own culture area offers them uproot themselves and leave. Most frequently the dissatisfaction is an economic one, but political and religious discontents play their parts, while the oppression of racial and cultural minorities was responsible for much of the emigration from Europe in the decades before 1914. Maladjustments of various types are often closely intertwined. The early New England settlers could probably not have honestly told whether their economic ambitions or their religious hopes had propelled them more forcibly from their native land. The poverty stricken Polish peasant who came to America to garner a harvest of gold was not free from the supplementary desire to escape Russification, while the Jew who sought to exchange the ignominy and terror of the Pale for the equality and security of the promised land was quite as concerned with his economic as with his civil status.

Periods of rapid social change, which almost inevitably throw some portion of the community out of gear, are most fruitful of emigration movements. A transition from one type of economy to another is probably the most dislocating of all changes, undermining as it does the sources of income, the bases of security and the foundations of the social structure on which the changing society has largely rested and producing an appearance of overpopulation by reason of the large numbers for whom the

system has not yet found a place. This was the situation in England at the opening of the seventeenth century when the multitudes of vagrants and "sturdy beggars" turned out of house and trade by the beginnings of capitalist agriculture and capitalist industry lent credence to the contention that the country was overpopulated and immensely stimulated emigration.

Almost equally disruptive, however, are major changes in economic conditions although the economic system of an area may remain unaltered. When the Polish farmers were ruined by the competition of American wheat in the 1880's, the Poles became an emigrating people. There is a noticeable tendency of emigration to follow the swing of the business cycle. Crop failures such as the Irish potato famine of 1846 have impelled emigration, as has the destruction of economic resources by the hand of man. To the ravages of Louis XIV in the Palatinate has been attributed much of the German emigration to America in the eighteenth century.

Maladjustment other than economic is equally likely to be the product of radical social change. The sects produced by the Protestant revolt for whom no place was made in the terms of settlement found emigration their only alternative to abandoning their faith. Separatists and Quakers in England, Pietists in Germany and Huguenots in France all chose to seek their fortunes in other lands. Except in times of change, at the founding of a new sect or when some stimulus produces active persecution, emigration for religious reasons is rare. Once a modus vivendi has been established, even a religious minority is not likely to resort to emigration. It may be that if the modus is not altogether satisfactory a more favorable possibility may attract the group away. Mennonites who had long lived with comparative satisfaction in Canada and the United States were induced to emigrate to the Gran Chaco by the guaranty of the Paraguay government that they would no longer have to sacrifice their pacifist principles. In the political field radical change rather than chronic unrest precipitates emigration. Whether a revolution succeeds or fails, one side or the other, be it French or Russian émigré or German "forty-eighter," is almost sure to find in another land his only opportunity for continued activity if not his only chance for survival. Racial and cultural minorities in their turn are driven to depart by active persecution, not by the mere presence of disabilities. Movements of Jewish populations have been so stimulated from the time of the Diaspora, and the exodus of Armenians from modern Turkey has been motivated in the same way.

Frequently accompanying economic, religious or political maladjustments but distinct in itself is the psychological factor of a broadened cultural horizon. So long as individuals or groups remain satisfied to follow their parents' ways and their horizon is restricted to their accustomed round of life, emigration is unlikely to occur. On the other hand, the press, radio, travelers, the extension of education, all have power to produce emigration through creating discontent with an otherwise unchanged lot. Not poverty alone but the conception of a fuller life has driven Italian peasants by the hundreds of thousands from their beloved land of sunshine and wine; the Jews who left Russia were not only those who had suffered from active persecution but many more who had heard of a chance to live with more freedom and dignity.

Emigration, however, as a solution for the various types of maladjustment described above depends upon the availability of some other accessible and desirable place. Such a place must at least be thought to offer those things which are lacking in the old environment, without requiring the sacrifice of such features of the old culture as are most cherished. The nature of the place of immigration and the suction created by its attractions may even become as potent an influence as the pressure to escape. Stories of El Dorado have made many families ready to believe that their lot could and should be mended and have sent them out from communities where their adjustment was comparatively good and their position secure. Yet if the conditions of immigration do not meet the needs of the potential emigrants, even subsidies have not the power to make settlers go out. With conditions in post-war England strongly favoring emigration, with generous assistance offered by the government, with the advantages of emigration extensively advertised and with ample space in the dominions for settlement, there has been comparatively little emigration from England during this period. The maladjusted population is industrial and either is unwilling to take up agriculture or is unwelcome in the dominions for lack of equipment to do so.

When factors producing emigration from a given country have continued over a period of years, emigration may become part of the culture complex of the emigrant sending country. In Ireland many generations of constant emigration have made the process part of Irish national

life. The Free State finds its efforts to revive the ancient Irish tongue impeded by the refusal of children to learn a language which will do them no good when they go to America. A mother assumes that six of her seven children will leave her for distant homes across the sea while the seventh remains to carry on the farm with the aid of money from abroad. The traditional songs are the songs of emigrants and the angry father in the typical popular play threatens to "emigrate" his son.

Impelled to depart and furnished with a place to go, emigrants still await a means of making the shift. There must be a method of transportation sufficiently cheap and convenient to meet their needs. Without cheap steerage passage poverty stricken peasants of eastern and southern Europe could not have negotiated their transfer to western shores, while post-war Britain has realized that without state aid transportation costs would be an insuperable obstacle to her scheme of sending settlers to the dominions. For large scale emigration, moreover, there must usually be some agency for organizing the exit and providing for adaptation at the other end of the journey.

Most commonly, at least when emigration from a locality is new, the process is a group process rather than an individual one. Only when the machinery has been established and the path well trodden does it become easy for individuals to move alone. The initial process tends to follow a certain pattern, typified by the seventeenth century agencies which facilitated emigration from England to the new world. A promoter or group initiates a scheme, sells the idea of emigration to potential emigrants and to financial backers through some form of publicity, provides or contracts for means of transportation and finally makes or purports to make some provision for placing the emigrants in their new homes. Such promotion schemes have been notorious for their failure to fulfil both their promises of financial return to the backers and of adjustment at their destination for the emigrants. Emigrants lend themselves readily to exploitation, since in breaking their ties with the system and culture that they know they lose the support of their social position and exchange the self-confidence that rests on familiarity for the bewilderment of a new environ-

Organizations facilitating emigration may be of several types: companies such as the Virginia Company and the "Mississippi Bubble" formed to make a profit from the colonizing enterprise: groups such as certain religious sects organized to negotiate a particular venture on a non-profit basis; and private agencies such as steamship companies which facilitate emigration as part of a general business and regard emigrants simply as lucrative cargo. In many, probably most, cases, some financial aid is necessary, for emigrants as a class are characteristically poor. Where the emigrant organization seeks to be a money making concern the emigrants themselves may be regarded as stock in trade and may receive their passage, as did the first Virginia settlers, by "adventuring their persons." Elsewhere passage may be financed in return for a promise of work. The bulk of emigrants to America in the eighteenth century came as indentured servants, aided by shipper or planter, under contract to work out their passage for a number of years in their new home.

Where emigration becomes a matter of public policy, direct aid from the home government or private home organizations may be offered. The British Parliament subsidized the Georgia colony as a dumping ground for undesirables, while Wakefield's colonization scheme to rid England of her surplus population after the Napoleonic wars called for both public and private funds. Subsidies from the country of ingress are also provided in the form of special inducements to enter newly developed territories, such as Canada and the Argentine. Private companies too offer assistance, as did the American railroads in opening up their western territories or the New England textile firms in importing French Canadian mill hands. Undoubtedly the greatest source of aid, however, is the volume of private remittances from former emigrants who have made a financial success in the new home and furnish the means for friends and relatives to follow them. For over seventyfive years Irish emigration to the United States and Canada has been financed in this way.

The effects of emigration movements upon both sending and receiving countries may be most favorable or most unfavorable. In any case they are profound. Emigration may be a powerful aid in the solution of a nation's problems, relieving it of the burden of its economic and social failures or facilitating processes of change. The industrial revolution in many countries has come with less friction and less hardship because only part of those dislocated from their old way of life have had to find their place in industry, while the rest have been able to escape by the

"safety valve" of emigration. Agrarian distress in older communities which is incident upon the opening of virgin territory to world exploitation has been mitigated by the chance to emigrate from suffering areas to these more favorable lands. On the other hand, emigration may so drain a country of its man power as seriously to reduce its vitality. When a whole community becomes so far unable to meet its economic or social problems that it habitually expects its more energetic citizens to emigrate or when an ultraconservative society forces out its progressives and its liberals, emigration is a blight rather than a boon. In any case, a country which furnishes emigrants in large numbers over a long period is almost necessarily carrying a heavy financial burden. The age at which persons are most apt to migrate is early manhood, just as they are entering their period of greatest usefulness. The country of egress has borne the cost of their rearing during their non-productive years. The country of ingress receives the full benefit of their labor without cost of education and support. In part this financial burden may be balanced by the volume of emigrant remittances and the burden of support in old age, but the balance is most unlikely to lie in favor of the emigrant sending country.

Emigration is probably the most effective means by which a country can extend its dominion. Political empires have been built by this means from the time of the Greek city-states if not before. The English, French and Spanish empires in the seventeenth century were built in varying degrees in this way, and England's triumph over France in the New World is commonly attributed to the fact that the former possessed emigrant and not merely administrative colonies. It remains to be seen whether the fate of Manchuria in the twentieth century will be determined by the emigration of Chinese settlers or by the military and political forces of Japan or Russia. In the extension of a financial domain emigration also plays a part, accompanying and facilitating the export of capital. With the exception of a considerable emigration to Canada emigration from the United States has been made up almost exclusively of representatives of American firms established abroad. On the other hand, the export of capital may itself act as a boomerang, forcing further emigration when goods produced with this capital abroad enter the home market and dislocate home industry. Such has been the fate of England in the twentieth century.

Cultural colonies, however, are as much the product of emigration as are political. Although the American states ceased to be a part of England's political dominion they remained in large measure members of her cultural empire. In this same sense New France was not destroyed by the victory of England in the colonial struggle but may be said to have survived as a cultural entity. Even such a culture area as the Ukraine, which has only with difficulty maintained its cultural identity, has become the center of a culture empire through sending out its emigrants, until in certain parts of western Canada Ukrainian emigrants boast that even the Indians speak Ukrainian. The degree to which emigrants become the extenders of culture empires depends on the divergent or conflicting culture with which they come into contact, but even the vigorous Americanization program of the United States has not been able completely to destroy the culture of her immigrant groups or to prevent them from introducing their religious and their social patterns into the land of their adoption.

Powerful though emigration is as a means of extending political, cultural and financial dominions its effect must not be overrated. It is an open question whether Europe has not been more "Americanized" in the twentieth century by movie, radio, ten-cent store goods and the rationalization of industry than America has been Europeanized through the process of emigration.

The control of emigration and immigration has been regarded as a problem of domestic policy, not a matter for international settlement or outside the field of state interference. Fascist Italy and Soviet Russia have been as insistent in controlling emigration as has the United States in restricting immigration. The latter country, not satisfied with the "gentlemen's agreement" by which the Japanese government agreed to prevent the emigration of Japanese laborers, passed an exclusion act for the declared purpose of demonstrating the domestic character of the problem. In spite of these claims, however, the consequences of emigration are not simply national in scope. Whether it be a matter of making available new natural resources and throwing the product on to the world market (vide the effect of Italian emigration to the Argentine on the world supply of wheat), whether it be a necessary condition of world economy based upon the assumption of the mobility of labor or whether it enter into the problem of

international finance, international movement of population cannot be dissociated from world economics. On the other hand, only those who hold that the state is rightly sovereign over all the acts of the individual can admit the restriction of personal mobility by state decree.

For in the last analysis emigration is an individual matter growing out of an individual's reactions to his own community. It is to the individual, moreover, that the process means most, for there are few actions of more far reaching significance in a person's life than the act of emigration. For the process of migration from one culture area to another leaves the individual in large measure culturally stripped and bare. Much that he learned in his old home is useless, irrelevant or hampering to him in his new. There is much in his new home that he can never understand and never make part of himself. In some measure he inevitably seeks to build his new life according to the pattern of his old, even though his exodus has been an act of escape. Often the old pattern and the new environment are incompatible. In these circumstances one of two situations is most likely to develop; either the process of emigration involves definitely a cultural loss, or it produces an overemphasis of that particular factor which could not find adequate expression in the old environment and whose satisfaction was sought through emigration. The excessive Puritanism of the New England fathers represented a focusing upon the cause of their dissatisfaction and the one aspect of their culture which could be carried on in the wilderness, while the rest was sacrificed. In fact, the present materialism of the United States may perhaps be attributed to the same influence-the concentration upon material success on the part of emigrants whose move was prompted by economic dissatisfaction and whose quest for gain came as compensation for the loss of their cultural heritage.

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See: Immigration; Migration; Mobility, Social; Mass Expulsion; Persecution; Famine; Colonies; Contract Labor; Penal Colonies; Land Settlement; Ethnic Communities; Foreign Language Press.

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EMINENT DOMAIN is the right to appropriate property for public uses. The term conveys some idea of ultimate or paramount ownership in the sovereign; this quasi-feudal notion has received formal expression in the constitutions of New York, South Carolina and Wisconsin but may be ignored. Eminent domain is simply an attribute of sovereign power supposed to be tempered by a principle of natural law which connects its exercise with a duty of compensation. To say that the right to take is inherent in sovereignty and the duty of compensation a positive limitation imposed by constitutions [Boom Co. v. Patterson, 98 U.S. 403

(1879); United States v. Jones, 109 U.S. 513 (1883)] is to ignore the history of the doctrine, which always linked up the duty with right. Grotius names as the two requirements public utility and, if possible, compensation (De jure belli ac pacis, Liber II, ch. 4, sect. 7); this was reiterated in the French Declaration of Rights of 1791; and Blackstone mentions as one of the safeguards of private property that its taking for the good of the community requires the sanction of an act of Parliament, which will be given only upon condition of full indemnification (Commentaries 1, 139). The Supreme Court of the United States at present regards taking, even for public use, without compensation as a violation of due process, so that the state is restrained in this respect by the federal as well as by the state constitution [C. B. & Q. R. R. Co. v. Chicago, 166 U.S. 226 (1897)].

American constitutions generally contain some provision relating to the power of eminent domain, usually by way of limitation but occasionally by way of enlargement. The occasions for enlargement have been furnished by doubts as to what constitutes a public purpose, particularly whether expropriation for drains and ditches and private ways is permitted and more recently whether excess condemnation could be sanctioned. Where the constitutions particularly name certain public purposes, this seems likewise to be for the purpose of removing doubts and is not intended as exhaustive enumeration. Express limitations on the power relate to the following matters: making the public nature of the purpose (also in very few states only the necessity of the taking) a judicial question; requiring compensation for damaging as well as taking property; determining the setting off of benefits against damages; restricting the taking to an easement; specifying the tribunal for the award of compensation (jury or commissioners); and governing the time for compensation.

In the United States the power of eminent domain belongs to the federal government as well as to the states; but under the federal constitution the United States exercises exclusive legislative jurisdiction only over places purchased by the consent of the state legislatures, and it was probably for this reason that for a long time the United States, when necessary, procured condemnation through state action [Kohl v. United States, 91 U.S. 367 (1875) p. 373].

The exercise of the power of eminent domain

may be delegated and commonly is delegated to local governmental bodies (cities and other local districts) and to private corporations, particularly to railroads, telegraph, telephone and water companies. But although the United States since 1920 has assumed full jurisdiction over new railroad construction serving interstate commerce it has not undertaken to confer powers of condemnation for that purpose, and these consequently depend upon state authority—an anomaly which could be easily remedied by legislation if inconvenience should result therefrom. The aid which the transcontinental roads first received from Congress was in the form of grants of public lands. The original act of July 1, 1862, did not provide for expropriation; the power was, however, given by an act of July 2, 1864 (13 Stat. 357).

Condemnation may be authorized by legislative act for each particular enterprise separately. This method is the one chiefly pursued in England, but in America there are general statutes permitting the exercise of the power for specified purposes without reserving to the legislature a judgment as to the merits of a particular undertaking. When, however, a city or other municipal corporation comes to exercise the delegated power it does so by special legislative act for each case, without further delegation to administrative authorities except for preliminary examination and report in accordance with the provisions of general statutes regulating the making of public improvements.

Whether the purpose for which it is proposed to take property is a public purpose is in the United States a judicial question. Since compensation is paid, the public interest is liberally construed; the promotion of beauty or of national sentiment may warrant the exercise of the power of eminent domain where it would not warrant the exercise of the police power [United States v. Gettysburg Electric Ry. Co., 180 U.S. 668 (1896)]. A number of courts have held that a way of necessity or the drainage of wet lands does not constitute a public purpose; but constitutional amendments have enlarged the power in view of these decisions.

Where a legislative act itself specifies the property to be taken (the public nature of the purpose being conceded), this constitutes a conclusive determination, allowing the owner no right to be heard as to the legislative act delegates the exercise of the power it may provide for a judicial determination of the question of the

necessity of the taking, and occasionally (e.g. in Wisconsin; in New York only when the taking is for a private road) there is a constitutional provision to that effect; but many statutes regulating the exercise of the power fail to make any provision for contesting the choice made by the expropriating corporation. Under the Act of Congress of March 1, 1929, relating to the acquisition of land in the District of Columbia an expropriation on behalf of the United States may assume the form of a "declaration of taking," upon which a right to compensation vests in the owner; and it is only this right to compensation which constitutes the subject of the judicial proceeding. General acts providing an appropriate procedure for the exercise of the power of eminent domain are common; the Supreme Court of the United States has held that a condemnation proceeding is a suit at common law within the meaning of the statutes granting jurisdiction to the inferior federal courts [Kohl v. United States, 91 U.S. 367 (1875)].

The appropriation of parts of lots for public streets (and particularly for the widening of streets) not infrequently leaves in the hands of the owner a remnant which is of little value to him, thus entitling him to a compensation larger than the value of the part taken. If his entire lot could be taken, remnants might be combined into suitable building lots; but technically this would not be taking for a public use. This situation has suggested the idea of what is called excess condemnation. An express constitutional authorization of this is generally deemed indispensable and is now provided for in the constitutions of several states (Massachusetts, New York, Ohio, Wisconsin). Even with such recognition there remains the question of "due process" under the federal constitution, and the Supreme Court had up to 1931 left the question open [Cincinnati v. Vester, 50 Sup. Ct. 360, 281 U.S. 439 (1930)]; a favorable decision may be expected with reasonable confidence.

Where expropriation is made for highways, the public purpose may be satisfied by an casement, leaving the fee by way of reversion in the owner. Difficult questions have then arisen whether the placing of rails, pipes or poles upon or under the highway constitutes an "additional servitude" calling for further compensation. Upon discontinuance of the highway, reversion to the adjoining owner ordinarily represents the most convenient arrangement; if therefore for technical reasons the fee or the reversionary

interest has not been carried by "mesne" conveyances, the result may be an extremely undesirable revival of ownership in the heirs of a former proprietor without any substance of equity. The situation can be managed (although not always retroactively) by appropriate legislative provision (e.g. the Illinois Vacation Act of 1923); but notice has to be taken of constitutional provisions which forbid more than an easement to be taken for railroad tracks (Illinois, Missouri, Oklahoma, South Dakota).

The laying out and particularly the subsequent improvement of highways not uncommonly involves a change of grades, which by leaving adjoining property above or below the new street level impairs rights of access and communication. After a number of courts had pronounced this to be "consequential" injury, falling short of a taking of property, express constitutional provision was also made for compensation for property "damaged" by public use. The Illinois provision of 1870 in this respect has since then been followed in many other states. Such a provision may also become applicable if the vacation of a street or public place equitably entitles to compensation. But necessarily the problem of injuries so indirect or remote as to place the right to compensation in doubt must be determined by the application and elaboration of general principles which cannot be compressed into a brief formula. Neither constitutional nor statutory provisions can give much aid toward a solution; they secure the appropriate tribunal (jury or commissioners), acting subject to judicial instruction or review, but refrain from particularizing as to measure of damages. A number of constitutions (the majority of them only if the taking is by a private corporation) provide that resulting benefits are not to be set off against damages; but in case of public local improvements which are financed by special assessments the offsetting of benefits against damages is the regular course, leaving normally a balance chargeable as a special benefit assessment against the owner; and statutes sometimes expressly require compensation to be reduced by benefits, as in connection with river and harbor improvements made by the federal government (33 U.S. C. § 595).

There is ordinarily no difficulty in distinguishing the power of eminent domain from other powers under which a sacrifice of property interests may be imposed or demanded. This is particularly true of the taxing power; even where in connection with local improvements expropriation and assessment of cost for a highway are closely blended in the same proceedings, the two powers are clearly distinguishable. The term condemnation is commonly used to designate the taking for compensation; but it may also be used to designate the confiscation of forfeited property, which is an act of justice, or the destruction of dangerous property, which is an act of the police power.

Difficulties begin when it is attempted to draw a sharp distinction between the police power and the power of eminent domain, largely for the reason that the test of compensation or no compensation is apt to fail or to create confusion. It is commonly held that where property has to be sacrificed to overriding claims of public safety, health or morals no compensation is payable; and the inevitable judicial recognition of this principle, as a matter of constitutional law, in cases where the legislature has made no provision for compensation has tended to obscure inherent equities. The Supreme Court has ruled, for instance, that property is held subject to a continuing public power to subordinate it to public uses; e.g. that by virtue of its power of regulating commerce the federal government may make river and harbor improvements in the interest of navigation without liability for compensation for the removal or damage of existing structures [Greenleaf Lumber Co. v. Garrison, 237 U.S. 251 (1915)]. In such a case the equitable claim to indemnification is extremely strong; it is hardly less so if property is destroyed to check the course of a conflagration or if exposed herds of livestock are killed to check the spread of contagious disease; it seems even stronger if cedar trees are destroyed to protect apple orchards [Miller v. Schoene, 276 U.S. 272 (1928)]. In all these cases there is no appropriation, no transfer of title to the public and hence no exercise of the power of eminent domain giving rise to a claim to compensation. Nevertheless, although such cases are held to involve only exercises of the police power, considerations of equity may induce the legislature to provide for compensation, and this has been done in cases of conflagration and cattle disease. Since, however, the right to compensation is not then a constitutional right, adjustments may be made that are more equitable to those who have to bear the burden of compensation; and the recognition of the difference of powers is an advantage in this respect.

In the practise of city planning the power of eminent domain applies in special forms and

also in close connection with other powers. Reference has already been made to the problems presented by the regrading of streets and by street widening which results in economically uscless remnants of lots. In the laying out of new streets taxation in the form of special benefit assessments overshadows the damages payable by reason of condemnation, but special difficulties arise where building is prohibited by reason of a street plan the actual execution of which is indefinitely delayed [Forster v. Scott, 136 N. Y. 577 (1893); Matter of City of New York, 196 N. Y. 255 (1909)]. Another question is presented by the enforced setback of houses in residential streets. Bulk restriction in connection with the building development of a lot is a legitimate exercise of the police power if it is a matter of providing adequate light and air; but the extent of the compulsory setback is very apt to be in excess of sanitary requirements, and if compensation is to be denied, a power wider than the traditional police power must be recognized in connection with city planning. If the aesthetic or monumental character of a particular site calls for special adjustments of adjoining properties in the way of reduced and uniform heights of buildings, the resulting restrictions should be looked upon as condemnations by which the public appropriates an easement, and compensation should be payable; this appears to be the better doctrine [compare Attorney General v. Williams, 174 Mass. 476 (1899) with Parker v. Commonwealth, 178 Mass. 199 (1901)]. In England, where constitutional limitations do not enter into the problem, the question of compensation or no compensation is largely determined by the opinion of the minister as to the reasonableness of restrictions for town planning purposes (Town-Planning Act, 1925, § 11).

Restrictions placed on particular pieces of property by reason of the national value which they have as historic or artistic monuments should be regarded as constituting expropriation pro tanto, with consequent claim to equitable compensation. This seems to be recognized by the French Act of December 31, 1913; there is no corresponding American legislation.

To what extent may vested rights be impaired without compensation in connection with social and economic reforms? If the impairment applies to an entire category of rights, all owners within the category being affected in the same way, the equity of compensation assumes a totally different aspect from that of the ordinary

expropriation for public use, and it must be doubted whether constitutional provisions are applicable. The abolition of slavery and the prohibition of the liquor traffic destroyed vested rights on a large scale and without compensation; but in both cases the effect was accomplished by provision written into the federal constitution, thereby making a judicial issue impossible. Before the Civil War, however, the abolition of slavery was mainly discussed on the basis of compensation or as a prospective measure to be applied to the unborn issue of slaves; in addition, moreover, the Thirteenth Amendment had been preceded by emancipation as an exercise of the war power. As far as the Eighteenth Amendment is concerned there was ground for contending that because the liquor traffic had been carried on under revocable licenses the whole business had the status of something existing at mere sufferance (Mugler v. Kansas, 123 U.S. 623 (1887)].

In Europe such problems have been particularly discussed. In England emancipation was effected by partial but not total compensation. European opinion seems to hold that liquor prohibition requires compensation. However, the practise as to compensation in connection with the abolition of feudal rights and with agrarian reforms has varied. Large scale reform would frequently be impossible if conditioned on full compensation; and Irish and English rent legislation has without compensation curtailed what at the beginning of the land agitation were held to be the just property rights of the land-lords.

In American railroad legislation the recapture of excess profits may be regarded as a form of taking property without compensation. Should the public welfare require the suppression of eleemosynary trusts that have outlived their usefulness, compensation would in the nature of things be impossible. The United States protested against but ultimately acquiesced in the legislation of Mexico which declared subsoil minerals, including oil, to be the property of the state. American courts may hold such a restriction of the content of a right of property to be inconsistent with the American constitutional guaranties on behalf of property; if this position is sound it means that such alteration of the content of property can be effected only by constitutional amendment, for to say that under the constitution it can be done only on payment of compensation is to state a futile proposition not responsive to the supposed practical need.

Under American constitutional terminology eminent domain means the taking of property for public use on payment of compensation. This involves the converse proposition that private property may not be taken for public use without compensation. It is conceded that the destruction of property under the police power, although without compensation, is not taking without due process. What taking does the police power justify? Does it under any circumstances justify a taking which is not destruction but appropriation or transfer? In view of the recapture provision of the Transportation Act of 1920, the answer cannot be an unqualified negative. Where then under American constitutions does the sovereign power over property find its limits? The Supreme Court alone can answer this question. If the answer is progressively liberal in favor of public power to satisfy progressive community needs or demands, a distinction must be made between two kinds of expropriation which are also, at least in a qualified sense, appropriation or transfer: the kind that requires compensation and the kind that does not require compensation. It will always clarify the discussion of public powers if the term eminent domain is confined to the expropriation to which the principle of compensation is properly applicable; but only the development of social legislation can determine to what extent the uncompensated curtailment of property rights is justifiable or legitimate.

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See: Property; Confiscation; Police Power; Due Process of Law; Excess Condemnation; Zoning.

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EMPIRE. There have been two concepts of empire and the word has been used in two ways. In a narrower sense the term corresponds to the Latin *imperium* and signifies a large kingdom or world state of vast dimensions, multiplicity of constituent parts and great might, like the Persian, Alexandrian, Roman, Chinese, Carolingian and Napoleonic empires and the present states of England, United States and Russia. In a wider but looser sense the term empire is used to refer to every monarchy which is closely unified and powerfully developed both internally and externally.

Of the five stages into which the history of mankind may be divided only one, that of the most primitive society, is entirely devoid of the appearance of empire even in the widest use of the term. The influence of the powerful and rich development of the kinship state in the last stages of primitive society, exhibited particularly by the Iroquois Indians, is really responsible for this absence of a fully formed monarchy and for the existence of a mere chieftainship and in exceptional cases of an embryonic form of monarchy. Considerable precautions were taken in this form of political organization by means of the admixture of democratic and aristocratic sentiments and institutions to forestall the rise of the kingship. In this these societies were successful, although a comparison with the development of the narrowly exclusive kinship state of Japanese antiquity (before the Taikwa code of 645) indicates how easily a kingdom might have arisen. The work of Lewis Henry Morgan, however, has demonstrated that at least all the powerful primitive peoples as well as the fully developed societies in their prehistoric period have undergone this or a similar course of development. In some instances, as among the Teutons, this approached a somewhat loose form of kingdom which was really a forerunner of the powerful monarchy of antiquity.

Empire, in its wider sense, is really a product of the second stage of growth, the so-called youth of mankind. The dominant spiritual powers of the most primitive period were imagination and feeling, the softer and at the same time the more natural forces in the realm of the inner ego. But with the coming to the fore of the stronger and harsher forces of will and reason there came also the creation of the state and, in the culmi-

nating stages, of empire in the narrower sense of the term.

A preliminary stage to the monarchies of the great civilized peoples is represented by the kingdoms of the more advanced Negroes in Africa, both the Bantu peoples of the south and some of the natives of the central zone between Fulah and Somaliland. This type of kingdom is barbaric and quite crude and primitive in its institutions, but in a number of selected instances it exhibits many similarities to the earlier forms of the old Egyptian and Carolingian governmental structures. Among these Negro tribes the most complete structural varieties of the early, maturing and truly archaic types of kingship were perfected. They range from the village chieftaincy of the Ewe type (in former German Togo), which comprises only one settlement, up to great kingdoms like the Lunda or Barotse empires.

The village chiefs of the Ewe have bodyguards who precede them in procession and force each passer-by to do them reverence. Above the village chief stands the tribal chief. His rank is inherited in his kinship group and within this group he is selected by the village chiefs. His relationship is patriarchal in character, but the administration of his retainers is harsh and severe. West Africa is the classic land of little Napoleons; of great chiefs and kings who by personal initiative raise themselves to royal power, but whose dominion vanishes again with their death. Central and south Africa have also produced numerous kingdoms of great dimension and long duration.

In the great kingdom of the Barotse, which was formerly a patriarchal tribal kingdom, the monarchy developed into a despotic personal rule. Before 1890 it was estimated that eighteen major and eighty-three subsidiary tribes had been subjected and brought within the kingdom. The king's power, formerly limited in many ways, is today in spite of the abundant survival of older usages completely supreme. He is both the commander-in-chief of the army and the chief magistrate. In addition to his political control he also possesses a formidable degree of economic power. He exercises control of a large part of the volume of trade, including the goods most in demand, and has a royal monopoly of such commodities as rubber and ivory. At his disposal he has a large bureaucracy headed by a chancellor of the realm. The village magistrates form the predominant class among the officials and the most favored of these enjoy the power

of district governors. Many of these magistrates also occupy positions in the central administration at the court. They are appointed to various departments by the king and exercise a limited authority throughout the realm. Such an official is, for example, the minister of foreign affairs of the south. The private court officials of the king, including the chief executioner, are more powerful than the state officials and have more weight in the counsel of the king. The pitso, or folk assembly, is of negligible significance. There is an official school at which the future assistants of the king are trained from their early youth.

The kingdom of the Lunda is much more extensive than that of the Barotse but more loosely organized and does not possess the strictly centralized despotism characteristic of the latter. The power of the muata janwo, or head king, is very great and is restrained only by the power of the lukokesha, the sister or half sister to the king, who, like the muata janwo himself, must be a descendant of one of the two chief wives of his predecessor. But although, according to reliable Portuguese accounts, this empire was in existence as early as the sixteenth century, the power of the conquered head chiefs and chieftains is still preserved and comparatively great.

During the period of its independence the organization of the Zulu tribe, the chief tribe of the Kaffirs, revealed a highly developed political sense. It was a severe military monarchy which yoked the entire energies of the people. The kingship was a restricted despotism, limited only by the authority of two powerful officials of a major-domo function, the two head *induna*, one of whom was the head of the army, the other the minister of state. The two head induna had within their jurisdiction important affairs of state, such as the declaration of war, verdicts of death and distribution of land. Together with the king they appointed the lower *induna*. The people had been converted into a thoroughgoing warrior state and were gathered together into great military camps or barrack cities of 6000 to 10,000 men. The young men were trained from early youth in the use of arms. They were forbidden to marry but allowed to retain concubines. The older men were allowed to marry and at times entire divisions of troops received the same privilege. The economic power of the king exceeded by far that of the Barotse ruler. He was lord of all the land and exercised a complete monopoly of trade and to him belonged the country's buffalo herds, its chief source of

wealth. An analogous institution is found in the ancient Norwegian monarchy under Harald Haarfager (c. 860-930). The proceeds from the buffalo breeding were devoted by the king to the supply of food, clothing and munitions for the army. He combined the functions of medicine man and head of a perfected judicial system.

Closely related to the Zulu is the warrior state of the Baganda in Uganda. Among them also each man is a soldier. The bureaucracy of head chiefs and chiefs is divided into two grades. Although both classes represent apparently the continuation of the old and previously independent chieftainships, the watongoli, or lesser chiefs, are subordinated to the bakungu, or greater chiefs. In the intimate life of the mass of the people it is, however, the watongoli who are all powerful. A sort of feudal relationship exists between the chiefs and the king. In case of war every watongoli is in duty bound to provide a certain quota of warriors. The king is lord over life and death but the great council headed by the *katikiro*, or prime minister and chief justice, and the kimbugwe, who is in charge of the king's umbilical cord, is also powerful. A traditional horrible cruelty and an extravagantly developed harem system are also characteristic of the Baganda kingdom.

The highest form of African monarchy is found among the Hova of Madagascar, who like the rest of the population of the island do not belong to the black race but represent an outpost of the Malays on African soil. Especially unique is the development of a lower bureaucratic nobility, not found in the political structures of the Negro kingdoms, in addition to the higher nobility made up of the descendants of the ancient chiefs and of the members of the royal family. Here too the ruler is the source of law as well as of all honors and punishments. As among the Baganda and the ancient Norsemen he is according to the law the possessor of all land. To him belongs all the produce of the soil not won by hoe or spade as well as all timber and minerals.

The group of early archaic polities thus far described reveals five general group characteristics. The expansion of states from small tribes or chieftaincies into greater empires proceeds within the particular communities by the combination of annexation and domination. The conquered chiefs become state officials and form a noble class. The state is fundamentally a despotism, although under weak rulers the royal power may be considerably limited. A central

bureaucracy is developed, consisting in most cases of the highest administrators and in the more advanced states of lesser officials with subordinate and departmental jurisdiction. Councils and popular assemblies are also at times evolved and the royal power is extended to the economic life of the people.

The fully developed archaic despotisms of the ancient Near East represent a second group of empires. The Old Kingdom of ancient Egypt (c. 3400-2475 B.C.), from its earliest history, consisted of two kingdoms. Lower Egypt, which represented the conquered territory, belonged directly to the king and was completely subject to his rule. The southern kingdom (Upper Egypt), on the contrary, was an aristocracy and relatively independent of the king. The state officials of the northern kingdom were wholly subservient to the king, and even more so were the great number of court officials. The nobility of the south was also at the outset dependent upon the king; but gradually they retired to their own possessions and, like the Merovingian counts, assumed the most important offices, made their positions hereditary and established themselves as practically independent princes. A similar but much more permanent and extensive encroachment on the royal power took place during the period between the Middle Kingdom and the New Kingdom at the hands of the Hyksos (c. 1675-1580 B.C.), who overran Egypt. The expulsion of the Hyksos and the establishment of the New Kingdom saw the development anew of a strongly centralized and military monarchy. The army became the dominant force in the state, and the king as its leader ruled supreme by means of a highly developed official bureaucracy. A large tax collecting organization grew up, the landed nobility slowly disappeared and in its place arose a new aristocracy of the army of petty functionaries who administered the local districts. Gradually, however, a new power, the priestly class, came to the fore and toward the end of the New Kingdom achieved supreme control of the state and converted it into a theocracy.

The empire of the Babylonians was, like Egypt, evolved from principalities and small kingdoms and grew in proportions by constant conquest. The rulers of these conquered states, known as *patesi*, sank to the role of local governors. The emperor accorded himself the prepotent power as lawgiver and chief judge of his people. He interfered continuously in the decisions of his officers and maintained a high court

of appeal at Babylon. Whereas the earlier emperors represented themselves as gods, the later ones like Hammurabi called themselves merely the favorites of the gods. The army was a standing force of professional soldiers who were in duty bound to appear at the command of the emperor; from time to time they were given leave. In contrast to the situation in Egypt, where the emperor remained sole lord of all land and property, the kings of Babylon began the system of compensating their soldiers with inalienable rights to land, cattle and personal property. Both the profession of warrior and the rights to the land became hereditary, and thus an aristocracy, taking its rise in the same way as that of the Merovingian-Carolingian empire, began to threaten the royal power. Some writers have even ascribed the fall of the empire to this system. A concomitant result of the granting of these rights, which were considered as divinely consecrated, was the great and rapid development of civil law. From 1750 B.C. on the empire began to fall piecemeal under the rulership of alien peoples; from 729 B.C. to 626 B.C. it was under the dominion of the Assyrians and in 530 B.C. was definitively conquered by the Persians and incorporated into their realm.

The Assyrian empire developed to great dimensions by a long series of conquests beginning in the thirteenth century B.C. It represents the most perfect development of the military monarchy in the ancient Near East. The Assyrian emperors ruled their subjugated lands through shaknu, or governors. To these governors accrued an extensive power which they often misapplied to their own enrichment. They maintained their own armies, collected taxes and then delivered a part of the taxes to the emperor's court. The army which formed the basis of the Assyrian state was at first enrolled from the entire population. Gradually, however, there developed the practise of commuting the military service into the form of taxes, and foreign troops came to make up the greatest proportion of the army. The native Assyrian population continued to be represented in the government only by an upper class of nobles and officials, and to this condition may be ascribed the inner decay of the Assyrian state which preceded its foreign defeats. In 605 B.C. it was absorbed into the empire of the Medes and in 539 B.C., together with Babylonia, into the Persian Empire.

The Persian Empire, because of its extent and still more because of its fundamental tendency toward conquest and territorial expansion, is the

only one of the despotisms of the Near East that may be regarded as an empire in the narrow and specific sense of the term. Under Cyrus I the Persian state emerged as a union of several tribes and by gradual conquest Asia Minor, Egypt and parts of southern Europe were added to the state. The expedition to Greece represented only a very limited part of the great system of conquests and was but a trifling circumstance in the eyes of the supreme ruler of the Persians. The Persians conducted their wars energetically but without cruelty; nor did they destroy a single center of culture. The Medes, a people of a related stock, shared equal power with the Persians after they were subjugated, while all the other conquered peoples were governed mildly. The combination of local autonomy and a highly developed central authority represents a type of imperial organization hitherto never attained. The empire was looked upor as a unit; its divisions were generally merely administrative and did not follow national lines. A net of powerful governorships headed by imperial satraps was established. Under Darius I (521-486 B.C.) there were twenty such divisions and these were in turn divided into provinces also governed by royal officials. Each satrapy was independent as regards its internal affairs, but written reports were made to the king; a well regulated mail, a system of uniform coinage and the construction of great military roads gave the empire a strong bond of unity. There was no attempt, however, to impose a uniformity of culture and religion. The military system was sound and based on the participation of all the people in time of war. In time of peace a standing army was maintained, built around the 10,000 king's guards, known as the "immortals." In important matters of state the king was obliged to consult with the chiefs of the old noble families. A royal supreme court, whose members were familiar with the old customary law, administered justice and instructed the king in disputes brought before him. While all these factors made for the strength of the empire they also allowed for palace intrigue and dynastic disputes of the most sinister type, which finally undermined it and made it succumb to the personal superiority of Alexander the Great.

These empires of the ancient Near East, comprising the group of fully developed archaic despotisms, are distinguished from the early archaic despotisms of the African Negroes by the greater elaboration of the system of imperial administration and the technical improvement

of the instruments of government. In Persia in particular there also becomes evident the tendency to make the state itself the end of all political action and thought. The Persians were imbued with the desire to subordinate the οίκουμένη, or the entire group of peoples they knew, to their authority; and, considering their conceptions of the extent of the universe, their ideal of world empire was not far from being realized. These empires of the Near East differ from those of the African Negroes more in the much richer cultural development of the state than in their formal structure. The imperialistic character exhibited externally in political dominion and lordship is evident also in the purely intellectual creations of the peoples of the Near East. In art it assumed the form of a forceful and functional architecture entirely subordinated to stylistic purpose, like the pyramids and columned temples of the Egyptians and the terraced palaces of the Babylonians. In science it appeared as the remarkable monistic philosophy of the Babylonians and in the all embracing and universal character and scope of their metaphysics. In religion, which was related even more closely to their art of government, it was revealed in the creation in the heavenly world of a counterpart of the imperialistic and unifying activities of the kings. The henotheism of the provinces became forged into a polytheistic closed circle of gods. Some of these gods rose to become emperors of this divine kingdom, and in one case the pharaoh, Ikhnaton, desired to consolidate all the cults into an official monotheism of the sun god Aton. This was, however, ultimately overcome by the opposition of the priesthood of the old individual gods.

The Far Eastern empires, although far removed from the Near Eastern group in space and time, are nevertheless closely related to it through their fully developed archaic political structure. China, whose series of dynastic houses is the only one to endure longer than the Egyptian and the beginning of whose chronologically certain history reaches back to about 2200 B.C., is in every respect the most powerful political creation of this group. The preliminary stages to the developed archaic despotism of China are represented by the Mongolian empires of the eastern and western Huns and the khans and their hordes, who overflowed China, western Asia and Europe. They were warrior kingdoms held together by purely personal ties without the firm structure achieved by the settlement of a closely circumscribed territory. Historically

they are noteworthy only because, despite their still crudely archaic form of government, their bands were organized with almost geometrically exact regularity. The followers of Genghis Khan (died 1227 A.D.) were, in accordance with the needs of war, subdivided into divisions of either 10, 100 or 1000 men. Genghis Khan filled his soldiers with the spirit of unconditional discipline. Unable to read or write, he did not wish his people to acquire any culture whatever: they were to remain utterly nomadic and belligerent. This empire, which for a short time extended over three quarters of Asia, fell to pieces after a few decades. The Mongolian empire of Timur (1336-1405), similar to that of Genghis Khan, decayed even more rapidly after the death of its founder.

The middle stage of Mongolian political development is represented by the empire of the Great Mogul of Delhi, reaching its culmination under King Akbar (1556–1605). Akbar was a ruler of tremendous political and military power and he subjugated all of India by a long series of conquests. The fundamental problem of all Indian politics, the conflict between Mohammedanism and ancient Hinduism, was solved for his period of rule; Akbar placed himself above the two faiths, tolerating both and so bringing them to peace.

The Chinese Empire at the time of its greatest expansion about the year 1760 possessed a territory of 13,000,000 square kilometers, almost three times more than the Persian Empire and four times more than the Roman Empire. It numbers today 400,800,000 inhabitants, one quarter of the world's population. The rise of the empire is described in traditional legends. It was probably welded together originally from a number of small states. The king was held to be the source of all wisdom as well as of all power. With the accession of the Chou dynasty in 1122 B.C. a far reaching dissolution of the existing unified empire occurred and the feudal period of Chinese history began. The subsequent course of Chinese history was one of continuous fluctuation between increasing and decreasing imperial power and unity. One of the highest stages of imperial power was that reached by Shih Huang Ti, the Charlemagne of Chinese history, who about 220 B.C. destroyed the feudal system and became the great unifier of China. The empire was divided into provinces assigned in the Carolingian manner to itinerant royal ambassadors. But again, as in the case of Egypt, the governors who replaced the royal ambassa-

dors made their positions hereditary and increased their power at the expense of royal supremacy. In 1368 A.D., under Chu Yuanchang, the founder of the Ming dynasty, a new high point was established. Many features of the administrative system which he set up were continued until the revolution of 1911-12. Nevertheless, a mild difference between the central power and the provincial administrations persisted, and even since the revolution territorial and perhaps ethnical oppositions have continued. China has exhibited the typical and consistent policy of external expansion and conquest. The almost unappeasable need for expansion was manifested when the army of Ming Ti of the Han dynasty pressed forward as far as the Tarim Basin and when his general Pan Ch'ao conceived the plan of an expedition against the Roman Empire. Under Chu Yuan-chang, Korea, Annam, Burma and distant territories in central Asia were made to acknowledge Chinese sovereignty and embassies were sent as far as Java, Sumatra, Siam, Bengal and Ceylon.

The Japanese Empire was in its earliest period a kinship state with a monarchical head. The Taikwa reforms (645–49 A.D.) initiated the process which fundamentally reorganized the state as a revolution from above transformed Japan into a complete archaic despotism. Like the reforms of 1867, these were inspired by the desire to imitate a foreign model; a commission of Japanese statesmen was sent to China to copy the Chinese institutions. The country was divided into sixty-six provinces, and at the head of each was placed a governor, or kokushu, with his deputy, the suke, in addition to a staff of officials and scribes. Five inner provinces were isolated as the emperor's seats, or kinai (Nara in 710 became the first permanent capital); the others, the outlying provinces, were aggregated into groups (do), which did not, however, constitute true administrative unities. Upon this provincial system was built a remarkably organized central administration. At the head of the whole bureaucracy stood the three ministers: the prime minister, the minister of the right and the minister of the left, who were organized as the san ko, or ministerial staff. The three nagon, the chief, the intermediate and the lesser advisers, who were only slightly subordinate in rank to the san ko, constituted with the latter the Dajo-kwan, or Great Council of State. The actual central administration was formed of eight sho, divisions which consisted in turn of a head and two subordinates of the type of modern ministers, who directed the affairs of state according to a distinctive departmental functionalization. In addition to this temporal administration, there existed the Jingi-kwan for the Shinto cult.

In its economic and social manifestations Japan presents many similarities to the African type of early archaic political organization. All landed property, which after the manner of a kinship state had until then been divided into great sections and along with the slaves made up the common property of the tribes, was now declared to be the property of the ruler. But in this instance a state socialistic system was evolved which was more than mere nationalization of the soil. Every five or six years a new division of the uncultivated lands was carried out. The lands now destined for cultivation were divided into tan; that is, rectangular cultivable sections of 1000 square yards in area. To each man a ku-bun-den, or portion of two tan, and to each woman one of one and a third tan was assigned. The head of the family was given the same landholding status as every male and female over five years of age; each was counted as the occupant of an uncultivated section. In addition ku-bun-den lands were loaned as rewards for service to officials—permanently, for three generations or for less; shoku-bun-den, or service lands, were given to princes and higher officers, and i-den, or noble lands, were also distributed. This distribution of uncultivated land to the individual, which is expressive of an almost atomic individualism, born probably out of a sentiment of extreme opposition to tribal collectivism, stands in decided contrast to the foundation laid by the ko, or family unit, which otherwise prevailed in the governmental features of the Taikwa reform. Notable also is the fact that the rigidly unified Japan of antiquity did not direct itself externally to a course of expansion or conquest.

The Turks, by far the most talented politically and the most warlike of the Mongols of western Asia, created their empire on practically the same scene as that of the caliphate (q.v.) of the Arabs. They were at first dependent on the Seljuks but later spread independently through Asia Minor. In 1356 they crossed the Hellespont, in 1361 they made Adrianople their capital and in 1453 effected the overthrow of the Eastern Empire by their capture of Constantinople. Under Suleiman I (1520-66) they conquered Hungary. During the period of their greatest expansion their empire stretched from the Leitha

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to the Bug and the Don, from the Peloponnesus to the Caspian Sea, from Algiers to the Persian border.

The Turkish Empire is the last instance of an empire conquered and ruled in the oriental manner. Its driving force was supplied by the combination of Mohammedan faith, superabundance of will to power and warlike prowess. Measured by the model of archaic despotisms the Turks did not really misgovern their lands. They remained tolerant in the sense that they only wanted to subordinate the non-believers rather than convert them to Islam. Their faults were chiefly those of callousness and, in the worst instances, of extortion and oppression. The administration under Mohammed 11 (1451-81) was so organized that the head vizier, later called the grand vizier, occupied the highest office and possessed the scal of the sultan, although the sultan was the absolute lord. The provinces were early divided into sanjaks, of which under Mohammed 11 there were thirtysix in Europe and forty in Asia, governed by sanjakbegs. The tax, census and postal systems were then already excellently developed. The army was formed of Turks around a nucleus of a lower property owning feudal nobility. The Janizaries, on the other hand, the sultan's bodyguards, were made up of prisoners of war or slaves trained for the service from youth, who devoted themselves unconditionally to the sultan.

The rule of the sultans suffered from the hereditary failings of oriental despotism, palace intrigue and the degeneration of the rulers. After 1566 the encroaching power of the Turks diminished and after 1718 they were pressed back into the Balkans. The nationalist movements of the nineteenth century resulted in the liberation and independence of the Balkan states, and finally by the Treaty of Sèvres in 1920 Turkey lost all its Greck, Armenian and Arabian dependencies. This forcing of the Turks out of Europe was natural and inevitable; it would have come about before the middle of the eighteenth century had it not been for the jealous rivalry of the European powers.

The archaic despotisms of pre-Europeanized America represent another group of empires. The kingdoms of the earlier peoples of ancient Mexico were barbaric incipient forms; the small states of the Mayas of Yucatan were theocracies; but the empire of the Incas in ancient Peru was of higher archaic culture. It too was animated by an incessant drive toward expansion and conquest. Its despotism was similar in many ways

to the near eastern and far eastern forms, especially in its administrative structure, in the division of the people into groups of tens, fifties, hundreds, five hundreds, thousands and ten thousands and in the state socialism of the cultivation of the soil. The name of the Inca empire, Tahuantinsuvu, which signifies "land of the four parts of the world," is literally the one assumed by the oldest Babylonian states; and the attempt to impose a state enforced monotheism by one of the last Incas in 1450 A.D. corresponded with the analogous attempt of the pharaoh Amenhotep IV about 1375 B.C. Both emperors assumed the name of the god to be worshiped: the Egyptian called himself Ikhnaton, and the Peruvian named himself Uriacocha after his sun god.

There is no lack of individual deviations and gradations in the morphology of the empires of antiquity, but the outstanding impression despite the variations is one of amazingly monotonous uniformity. It appears as though during this period the great men of action had no other purpose in mind than the concentration of brutal power either over their own people or preferably over alien peoples, and that the peoples themselves acquiesced. The life impulse of this era was tremendous, and since it found an outlet only to a limited degree in intellectual activity it therefore turned toward the simplest, most elementary form of action-violence and exercise of might. All development came merely as a consequence of this deep psychological experience. Another peculiar phenomenon regarding the external fate of nations can be perhaps explained by this experience—the fact that so often the most powerful empires not only decay after a course of centuries but vanish without a trace as though wiped off the earth. This was the fate of the empires of the Egyptians, the Babylonians, the Assyrians, the Medes, the ancient Persians, the Seljuks and the caliphate. Only a few, like the Chinese, Japanese and Turks, survived. It was always an external attack which precipitated the collapse. A new military power came upon the scene, and it was usually the newer nations just emerging from their primitive state who were victorious. The case was also one of geo-historical necessity, since the attacked nations were usually already in possession of rich lands—as on the Nile, the Euphrates and the Tigris-and the attackers came from the bare plateaus or desert wastes.

Little is known concerning the institutions of the empires which emerge in Greek antiquity. Only the foundation walls of the royal palaces and remains of networks of streets offer certain evidence of the kingdoms of Crete, Mycenae, Tiryns and Troy. These were all states of an extremely limited area, characterized by aristocratic rule and consequently by an encroaching paralyzation or utter annihilation of royal power.

During the later age of Greece, extending from 508 to 404 B.C., Athens experienced a display of political strength in the eras of the Persian and Peloponnesian wars which led internally to an extreme intensification of all its political and military activities and externally to a victorious repulse of foreign attack as well as to an indirect expansion of its own sphere of influence. The intimate naval alliance of Athens with the city-states of the Aegean, which it completely dominated, allows one to speak of an Athenian empire, at least in a figurative sense. The Greeks, however, were never able to achieve union within their own boundaries because of excessive local divisions. For a short time two camps under the leadership of Athens and Sparta confronted each other; but the Peloponnesian War, which arose from this, revealed by its outcome that such opposition was irreconcilable. Agrarian and conservative Sparta although intellectually weaker was victorious but was not strong enough in a political or military sense to subdue thoroughly and permanently the much more versatile Athens. This multiplicity and lack of unity in political life was, however, perhaps the chief cause for the high development of the Greek spirit.

Not until the succeeding period of ancient Greek history was empire created in the modern sense. This did not arise from Hellas itself, which on the contrary lost a large part of its political independence; it was effected rather by the semi-Hellenic Macedonia, which had just emerged from a barbaric, archaic despotism. But the Hellenism arising in this way was impregnated with the Greek spirit and later with Greek blood as well, so that it may be considered the legitimate continuation of the preceding Greek era. Alexander, the creator of a world empire of fabulous proportions in the short period of his life, set his stamp upon an extensive world state from Greece to the borders of India and from Egypt to the Black Sea. To be sure, the structure he built collapsed, but the resultant portions held together in the looser connection of a cultural and land area which may be designated as the first league of states; that is, a number of empires held together by

a durable nexus of political relationships. Thus was formed a confederation of states which while not really comparable in compactness and development with the European alliances of the eighteenth century may be regarded as their germinal and preliminary forms. The internal structure was also rigid and strong: the kingdoms of the Seleucids and the Ptolemies were organized under the influence of the oriental prototypes, the bureaucratic administration in Egypt being improved by its division into several classes and provided with a more highly specialized fiscal department. Material culture flourished under this form of government. The fact that these states broke under the overpowering might of Rome is not to be regarded as a sign of internal weakness.

In Roman history the period of royal control, from 753 to 509 B.C., and the aristocratic period, from 510 to 330 B.C., are occupied almost entirely with factional struggles. The later age from 330 to 133 B.C. is, as among the Athenians, despite its lack of a kingdom a period of development of the severest expression of state power. Internally it led to the concentration and magnification of political and military potentialities; abroad, to the extension of Roman rule in Italy and far beyond its borders and to the repulsion of a terrific foreign assault. The empire arising in this way thus represents the dominion of a single city-state over subjugated but unincorporated and unequal lands.

After a century of revolution, from 133 to 27 B.C., that form of the imperium set in which was the first to give to the concept of empire its name and original prototype. At the head there was a monarchy limited by its non-heritability and many aristocratic restrictions but uniting in the hands of the ruler a show of power hardly inferior to that of the ruler of an archaic despotism and after the advances and refinements of a later period even exceeding it in intensity. The might of the ruler, already absolute under the principate, from 27 B.C. to 284 A.D., became quite equal to that of the oriental despotism under the dominate of Diocletian and his successors, from 284 to 474 A.D.: the emperor became dominus et deus. The institutions and differentiations of the imperial period, particularly the post-Diocletian, gave rise to a system of officials which in European (but not in Asiatic or American) history has not been surpassed in its multiplicity of divisions. A series of gradations led from the emperor and his consistorium, or state council, to the four praefecti praetorio,

the administrators of the four large districts of the empire; from the *praefecti* to the *vicarii*, the governors of the next smaller districts still comprising entire countries; and from the latter down to the provincial officers, the *proconsules*, *consulares*, *correctores* and *praesides*. The scheme of organization and the development of law were then of an almost ideal type, and many of its sections remain so today.

In contrast with the modern states the internal structure of the Roman Empire remained basically a city-state as in its early period. Unlike the case of the Asiatic despotisms the peoples of the provinces remained subject peoples. Under Caracalla in 212 A.D. all the citizens of the provinces were granted Roman citizenship just as the people of Italy before them, but the narrow original city unit of the old Roman state with its environs retained the rule in its hands. Thereby through the lack of a strong democratic movement and through the neglect to free the fourth estate of its undeserved shackles of slavery the empire was no longer able to offer resistance and had to succumb to the onslaught of the Teutons, which in itself was the mightiest attack leveled against any cultured peoples in history. More or less by accident the Eastern Empire remained, only to fall prey later, completely disrupted, to the same fate at the hands of the Turks.

The Teutons developed their archaic monarchies out of small, free primitive states. The world empire of Charlemagne soon overshadowed them all and absorbed a great number of them within its sphere. The essence of the developing European political world lay in the basic fact that for the first and only time in history an entire group of states existed side by side without being bound closely either in peace or in war. In internal structure these states resemble in many aspects the archaic despotisms of Asia and even Africa, such as that of the Babylonians and the Hova of Madagascar. They share in common also the pressure toward conquest and expansion: the empire of Charlemagne has been estimated, probably too highly, as having contained 20,000,000 people. The Frankish administration by duchies like that of most of the Teuton kingdoms was made up of only one class but was at its height firm and reliable.

The road to the Middle Ages leads from the hereditary succession of officials and fiefs to the aristocratic state and the diminution of the royal power and with it the stability of empire. Nevertheless, the ancient imperial tradition continued to be a force in this period of the history of Germany; in England and France the countermovement for the resurrection of royal power began its course early. The claim of the German kings to Italy, Rome and the accompanying title of Roman emperor was a survival of the Carolingian era and became ineffectual after the extinction of the house of Hohenstaufen.

The modern age, like the Greek and the Roman, was a period of the most powerful external expansion and internal concentration of the power of the state. This was true also of those states like Venice and Holland which had no monarchical form of government. The characteristic traits of international history of this age were the consolidation of the mediaeval groups of states into a society of states, the extraordinary increase of both military and peaceful relations within this society of states and finally the expansion of leading states by the conquest of non-European colonies, as in the cases of Portugal, Spain, Holland, France and finally but most successfully England (see Colonies).

The most recent period is distinguished by imperialism (q.v.), which begins with the truly personal type of Napoleon and his attempt to set up a world empire. After the collapse of this undertaking the liberal democratic movement extending over a century introduced a pause in imperialism. The attempt of Napoleon III to create a European republic of states was only a weak reverberation. In the last third of the nineteenth century, however, imperialism as a collective movement arose and resulted in the creation of the great colonial empires of Great Britain, Russia and the United States.

The extension of the European society of nations to a circle of world states must be regarded as a corollary of imperialism. As early as the sixteenth century the Germanic-Roman concert of states had been widened by the addition of the still mediaeval Poland and in the eighteenth century by that of archaic and despotic Russia into a German-Roman-Slavic group of states. The American Revolution brought the United States into this group. As a result of the World War the League of Nations was brought into being, and as a consequence the ideal of world unity has been still more widened to embrace many of the non-European states.

Contemporary imperialism is simply the most modern form of that primitive drive for power which has led kings and nations onward ever since the pharaohs upon the path of acquisition of ever increasing masses of territory and of political power. The countermovement, which has called pacifism into being as its theoretical manifestation and the League of Nations as the much more powerful practical form of repression and limitation of the primitive human urge, is today neither morally nor politically in the ascendancy.

KURT BREYSIG

See: Imperialism; Conquest; Colonies; Government; Social Organization; Monarchy; Aristocracy; Centralization; Federation; Praetorianism; Civil Service; Revenue Farming; Public Domain; Transportation; Citizenship; Cosmopolitanism; Internationalism.

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EMPLOYEE REPRESENTATION. See Industrial Democracy.

EMPLOYEE STOCK OWNERSHIP. In the third quarter of the ninetcenth century profit sharing acquired considerable importance as a method of stimulating increased labor-efficiency and developing more harmonious relations between employer and employees. Some employers in England and the United States adopted the policy of distributing either optionally or arbitrarily the employees' share of profits in the form of company stock. Employee stock ownership thus grew out of profit sharing. Later employees were invited to buy stock in their companies and the terms of buying were made easy.

In the United States before 1900 several railroads tried to interest their employees in buying stock; but only one, the Illinois Central in 1893, attained a measure of success. Several companies that had profit sharing schemes allowed their employees to take their profits in the form of stock. Following the lead of other industrial companies the United States Steel Corporation made an offer of shares in 1903, starting an annual series of offerings since unbroken except in one year. Before the World War and during the war and its early aftermath others of the largest companies of the country adopted employee stock ownership plans; the largest of all, the American Telephone and Telegraph Company, did so during the depression of 1921. The movement was greatly accelerated in the epoch of recovery and boom that lasted into 1929. Probably three quarters of all companies that offered stock began to do so between 1916 and 1928.

The largest corporations, those with from 10,000 to 100,000 or more employees, have long been leaders of the movement. No count of the companies participating has pretended to be complete, but the number is probably nearer 1000 than 500. In 1927 it was estimated that the movement had embraced 1,000,000 employees, whose shares were worth \$1,000,000,000. In England in the same year there were 503,400 stockholders in eighteen corporations capitalized at \$700,000,000, many of them employee stockholders; in the case of Brunner, Mond and

Company employees owned 643,000 shares, or 5 percent of the total. Employee stockholdings are concentrated among a minority of employees and corporations; in 1927 in the United States 269,239 employee stockholders in thirteen corporations owned \$425,000,000, or almost half of all employee stockholdings. In 1929 a well marked era came to an end; the promotion of new plans declined, many companies withheld further offers or abandoned them altogether, and the stock owned by employees shrank severely in the general decline of market values.

Although employee stock ownership grew out of profit sharing and purchase plans often incorporate features suggestive of it, a distinction is imperative. Profit sharing arises most readily in a country where productive enterprises are small and owned by few persons and where the employees' wages or salaries may be supplemented in cash with a portion of profits that would otherwise accrue to the owners. Where the owners of capital are more numerous and where ownership takes the form of shares of stock, the employees may acquire shares. If a profit sharing plan is already in force, employees may receive shares in lieu of cash; copartnership, as this system is called in England, would then result; in that country it has latterly gained in prominence over long established profit sharing. In the United States both profit sharing and copartnership have greatly lost ground in comparison with stock purchases for cash, which in England would be called contributory copartnership. Copartnership in England is more highly developed than ordinary employee stock ownership; but the latter in recent years has acquired considerable importance, particularly among the larger corporations.

It is plain that stock purchase plans can arise only in a country where the rate of wages and the usual steadiness of employment allow employees to accumulate a surplus over customary needs. They thrive in a country where the stock market has been broadly advertised. In the United States their greatest development came after Liberty Loan campaigns had disclosed unsuspected founts of popular saving. The employee who had paid for his war bonds with periodical deductions from his earnings was ready to pay for shares of stock in the same way. After the war also customer ownership campaigns flourished whereby public utility corporations sought new capital and larger public confidence by selling shares to customers; the operation was conducted with a publicity that

stimulated the movement for stock purchase by employees.

Businesses, such as metal mining, whose profits fluctuate sharply from year to year rarely offer shares. Businesses whose earnings are steady or rising or which have a reserve of financial strength to withstand fluctuations of earnings have been leaders; the example of one company in an industry has been quickly followed by others. The more successful manufacturing companies, many electric light and power companies, the important petroleum refiners, a number of railroads, large mercantile enterprises including some chain systems, and sundry large banks have offered stock purchase plans to their employees.

The advantages intended are mutual. The employee is assisted to share in the prosperity of the company and makes a desirable investment of his savings. In turn he is expected to work more steadily, less wastefully, with more devotion to the company's interest; to become more constructive in his criticism and a force for allaying grievances instead of magnifying them.

In most of the companies trade unions have never been a significant factor and their introduction has been consistently opposed by the managements. Many companies have been leaders in the introduction of various policies calculated to improve labor relations within the company; in this respect employee stock ownership is an aspect of the "welfare capitalism" which has made rapid strides in recent years.

Either all employees or only stated groups may be eligible to subscribe. If the price is low or the incidental advantages of subscription are great, eligibility may be confined to workers employed for from two to five years or to managers and supervisors who are able to make the work of those below them more effective. The American Tobacco Company, which for years had maintained a plan open to the rank and file, established one in 1930 for several hundred employees, "beginning with the President and going down to and including sub-assistants in factory departments," to whom it offered a varying number of shares at a low price as "additional compensation for services to be rendered." In so extreme an instance the offer is tantamount to a bonus. Sometimes a company begins with an offer to "key" men and gradually broadens it to include nearly all employees; it is usually in manufacturing companies that "key" men are given preference. The higher executives

and the directors may be expressly excluded; occasionally a stock purchase offer is made exclusively for the higher executives. In general, employee stockholders and holdings are concentrated among employees in sales, technical, managerial, supervisory and other executive positions—among those, in other words, who are capable of influencing increased output and business.

The number of shares obtainable is usually determined by the amount of the employee's annual carnings. In the American Telephone and Telegraph Company it is one share for each \$300 of annual remuneration, with fifty shares as a maximum; in the United States Steel Corporation it is one share for \$1400 of compensation and more shares, rising to a maximum of sixteen, for fifteen higher salary groups. The price is sometimes the market price but is commonly less, even much less; alternatively, the company may "contribute" a portion, say a third, of the purchase price; and sometimes it binds itself to pay an annual bonus above dividends on shares that are retained.

Where a stock is intended primarily for persons in authority, most of those eligible are likely to buy. Where it is open to all, the proportion reached will depend on the effort made to enrol all, particularly since the price may be less advantageous where the scope is comprehensive. In many companies a comparatively large number of employees have subscribed; the range is from 5 percent to 40 percent, with an average of probably 15 percent for all the companies affected. A majority of employees is rarely included; even in the case of some small corporations, where employees own from 25 percent to almost 100 percent of the stock, employee stockholders do not exceed 40 percent of the total number of employees.

The variety of plans is great. Nearly always there are special features of price and term of payment, sometimes provision for loans on the stock to employees who need them or bonuses for retention of stock. Occasionally the stock is a preferred stock, more rarely a special form of employee stock; usually it carries a vote and in exceptional cases, for example, the Reynolds Tobacco Company, almost the entire voting stock may be lodged with executives and other employees. Sometimes, as in several Standard Oil companies, trustees vote the stock while it is being paid for. A number of plans are worked in close conjunction with employee representation schemes and company unions.

Employees often sold their shares when the market price rose. This was observed thirty years ago after the early Illinois Central offers and has been noted repeatedly since. Hence there are restrictions on selling, usually indirect: in many plans, a disqualification from buying more shares at a low price in the subsequent offering of stock. Yet often no penalty is attached if the employee retains a substantial part, say half, of his shares. Upon withdrawal from employment the employee who has not completed payments on stock may receive his money back with interest or its equivalent in stock.

In a few small companies groups of employees have become the owners of a large majority of the outstanding shares, although this is rare. In three of the largest corporations of the country, Swift and Company, the American Telephone and Telegraph Company and the United States Steel Corporation, employee stockholders owned as early as 1926 about an eighth of the stock; in two leading Standard Oil companies they owned 4 percent, having become the second largest stockholding interest. In other representative corporations, however, employee ownership was much smaller-0.4 percent, for example, in General Motors and 0.7 percent in the Pennsylvania Railroad. The average in the thirteen largest corporations was 4 percent; in twenty representative corporations the employee stockholders owned 4.5 percent of the aggregate stock. (Of the \$92,000,000,000 stock of all corporations, the total employee holdings of \$1,000,-000,000 constituted not much over 1 percent.) The combined strength in voting control of employee stockholders never equals that of a single stockholder owning the same fraction of stock, because they are scattered and may prefer or may chance not to vote together. In a few corporations either meetings of employee stockholders are held or they are permitted to elect a member of the board of directors, but this development is apparently not encouraged by the managements; in fact, in one extreme case the corporation explicitly denies its employee stockholders the right to vote, become members of the board, inspect the books or in any manner participate in management or control. Whatever its potentialities, the influence of employee stockholders on management and control is inconsiderable, although the final verdict must await developments still to come.

The influence of the employee stockholder in matters that concern him as employee is probably greater than his holdings would suggest

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Where the invitation to buy is repeated in later years, other evidences of good will are likely to appear—the more, if the company notes evidences of increased loyalty on the employee's part, diminished turnover of labor, avoidance of waste and the like.

The long market decline beginning in 1929 produced considerable losses among employee stockholders, although losses in many cases were mitigated by the fact that shares had been bought at the low prices of several years before or at least at prices below the highest boom prices. At the end of 1930, 320,000 American Telephone and Telegraph employees were still making payments on stock that would cost them \$240,000,000, at a price per share of not over \$150, a price well below the market at that time. This is the more favorable side of the picture. The shares of many companies fell, however, to a level far below the price the employees had paid, followed by reduction or omission of dividends; employee stockholders forced to sell because of unemployment or other reasons had to take heavy losses.

Opinions about the employee stock ownership movement differ. What established corporations have fostered has commended itself to the conservative both in business and outside. Critics who fear a growing concentration of control under capitalism have welcomed the employee contingent to the swelling ranks of stockholders of the large corporations. Those who emphasize the thrift of the individual as a means to his own improvement and to the healthy advance of society have commended the new movement. Enthusiasts have seen the foreshadowing of industrial democracy; it is interesting to note that one of the earliest of these enthusiasts, Nicholas Paine Gilman, said in 1889 that employee stock ownership "tends to make the establishment a purely co-operative one in time." This view has been ridiculed by the leaders of organized labor, who discern in the development an attempt to forestall a virile trade union movement. At the 1926 convention of the American Federation of Labor the Executive Committee in its report called employee stock ownership "a supplementary method of retarding the legitimate trade union movement" but urged further study and "utmost discriminating care" in passing judgment on particular stock purchase plans, as there were cases where plans were not used to combat unionism and collective bargaining. A resolution in that sense was adopted by the convention. The more radical labor elements consider employee stock ownership one of the newer devices of capitalism to strengthen its power.

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See: Stocks; Profit Sharing; Wages; Industrial Relations; Industrial Democracy; Welfare Work, Industrial; Corporation Finance; Public Utilities.

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EMPLOYERS' ASSOCIATIONS. An employers' association is a group which is composed of or fostered and controlled by employers and seeks to promote the employers' interests in labor matters. It is therefore, on first view, to the employer what the trade union is to the employee. The highly formal superorganization of employers of modern times has been the result of the capitalistic evolution in industry, commerce and finance. This evolution has also made trade union organizations both complex and extensive, and accordingly the associations and the trade unions have had counteracting influences on each other. This counteraction, the heart of the modern labor problem, has not been parallel, however, and associations are not the exact counterparts of unions either in form or activities. Action and counteraction have resulted in the more efficient organization of employers to meet uninterruptedly and effectively the chronic problems arising out of the employment relation. Whatever socializing influences have developed have been incidental and subordinate to that purpose.

Employers' associations are not a new form of organization. A stone tablet which has been unearthed among the ruins of ancient Sardis shows not only that employers' associations existed in the building trades of that day but that they appealed to governmental authorities to restrain certain practises by the workmen. The craft guild

of the Middle Ages ordinarily functioned as an employers' association not wholly unlike associations of master craftsmen in the building trades of our own times. In the United States the craft guild functioned as an employer's association in the colonies of Massachusetts, New York and Pennsylvania. Thus an association was formed to resist the demands of the ship carpenter sailors. The early conspiracy cases against labor organizations were instituted by the associations of master cordwainers, master carpenters, master tailors, master hatters and so on. The early associations employed methods suggestive of current practises; welfare work was promoted by the Employers' Central Executive Council shortly after its formation in 1873. As early as 1880 a National Labor League was formed in Pittsburgh for the purpose of building up workingmen's organizations "to put an end to strikes," and employers were also advised to use the labor injunction.

The assumption that trade union organization has always preceded any organization by employers is unwarranted. Employers' associations are organized and function whenever a group of employers is convinced of the desirability of united action in dealing with labor questions. For instance, the desire for legislation which would fix wages and require seven-year apprenticeships, as subsequently enacted in colonial Massachusetts, may have been the primary motive for the formation of the master shoemakers in 1646. European craft guilds had long furnished abundant precedents for such legislation. More recently the opposition to labor laws led American employers in the textile industry of the South to organize, although their employees were wholly unorganized. In Japan, where the workers are practically unorganized, the employers have strong associations. It is true, however, that demands from a newly organized or rejuvenated union may cause employers to reorganize, especially to organize more formally than in the past.

An employers' association differs from other entrepreneurial organizations such as chambers of commerce, trade associations, exchanges and pools, which are organized to promote a different set of interests. Since in the United States, however, the line of functional demarcation is not always clear, an employers' association rarely remains simon pure and usually performs other functions incidentally. On the other hand, a chamber of commerce or any of the other commercial organizations may also function as an

employers' association; it usually limits its activities to propaganda for the employers' point of view, but in local affairs it may occasionally act as a local coordinating employers' association. The chambers of commerce of France claim the right to control apprenticeship and other methods of training industrial workers, but the semipublic nature of the French chambers gives them a vastly different status from those in America.

At times an employers' association whose jurisdiction is limited to a handicraft trade, as, for instance, an organization of master plumbers, is called a trade association. Generally, however, a trade association has a larger scope, and where it concerns itself exclusively with the growth of the trade or commerce of its members and does not deal with labor matters it is not an employers' association. Even such an organization may take on the character of an employers' association-if, for instance, in attempting to improve the technical methods and equipment used in production by its members it should take up the matter of labor efficiency. A manufacturers' association which generally functions as an employers' association in such fields as legislation, politics and propaganda may be termed a trade association although its membership and purpose may be industrial rather than primarily commercial.

Similarly, pools and other price fixing associations may at times function as employers' associations, especially when the labor cost constitutes a large proportion of the cost of production, as in the anthracite coal and iron and steel industries during the last quarter of the nineteenth century and in the building and photoengraving industries today. A unified financial organization, however, like the United States Steel Corporation, cannot properly be called an employers' association, although many of its subsidiaries may belong to the employers' association in their respective fields. In addition to these easily recognized groups there are in the United States such bodies as citizens' alliances, leagues for industrial rights, rotary associations and the like, which may closely resemble the employers' association or may take on some of its functions.

There are many types and classifications of employers' associations. They may be classed according to jurisdiction as trade, industry and general associations. They may be formal or informal, depending upon whether the organization has a constitution, rules and a definite pro-

cedure; the formal are usually incorporated. Geographically, associations are local, state, district, national and even international. With regard to formal relations with other associations they may be classed as unaffiliated, affiliated and federated; federations may be pure or mixed and centralized or decentralized.

The different types of association make the movement seem more confusing and inconsistent than it really is in purpose and operation. In the United States, where the association develops out of immediate problems and has no official status, although its representatives may in practise exercise great influence, there arises the greatest number of types. In Italy the chief employers' association, especially since its acquisition of a legal status in 1926, functions as a great central controlling body that fosters and modifies its affiliated organizations in accordance with one general plan. Between these two extremes are the great majority of the continental European associations which, especially since the World War, have a quasi-public status and are represented on the national and local councils of labor and industry set up for advisory or other purposes by the governments. The best examples of this type are probably the German associations.

In contrast with most European associations, except those in France, the associations in the United States are not closely knit into federations, since they depend usually upon informal interrelations. Where federations do exist in the United States their decisions commonly have no binding effect upon the affiliated bodies, whereas in Europe the general federations in varying ranges of degree exercise considerable control. Although within national limits there are associations that are exceptions to the rule, the percentage of employers belonging to associations is generally greater in Europe than in the United States. In Italy membership has reached the highest attainable point, since by the law of 1926 the so-called independent employer is required to pay dues and is bound by the action of the association just as though he had joined voluntarily. In fact, employers' associations function as part of the government and constitute an essential factor in the Fascist regime. The law requires collective agreements and prohibits strikes and lockouts as criminal offenses. Over three million industrials are included within the jurisdiction of the Fascist Confederation.

On the basis of their attitude toward trade unions, associations may be classed as negotia-

tory, entering into trade agreements, or belligerent, offensively or defensively opposing union activities. A third and minor type is the mediatory association of which in the United States the National Civic Federation is an example; its aim is to induce employers and employers' associations to negotiate with trade unions. This classification also determines function and activities; from a functional point of view associations may be unrestricted or special; they may engage in propaganda, legislation, politics, welfare work, mediation, negotiation, conferences or in limited combinations of these. Thus the negotiatory association directs much of its energies into conferences with trade union officials, in formulating trade agreements and in adjusting disputes that arise between its members and their unionized employees. Negotiatory associations may also combine with trade unions to fix prices or control working conditions and in functioning thus may promote extensive "racketeering." In case of a strike resulting from failure to adjust differences directly or through arbitration the formerly negotiatory association may take on many of the functions of a belligerent association.

The belligerent association may perform any or all of the following functions: It may combat strikes with the old methods or with a modern highly organized and efficient system. It may prosecute union leaders for the violation of injunctions it has instituted, also for boycotting and the like. It may oppose legislation sought by the unions and seek to counteract their political activities. It may conduct propaganda against unionism generally and union leaders specifically. It may make direct war upon the union label and the closed shop in every conceivable manner. It may foster rival independent employee or company unions to supplant or weaken trade unions. During strikes it may assist its members financially; in the United States reserve funds of the association are drawn upon for strike breaking expenses; the European associations, generally negotiatory, provide usually against industrial war periods by schemes of strike insurance. It may eliminate and keep unionists and agitators out of the association shops by means of employment bureaus, independent ("yellow dog") contracts with employees and intelligence corps (labor "spies"). It may suggest to the employer that employee stock ownership in his corporation would lessen agitation. It may promote welfare work. It may encourage and support numerous forms of industrial education with a view to training an adequate supply of non-union workmen. It may urge employers to instal new machines and processes in their shops, thus depriving the union members of the strategic position that trade secrets and skill otherwise give; this procedure has proved to be a most effective weapon against trade unionism.

In general the aim of all employers' associations is to preserve the institution of private property and to maintain conditions least likely to diminish the profits of the employer and his control over his business. Thus the negotiatory Building Trades Employers' Association of New York City sets forth as its purpose: "In all lawful ways to promote and protect the business interests of the members of the Association." The hierarchy of the Italian employers' associations, at the head of which is the General Fascist Confederation of Italian Industry, officially explains its existence as "in accord with the general Fascist conception of production, in which all idea of the class struggle is abolished and all the various factors of production, actuated by a common spirit of collaboration, are required to adjust their mutual relations by agreement." The trade agreement thus becomes a weapon against the class struggle. The mediatory National Civic Federation in the United States also "aims to bring together the three forces of capital, labor and the general public to work out industrial problems through evolutionary rather than revolutionary processes." With the aid of trade unionists it seeks to make effective assaults upon the socialist movements. On the other hand, the belligerent National Erectors' Association, also in the United States, declares that "Bolshevism and the I. W. W. are being held up as bogies from which the acceptance of closed shop unionism is alleged to be the only escape"; and the Metal Trades Association, which is the largest, most highly developed and efficient belligerent association of the unrestricted type, places itself on record as in "opposition to the attempts of labor unions to fasten upon the industries of this country uneconomic conditions."

Perhaps the most outstanding difference between European and American national organizations is that the latter are predominantly belligerent, while except in France and Finland the great national associations of Europe, which developed out of belligerent organizations, are now usually negotiatory. In the United States the great majority of trade agreements entered

into by negotiatory associations are local-as a result not so much of the process of decentralization as of the transformation of national negotiatory associations into belligerent ones—but in Europe national associations for the purpose of conference with trade unions have extended beyond trade lines. Thus, for instance, in the National Alliance of Employers and Employed in England, a joint organization of trade unions and employers' associations, the following employers' associations are enrolled: Federation of British Industries, National Federation of Iron and Steel Manufacturers, Brass Founders' Employers' Association, Associated Chambers of Commerce, Incorporated Federated Association of Boot and Shoe Manufacturers, Central Landowners' Association and local associations. In Germany in 1924 the joint industrial association which was made up of representatives of associations and trade unions who had jointly signed the "November agreement" was broken up with the abrogation of that agreement. The associations in Germany have generally remained negotiatory, but the agreements have been decentralized to trade, industry or district. A similar decentralization also took place in Denmark about the same time. The approval by the federation is, however, usually a requisite to the validity of the localized agreements. In Italy this is true without exception. In France collective bargaining by the associations is confined mainly to the printing trades.

European employers now generally accept formal group action even in legislative matters, while perhaps the great majority of employers in the United States believe that individual or informal group action is preferable. Negotiatory associations must necessarily enrol most of the would be competitors in order to function best. On the other hand, a high degree of organization of employers is most difficult in the highly competitive industries. Organization of employers over the competitive area is often indirectly encouraged for negotiatory purposes by trade unions. The belligerent employers' association is designed primarily to preserve the individualism of the employer in labor matters, and the enrolment of competitors is not so necessary to its success. A careful reading of the declaration of principles of the National Association of Manufacturers or of the National Metal Trades Association will show that they are concerned mainly with the rights of the employer to conduct his employment relations free from "outside interference."

Associations in Europe have attempted far more than those in the United States to enrol the small employer. In the United States therefore the average number of employees per member is much higher. Small manufacturers have been organized in separate associations abroad, notably in France, Rumania and Denmark. Probably one of the most active associations of this type has been the federation of small manufacturers in the boot and shoe industry of France. France especially has developed associations of small employers because of the great extent of small scale enterprise there. In Denmark the small employers and their associations were brought into the general federation, but due to the post-war depression concessions to them in the matter of dues were necessary to prevent wholesale withdrawals. This resulted in the discontinuance of strike insurance by the Danish Employers' Federation and the adoption of reserve fund levies with very much restricted payments for strike relief. In these levies also special concessions to the small employers were made so that they paid proportionately less than other employers. The Swedish Employers' Federation has also had difficulty in retaining its small employer members. In contrast the belligerent Central Association of Finnish Employers eliminated the small employer by restricting membership to employers who used ten or more workers.

Whereas associations in Great Britain and Ireland, Germany, Italy, Denmark, Norway and Sweden include practically all the employers in the country and can thus commit the whole body of employers in any locality, trade or industry and even the entire nation to a particular course, almost the opposite is true in the United States. Here associations in very few trades, industries or even localities can boast of a membership of more than 80 percent of all eligible employers. Even the National Association of Manufacturers, the largest organization of its kind in the world, has enrolled only 5000 members, a very small percentage of the manufacturers of the United States. As a rule associations are more highly developed in the iron and steel industry than in any other industry, and the United States and Germany probably lead in the extent of association in this industry. Nevertheless, in the United States there are large numbers of employers in the metal trades whom even the National Metal Trades Association, one of the most efficient associations, has not desired or been able to enrol as members.

The organization of agricultural employers' associations is more fully developed in Germany than elsewhere. France has some agricultural employers' associations, mainly in the wine growing sections. The difference in the methods of landholding in the two countries is one of the chief factors in the comparative development. Italy's agricultural employers are also organized under government jurisdiction. Except among the fruit growers in California agricultural employers' associations in the United States are few and poorly developed.

Within a country there are frequently wide divergences in practise among the various associations. For instance, in Great Britain while the Engineering and National Employers' Federation was declaring a lockout in 1922 with the new issue of managerial functions as the point in dispute, the National Federation of Building Trades Employers of Great Britain and Ireland was taking a strong stand over apprenticeship, an issue that disappeared long ago in machine industries. Again, the Flour Milling Federation of Great Britain adjusted wages on the cost of living index basis, although the Glasgow Chamber of Commerce condemned the system.

Employers' associations expand most rapidly in membership and power during war years and years of credit expansion; this expansion goes unnoticed, however, until it is demonstrated in the strike waves which follow these periods.

Nearly all the great central federations of continental Europe and the United States have been formed in the twentieth century, most of them during or following the World War. They were logically succeeded by the growth of international employers' associations, also a post-war development. International cooperation existed prior to 1900, especially among the belligerent associations. In recent years, however, especially in industries whose products compete internationally, negotiatory associations have cooperated or federated internationally, primarily because concessions in increased wages or reduced hours made by an association in one country are likely to place its members at a disadvantage in international competition. This form of international association may have some bearing on the fact that in Great Britain in 1924 wages in industries competing on the world market were only 30 to 40 percent higher than in 1914 while in other industries they were 100 percent higher. International legislation on hours has stimulated the growth of such international employers' associations as the International Association of Building and Contracting Industry and the International Federation of Master Cotton Spinners and Manufacturers. In 1922 international cooperation among agricultural employers and their associations in Belgium, Czechoslovakia, Denmark, France, Great Britain, Italy, the Netherlands, Norway and Sweden resulted in the International Association of Agricultural Employers.

Associations have fostered the growth of welfare work and engaged extensively in industrial betterment activities. In this respect they have aided in the improvement of working and living conditions among the laboring classes. Perhaps no associations have undertaken to promote welfare work more systematically than those in Italy, yet conditions in Italy are not regarded as approaching the ideal. Belligerent associations like the National Metal Trades Association in the United States and negotiatory associations like the United States Brewers' Association have promoted welfare work but for different ends. Associations in France, Germany, Austria and Belgium have favored family allowance schemes but on a voluntary rather than compulsory state basis. Some European associations have endorsed hour legislation as a general principle, but they have protested against a rigid fixing of hours for all industries without regard to particular conditions and against subjecting the industries of their own country to an eight-hour convention when other competing countries were not so restricted by law. Employers' associations have advocated workmen's compensation laws and other legislation promoting the safety and health of workmen, but in these matters the broad social point of view has not been foremost. While the welfare work of associations has in one sense seemed to have a great socializing influence upon the individualism of the employer its main purpose has rather been the opposite, to offset in the United States the betterment activities of trade unions and in Europe the propaganda of socialistic organizations. In other words, welfare work serves the purpose of retaining for the employer the greatest amount of control possible over his business.

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See: Industrial Relations; Trade Unions; Collective Bargaining; Trade Agreements; Labor Disputes; Blacklist, Labor; Closed Shop and Open Shop; Company Unions; Welfare Work, Industrial; Family Allowances; Arbitration, Industrial; Trade Associations; Chambers of Commerce; Fascism.

Consult: United States, Library of Congress, Division

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EMPLOYERS' LIABILITY. Prior to the adoption of the modern systems of workmen's compensation for industrial accidents the opportunity of an injured workman to obtain damages from his employer rested in western countries upon the law of negligence. Fundamental to recovery was the necessity of showing in the courts that the injury to the servant was due to the master's negligence or fault. The general principle of the common law was that an injured person could recover for a tortious act in a suit for damages against the person guilty of the tort. A corollary of this principle was that the responsibility for an injury done to a third person because of the negligence of a servant working under the master's direction rested upon the master himself. It was and still is assumed that in such cases the servant is an agent of the master and that the latter must bear the burden of the servant's negligence.

If these principles had been followed consistently, an injured servant could have recovered damages for an accident occurring in the course of employment by demonstrating the negligence of the master himself or of another servant. In 1837, however, in the English case of Priestly v. Fowler (3 M. & W. 1) Lord Abinger laid down the precedent that a master was not responsible for injury due to the negligence of a fellow servant. In that case a worker riding on a van was injured as a result of the breakdown of the van due to its careless overloading by a coworker. Lord Abinger pointed out that the servant was under no obligation to take the risk, since he was free to decline employment, and that he was just as likely to be acquainted with any danger which existed because of his fellow's negligence as was his master. Thus was first enunciated the famous fellow servant doctrine, also known as the doctrine of common employment, which was thereafter generally followed in England and the United States. In 1842 the doctrine received its classical American statement from Chief Justice Shaw of Massachusetts in the case of Farwell v. Boston and Worcester Railroad (4 Metcalf 49).

In its most extensive form the fellow servant doctrine operated to relieve the employer of responsibility even though the fellow servant whose negligence resulted in an injury was a superior officer under whom the injured employee worked or was engaged in a department of the establishment other than that of the injured worker. All persons employed by a common master, whether or not they ever came into personal contact with each other or were in a position to exercise a restraining influence upon each other, were regarded as fellow servants for whose negligence the employer was not held responsible. Moreover, the employer was further protected by the doctrine of contributory negligence. If he could prove that the injured employee had failed to use reasonable care in doing his work and that the accident was due even though only in part to the worker's own negligence, the latter could not recover damages from his employer. A third defense of employers was involved in the doctrine of assumption of risk, according to which a worker on taking a job assumed the risk of injury due to ordinary dangers inherent in the occupation. It was maintained by the courts that the ordinary risk of

accident was considered when employer and worker made the wage contract and that the employer therefore had no pecuniary responsibility in case of accident arising from such a danger. This rule was also assumed to follow from the theory that an employer was responsible only for an injury due to his own negligence. The courts were not disposed to consider him negligent if accidents occurred, providing he had taken reasonable precautions to prevent them.

The positive duties of the employer to prevent accidents were to employ a sufficient number of competent servants, to put proper rules into effect whenever such rules might be expected to reduce the possibility of accidents, to provide a reasonably safe place to work and to furnish safe tools and machinery. The courts in considering whether the employer had met these obligations set up so-called reasonable standards of performance and did not hold the employer to uncommonly high requirements. If despite these ordinary precautions of the employer a worker was injured, the court generally absolved the former from responsibility for damages on the ground that the worker had assumed the risks of such injuries on accepting employment. If a worker knew that his work was especially dangerous because of the failure of the employer to perform all his duties and nevertheless continued to work without notifying the employer of the existence of the hazard, the latter could not be held responsible in case an accident resulted. If, on the other hand, the employer was notified and had promised to repair the defect and an accident occured before the promise was fulfilled, responsibility rested upon the employer. If after a reasonable time the employer's promise had not been fulfilled and the worker continued to work, the responsibility for an accident reverted to him.

During the latter half of the nineteenth century the law of employers' liability, as here described, was generally applied in Great Britain and the United States. On the continent of Europe the provisions of the civil law of liability, based upon the individualistic conceptions of the Roman law, resulted in the development of a law of employers' liability similar in many respects to that in Anglo-Saxon countries but on the whole somewhat more favorable to the worker. In France the law was based upon articles 1382 to 1384 of the Code civil. The first two of these sections provided for fault liability. The third stipulated more particularly that

masters and employers were responsible for the injury caused by their servants and overseers in the performance of the functions in which they had been employed. These provisions were interpreted to mean that every person must answer for an injury to another due to the negligence of himself or his agent. Thus workers could recover if they could prove that either the employer or his agent was responsible for the accident. On the other hand, workers could not recover for injuries due to the ordinary risks of work nor could they recover for accidents due to their own negligence. A doctrine of contributory negligence, however, was not rigorously applied, such negligence going ordinarily only to the measure of damages. The law in Belgium, Spain, Italy, Switzerland and Holland, based upon the same articles of the Code civil, was similar to that in France. It should be noted that the law of employers' liability based upon these provisions differed in an important respect from the common law in England and the United States: the fellow servant doctrine was not applied. In Prussia, on the other hand, the fellow servant doctrine was generally applied; under the rules of the German common law an employer was responsible only for the results of his own personal negligence; this meant that he was responsible only in so far as he had chosen incompetent agents.

The operation of the law of employers' liability worked an especial hardship upon the injured employee and his dependents. In a period during which industrial organization grew in size and complexity, widening the gap between worker and employer, and the widespread use of dangerous machinery and complicated industrial processes intensified the hazards of employment the worker encountered in the courts a set of principles which were much better suited to an industrial society characterized by the use of easily controlled techniques and by an intimate relationship between the master and his worker. The employee, badly in need of financial help because of the costs of the injury and interference with his regular income, was compelled to bring an expensive suit in the courts on his own initiative, based upon provisions of law unsuitable to the protection of his interests.

Moreover, in the case of fatal accidents a rule existed in the common law which was generally without a counterpart in the law of continental countries, existing neither under the French civil code, the German pandects nor the Prussian or Austrian codes. This was the rule that in case

of wrongful death no cause of action survived to the dependents or next of kin of the deceased. Based upon the maxim actio personalis moritur cum persona, the Latinity of which has been considered by legal historians to be very dubious, the rule operated entirely to relieve an employer precisely when an accident proved most serious. It was abolished in England, however, at a comparatively early date by Lord Campbell's Fatal Accidents Act [9 and 10 Vict. c. 93 (1846)], and a movement for similar legislation began about the same time in the United States, resulting finally in the adoption of one form or another of remedial statutes in all American states.

The social inadequacies of the whole situation with respect to employers' liability gave rise to the passage of statutes whose purpose was to limit the application of the employers' ordinary defenses. Probably the first of such statutes was the Prussian law of 1838, which declared that a railway company was responsible to any person for an accident unless it could be proved that the accident was due to the injured employee's own negligence or to vis major, the equivalent of the common law "act of God." This statute put into effect a principle which was far in advance of its time, i.e. under it the burden of proof in case of railway accidents to workers rested upon the employer. Other German states copied the idea, as did Austria in 1869, and in 1871 it was enacted into an imperial statute which was extended in 1873 to the whole empire. The first section of this act relating to railways simply incorporated the provisions of the Prussian law of 1838; the second section of the act applied to accidents in mines, quarries and factories and while it established less favorable rules of liability in these fields it represented some improvement over the German common law. It was provided that in case of accidents in mines, quarries and factories the employers were to be liable for the negligence of the officials (or vice principals) whom they had put in charge of their establishments. This involved an important modification of the fellow servant doctrine which bore a close resemblance to provisions of later English and American statutes.

The English Employers' Liability Act of 1880 had as its chief object the abolition of the fellow servant defense in the case of accidents due to the negligence of a vice principal; and in the case of railway accidents due to the negligence of a person in charge of the operation of signals, locomotives or trains. The provision respecting railway accidents was later embodied in the

statutes of Massachusetts, New York, New Jersey and other states, although it is to be noted that Georgia had adopted a similar provision as early as 1855 and several other American states had followed it. A number of states, including Massachusetts, New York, New Jersey and Pennsylvania, enacted statutes abrogating the fellow servant doctrine in the case of injuries due to the negligence of a superior employee with authority to give orders; while other states abolished the doctrine when the fellow servant was engaged in a different department of the establishment. The doctrine was abolished in case of railway accidents in about two fifths of the states and in case of mine accidents in Missouri and Oklahoma, and it was abrogated as a defense in all accident cases in California and Colorado. In some jurisdictions the courts themselves modified the fellow servant doctrine without waiting for the passage of legislation. Thus the rule was not applied with respect to vice principals by the United States Supreme Court; with respect to superior servants by the courts of Ohio, Illinois and a number of other states; and with respect to workers in other departments in Illinois, Missouri and elsewhere.

The doctrine of contributory negligence was also modified by statute. In its place was set up the rule of comparative negligence, according to which proof of the worker's own negligence instead of completely relieving the employer of responsibility operated to diminish his responsibility in proportion to the relative negligence of the worker. This principle was embodied in the legislation of California, Wisconsin, Georgia and Oregon and was applied to railroad accidents in Nebraska. In several jurisdictions the doctrine of assumption of risk was abrogated by statute in case of injuries arising through the violation of safety laws by the employers. California in 1911 abolished the doctrine of assumption of risk in all cases.

The Federal Employers' Liability Act of 1908 as amended in 1910 applies to accidents upon railways engaged in interstate commerce and represents a serious attempt to correct the inadequacies of the common law. This legislation followed an earlier act of 1906 which had been held unconstitutional upon the technical ground that it applied to intrastate as well as interstate commerce [Employers' Liability Cases, 207 U. S. 463 (1908)]. The legislation now in force has completely abrogated the fellow servant rule. It has substituted the principle of comparative negligence for that of contributory negligence.

It has abolished the doctrine of assumption of risk in all cases in which injury was due to the violation of the safety statutes by the railway companies. It has provided for damage suits in case of injuries resulting in death. Finally, by declaring void any contract between the employer and the worker whereby the latter agreed not to bring suit in case of injury it has met a situation under which workers were often seriously handicapped.

Despite attempts to improve conditions by legislation of the kind described the shortcomings of the law of employers' liability had become so generally recognized toward the end of the century that there was widespread dissatisfaction with it among employers and judges as well as among workers. It was recognized that only a small proportion of injured workmen received substantial compensation and that they and their dependents were forced to accept lower living standards and often suffered destitution as a result; that even in those cases in which substantial damages were awarded the recipients had to pay excessively large fees to attorneys, estimated at from 20 to 50 percent of the awards; that the system by encouraging fruitless litigation was expensive to the state; that recovery under it was long delayed, although the need for funds on the part of the injured was immediate; and that it bred antagonism between employers and workers, since whenever accidents occurred the opposition between the two parties was likely to be intensified.

Although injured workers did not often win substantial awards in the courts, juries occasionally granted large sums. Employers found it difficult to plan for such eventualities. In time private insurance companies came to their aid and offered in return for the payment of regular premiums to assume the burden of fighting liability cases and to pay within stated limits whatever damages were awarded. Many employers took advantage of this opportunity, but since it was generally impossible to estimate the probable cost of the burden to the insurance companies with any degree of accuracy the premiums were very high. As a result employers were generally found to be paying sums to the companies greatly in excess of the amounts actually paid out by the latter to injured workers.

Furthermore, the employers' liability system operated to promote dishonesty and legal malpractise. The victim of an industrial accident was likely to be interviewed at the first opportunity by a lawyer offering to defend him and

urging him to bring suit for a large sum or by a lawyer for the employer or an insurance company urging him to make an immediate and inadequate settlement and stressing the weakness of his legal position if he should bring suit. In either event a just settlement was not likely to result. The situation encouraged the presentation of perjured testimony if the case went to court, and the superior legal talent representing the employer reduced the worker's already slight chance of victory. If the worker under the pressure of need agreed to a cash settlement instead of bringing suit, he was unlikely to get substantial compensation.

The need of an entirely different compensation system for injured workers was recognized earlier in Europe than in the United States. The first step in reform was the acceptance of the principle of risque professionnel. Instead of relieving the employer of responsibility for accidents due to the ordinary hazards of industry it was proposed that the costs of such accidents as well as of all others except those due to the worker's intention should be considered as part of the costs of production and should therefore be borne by the industry. Accompanying the principle of risque professionnel was the idea that compensation for injuries should be paid without the necessity of bringing suit and according to a definite schedule of benefits varying with the nature of the injury. The third and final part of the new system was compulsory insurance carried by employers to enable them to pay compensation to injured workers.

Workmen's compensation laws embodying these principles more or less completely had been enacted in all important European countries by 1910, at which time a campaign for their adoption was well under way in the United States. The pioneer country in Europe was Germany, which adopted a workmen's compensation law in 1884. It was followed by Austria in 1887, Norway in 1894, England in 1897, France and Italy in 1898, Spain in 1900, Holland and Sweden in 1901, Belgium and Russia in 1903, Hungary in 1907 and Switzerland in 1911. The first compensation law in the United States was passed by Maryland in 1902 but was declared unconstitutional two years later. This, however, was only a temporary setback. At the end of the year 1930 only four states were still operating under the law of employers' liability. EDWARD BERMAN

See: Workmen's Compensation; Negligence; Damages; Accidents, Industrial; Mining Accidents;

RAILROAD ACCIDENTS; SAFETY MOVEMENT; COMPENSATION AND LIABILITY INSURANCE.

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EMPLOYMENT EXCHANGES

EUROPE. Employment exchanges are offices at which work people seeking employment and employers requiring work people may notify their respective needs. They are a market place for labor, intended to replace the unguided individual search for work or for employees—the hawking of their labor from door to door by work people, the posting of their needs at their own factories by employers or the use of newspaper advertisements by either. The general function of employment exchanges is thus to substitute an organized for an unorganized marketing of labor, but where such employment exchanges are run as competitive business enterprises this function is likely to be subordinated to that of profit making for the owner of the exchange. There has therefore been advocated and in some instances effected the establishment of a coordinated system of public employment exchanges. The main advantage to be gained from organization is greater and better guided mobility of labor from district to district and trade to trade carrying with it an improvement of industrial efficiency and a reduction of unemployment. Public employment exchanges have also been advocated for a number of subsidiary purposes including the decasualization of occupations which make a practise of casual employment, such as dock labor, the dovetailing of seasonal occupations and vocational guidance to juvenile

workers; these are all specialized forms of labor market organization. In addition the employment exchange may supply information as to unemployment to serve as a basis of relief measures and may control the administration of unemployment insurance.

The organization of employment exchanges as a gratuitous social service under public control is now part of the industrial policy of most European states and of many states outside Europe. At the first session of the International Labour Conference of the League of Nations held at Washington in 1919 a convention as to unemployment was signed, including as its second article a provision that each ratifying member was to establish a system of free public employment agencies under the control of a central authority, with advisory committees representative of employers and of workers, and that where both public and private free employment agencies existed steps be taken to coordinate their operations on a national scale. It provided moreover for a coordination of the operations of the various national systems by the International Labour Office in agreement with the countries concerned.

By the end of 1928 twenty-three countries had ratified the conventions unconditionally; namely, South Africa, Austria, Bulgaria, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, India, Irish Free State, Italy, Japan, Jugoslavia, Luxemburg, Norway, Poland, Rumania, Spain, Sweden, Switzerland. An additional number of countries have more or less developed systems of free public employment exchanges: Argentina, Australia (where exchanges are maintained by the separate states), Belgium, Canada, Czechoslovakia and the Netherlands. The actual scope of the exchange system varies greatly in the different countries. In Russia the system is coordinated with the scheme of state socialism and use of the exchanges is compulsory upon all employers wishing to hire labor. The most highly developed voluntary systems are those of Germany and Great Britain.

In France a system of public employment exchanges has been in existence only since the war of 1914–18. Although regulatory legislation dates back as far as 1852 and acts passed in 1904 and 1910 provided for the setting up of employment exchanges by the cities, it was not until after the legislation of March, 1916, that the system became effective. Departmental (provincial) exchanges replaced those of the communities and were coordinated into a national system through

six regional clearing houses and a central employment exchange under the Ministry of Labor. In 1929 the total number of placings made by these offices amounted to over a million and a half; most of the offices are highly sectionalized as to vocations and each industrial section pursues a policy which has been arrived at after consultation with representative bodies of workers and employers. In addition to these exchanges there are depots in border cities which recruit and place several hundred thousand immigrant laborers annually.

In Germany the employment exchange system is local in origin. The Berlin exchange was founded by a voluntary association as long ago as 1883. A general movement for the establishment of exchanges in all important towns either directly under the municipal authority or with a subsidy from its funds began about ten years later as a consequence of the industrial depression of 1893-94 and the attention called thereby to the problem of unemployment. By 1904 there were about 400 public general exchanges filling about 550,000 vacancies a year in addition to exchanges maintained by employers, trade unions, guilds, chambers of agriculture and other bodies. A survey of the exchanges was made at that time by the German Statistical Office as part of a report on the possibility and methods of insuring against unemployment, since it was believed that the practicability of unemployment insurance depended entirely upon an adequate system of employment exchanges.

Until after the World War the national government in Germany merely collected information and published statistics as to the work of the local exchanges. A movement toward nationalizing the system began as part of demobilization plans in December, 1918, and culminated in the act of July 16, 1927, setting up a National Institute for Labor Exchanges and Unemployment Insurance (Reichsanstalt für Arbeitsvermittlung und Arbeitslosenversicherung). This institute, although its headquarters are in the Ministry of Labor at Berlin, is not technically a department of the federal government and its officers are not federal civil servants. It is intended to be a self-governing institution for a specific public purpose, under the control of a commission representing equally employers, employees and public authorities, with the president of the institute as its chairman. Most of the exchanges formerly maintained by local authorities have been incorporated in the institute as distinct employment offices; of these there were 361 in op-

eration in 1928. In the same year there were moreover 1629 non-profit making exchanges maintained by public and philanthropic bodies; these although not incorporated in the institute are to some extent supervised and coordinated by it. There were also many registries—principally for domestic servants-run as commercial undertakings. The act of 1927 provided for the abolition of all such profit making registries by December 31, 1930. The employment offices directly controlled by the institute filled 6,258,373 vacancies in 1929, while the independent exchanges not working for profit filled 756,425 vacancies. In addition to exchange work in the narrow sense the institute has an elaborate organization for giving advice to boys and girls in the choice of careers. It also, as its name indicates, administers the compulsory unemployment insurance system.

In Great Britain effective employment exchanges developed much later than in Germany and were national almost from their beginning. Before 1910 the only exchanges of any importance were those established by the Central (Unemployed) Body for London under the Unemployed Workmen Act of 1905. The national system followed on the report of a royal commission which from 1906 to 1908 exhaustively examined the administration of the poor laws and the problem of unemployment and recommended as the first step for dealing with unemployment the establishment of a national system of labor exchanges. Under an act passed in pursuance of this recommendation in 1909 a system of exchanges covering the whole United Kingdom was established, controlled by a government department, the Board of Trade. The first exchanges began work in February, 1910, and the system reached its full extension by the beginning of 1913; to it was added the function of administering the system of compulsory insurance against unemployment, introduced for certain trades under part II of the National Insurance Act of 1911. The exchanges were at first known as labor exchanges; the name was changed to employment exchanges at the end of 1916. Almost immediately after, on the institution at the beginning of 1917 of a separate Ministry of Labour, control of the joint service of the employment exchanges and unemployment insurance was transferred from the boards of trade to this new department.

The system today includes about 1200 local offices. Of these slightly over 400 are employment exchanges staffed by full time officers in

the direct service of the Ministry of Labour, covering all towns and urban districts of any importance; while about 800 are branch offices in small towns and country districts, undertaking specified duties in connection with exchange work and insurance for a remuneration varying with the volume of work. All these local offices are grouped in seven territorial divisions in each of which is a divisional clearing house charged with the duty of coordinating the work of the separate exchanges. The endeavor of each exchange is to fill any vacancy for employment from suitable men on its register; if suitable men are not available, the vacancy is transmitted to the divisional clearing house; the divisional clearing houses in turn communicate unsatisfied demands for labor to a national clearing house. The exchanges deal with all kinds of employment—manual, clerical, domestic—and make no charge for their services. As in Germany, the private registry for domestic workers still predominates, especially since workers in private household employment are exempted from unemployment insurance. In the case of a trade dispute the exchanges do not refuse to register vacancies created by it but in bringing these vacancies to the attention of work people give notice of the dispute. With juvenile workers under eighteen special consideration is given to vocational guidance either directly by the Ministry of Labour with the help of a special committee representative of educational interests or else by the local education authority, which maintains an exchange for juveniles under the supervision of the Ministry of Labour and in cooperation with the rest of the exchanges. It is estimated that these agencies handle rather more than half of the total number of juvenile workers.

The development of the British employment exchanges as placing agencies has been much interfered with, first by the war of 1914-18, during which a great variety of miscellaneous duties was thrown upon them, and later by the growing burden of insurance administration. In 1928 a government committee called the Industrial Transference Board drew attention to the importance of transferring to other areas men in districts where mining and certain heavy trades had irretrievably decayed. Partly as a result of this and partly for other reasons there has been within the past few years a revival of exchange work proper, as distinct from unemployment insurance, in the employment exchanges. The number of vacancies filled each day, which had sunk to under 2500 in 1922, rose

to over 5000 in 1929 and rose still further in 1930 in spite of the severe depression of trade. The scale of operations of the British exchanges as placing agencies is thus much below that of the German exchanges but appears to be greater than that of any other country except Russia, where it is recorded that an average of 2,500,000 vacancies is filled each year.

W. H. BEVERIDGE

UNITED STATES. The private fee charging employment agency is as characteristic of the United States as the socialized service is of European countries. The public employment agencies of municipalities, states and the federal government numbered about 217 in 1930. There is no accurate record of the number of private agencies, but it is estimated that there are between 3000 and 5000, operating under highly varying state regulatory provisions. This figure probably includes a number of agencies operated on a semicommercial or non-profit seeking basis for the placement of social workers as well as juvenile vocational guidance bureaus, private teachers' agencies, collegiate women's vocational bureaus and the like, which represent the most efficient and most reputable of the group.

The large majority of the employment agencies are those which supply manual labor and domestic service. The most powerful are those which supply railways and contractors with common labor. They are strong business organizations with central offices in such labor centers as New York, St. Paul, Minneapolis, Chicago and St. Louis and branch offices or representatives in a number of other cities. Their contracts with the railway provide for their exclusive employment not only as recruiters and suppliers of labor but as concessionaires and owners of the commissaries operated along the line. These agencies usually split fees with "padrones" among the immigrant groups, and the workers are often bled by these padrones for additional fees, representing interpreters' commissions for securing jobs or preventing discharge. Since this is predominantly an interstate business, it is impossible for the individual states to regulate the agencies adequately and no federal provision has as yet been enacted.

State regulation varies widely in effectiveness. The first regulatory act was that of Massachusetts in 1848. In addition to Wisconsin, Minnesota with its act of 1885, which established a \$100 municipal license fee and required the posting of a \$10,000 bond to be drawn against

for damages in case of fraud, and with subsequent legislation is at present the only state with stringent regulatory legislation. Idaho is the only state which prohibits fee charging agencies. An attempt to pass a similar law in the state of Washington was declared unconstitutional [Adams v. Tanner, 244 U. S. 590 (1917)]. Forty-one other states have enacted legislation, with licensing fees ranging from \$2 to \$200, the majority being between \$10 and \$100.

The provisions of the regulatory laws indicate the abuses which characterize the business. They prohibit misleading advertising, misrepresentation and other forms of fraud. They forbid agencies to collect fees from both employer and employee and prohibit fee splitting between the agencies and employers. Some states endeavor to regulate the fees to be charged. Oregon, for instance, has graduated fees approximating 5 percent of the wages paid on the job. Most states forbid registration fees. Some require the filing of fee schedules with the industrial commission. A number of states require the agencies to post notices of strikes and lockouts or to stamp the information on the introduction cards given to men sent out to jobs where disputes are in progress.

A judicial decision which may be of far reaching importance in such regulatory legislation is that reached in Ribnik v. McBride [277 U. S. 350 (1928)] which held unconstitutional a New Jersey law fixing the fees charged by private agencies on the ground that such legislation exceeded the police power of the state. This is especially significant in view of the impotence of the public employment exchange, the movement for which has been greatly hampered by the activities of private employment agencies.

Isolated attempts on the part of states to establish public offices date back to 1890, when Ohio established agencies in five cities. In the quarter of a century preceding the depression of 1907 only twenty-seven such agencies had been established, but between 1907 and 1909 twenty were instituted. The return of prosperity caused a loss of interest in the agencies and in 1917 there existed only ninety-six in the entire country.

Federal activity in the establishment of public employment offices actually began in 1913 with the creation of the Department of Labor; under an empowering act of 1907 its Bureau of Immigration and Naturalization opened a number of offices in eighteen "zones" throughout the country, each manned by an immigration inspector and some with branch offices. The number of

offices opened had no relation to the employment needs of the states; their methods of operation, such as the posting of notices in public places, violated most of the canons of good employment practise. A similarly inadequate step was next undertaken, when every post office was made an employment office.

Whereas prior to the World War the establishment of public offices was urged as a measure of unemployment relief during periods of depression, labor shortage constituted the basis for the wartime public employment system. Already in 1914-15 the labor surpluses on which employers depended showed signs of decreasing and with American participation in the war employers feared the loss of millions of experienced workers. In the first few months of American participation not only employers but government departments stole men from each other; private agencies and their scouts reaped enormous profits; turnover increased by leaps and bounds. On January 3, 1918, therefore the Employment Service was separated from the Bureau of Immigration. The United States Employment Service, which was created to replace it, had to function immediately although it had neither organization, equipment nor staff. The service expanded by the rapid establishment of new offices, reaching a total of 832 by October, 1918, and by the absorption of existing state and municipal offices, either by agreements or cooperation or by assuming actual control. Strenuous efforts were made to enlist other agencies: third and fourth class postmasters, the newspapers of the country, motion pictures, the National Grange and other agricultural organizations, councils of defense and the like were utilized. Cooperation was also effected with the United States Department of Agriculture. The recruiting of labor was aided by two organizations previously created: the United States Public Service Reserve and the Boys' Working Reserve. It was not until President Wilson declared that after August, 1918, all employers "engaged wholly or partly in war work, whose maximum force . . . exceeds 100" were required to hire all of their unskilled labor through the United States Employment Service that employers began seriously to depend upon the service and to discontinue competitive solicitation. About the same time state advisory boards, community labor boards and the like, on which employers and employees were represented, were established. There were 1386 such organizations in operation by October, 19:8

By the time the organization was in good working order the armistice had been signed. In 1918 the service was financed from the president's contingent fund by an appropriation of \$5,500,000. In 1919 Congress appropriated \$400,000 for the service but subsequently cut the appropriation to \$200,000. The agitation of the National Manufacturers' Association, which feared a possible labor bias in the service and preferred an uncontrolled labor surplus, and of private agencies as well as the inefficiency and waste of the service during the war militated against the continuance of the system.

Intermittent efforts to reestablish an adequate federal-state employment service reached a high point in the depression of 1929–31. The Kenyon-Nolan Bill, later known as the Wagner Bill, providing for a supervisory organization on a nation wide basis with financial aid to and control over state and local exchanges, was presented to Congress several times and was finally passed in the spring of 1931 only to be vetoed by President Hoover.

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See: Unemployment; Labor Turnover; Migratory Labor; Casual Labor; Trade Unions; Labor, Government Services for.

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ENCLOSURES. Enclosure was the process by which, from the twelfth century onward, land hitherto unoccupied or subject to common control or rights passed into individual use and enjoyment. Its outward sign was a ditch, wall, fence or hedge; its motto, "Trespassers will be prosecuted." In the New World enclosure accompanied the growing density of settlement and the framing of satisfactory methods of alienating the public domain; inroads on native land (as in New Zealand), boundary disputes with neighbors, pastoral leasehold tenures (as in Australia), the desire to prevent cattle from straying, the scarcity of shepherd labor and the cheapness of steel wire led to the rapid enclosure of arable or pastoral holdings in most newly settled regions. In Europe also enclosure brought much waste or unoccupied land into effective use, but more conspicuous is the fact that it did much to destroy the village community, redraw the rural map and clear the way for better husbandry. It was a powerful force in transforming the British manorial system into the modern capitalistic rural organization and in building up the latifundia of Hungary, of Germany east of the Elbe and of Spain; and within the past fifty years it has been invoked to free Russian and Prussian peasants from the routine and conservatism of village control.

The central feature of the economy within which the European enclosure movement developed was the mediacval village, with its open arable fields cut up into many strips, its common pasture and waste lands, its two or three-field system including fallow, its predominant subsistence farming and its rule of custom or communal decree. In such a village the typical cultivator held a number of strips of arable, received a share of the hay from the village meadow and had the right of pasturing his plow oxen and some other animals on the commons, on the waste, on the meadow after hay had been cut and on the arable fields after harvest or during the period of fallow. Other common rights gave him access to supplies of fuel and lumber and possibly of fish. The humbler villagers, who had little or no arable land, were able to feed a few sheep and cattle on the commons, thus supplementing their earnings as hired laborers or as village industrialists.

The possible defects of this system are obvious in retrospect. There was waste of land, as in balks, headlands, paths, and waste of time in getting from strip to strip or from the dwelling to the more distant lands; plots were too small or narrow for efficient cultivation; drainage and weed control were difficult; distant fields received little manure; boundary disputes and trespass were common; soil exhaustion was possible and land was put to uses for which it was unfitted. Commons might be overcrowded, cattle diseases could spread easily, breeding was promiscuous, cattle strayed and waste lands were underutilized. Routine imposed by the village checked initiative and experimentation and accentuated rural conservatism, although incidentally it may also have checked the slipshod farmer. But these criticisms are in large measure the verdict of hindsight; they are valid only in the light of a knowledge of better technique, of transportation facilities, of supplies of capital, of commercial rather than subsistence farming, of the existence of good urban or foreign markets, of growing population, of land scarcity, of the possibilities of specialized production and of a class of landlords or cultivators actively seeking to wring a larger financial return from the soil. The persistent survival of the open field system in at least half of England until the eighteenth century and in parts of the continent until recent decades is evidence that it did manage somehow to satisfy the economic and social needs of a peasantry which was chiefly concerned with feeding itself and paying its dues, had little contact with big growing markets, had little capital and was resigned to occasional starvation. Only the pressure and possibilities of the last two centuries have revealed fully the unsuitability of the system and have led to its final disappearance in England; on the continent its end has not yet come.

Enclosure as it was commonly practised might be of at least four kinds. The most simple form was the enclosure of waste lands—moors. sandy stretches and swamps—over which villagers might have common rights, but from which the landlord drew little benefit. Such land was of little use until it was enclosed and treated systematically by drainage, paring, manuring and similar methods. Secondly, common pastures might be partially enclosed by the commoners or under certain conditions by the landlord. In a third form of enclosure the demesne arable strips were withdrawn from the village fields, consolidated and enclosed in a compact

farm. Meanwhile other arable holders might by exchange, purchase, lease or other means bring their scattered strips together, and this procedure if pushed far enough would convert the open fields into enclosed compact blocks of land. As a fourth method all the village lands might be enclosed at one step instead of piecemeal. In such case the claimants surrendered all their rights to arable, to a share of the hay and to common pasture. In return each received one piece of land, on which he could do as he wished and from which he must draw crops, hay and fodder. The transformation would be completed if the farmer built a house on his new holding and migrated from his home in the village.

Enclosure was continuous, especially in England, from at least the thirteenth century; therefore the methods as well as the character of the land enclosed changed with altering economic and political conditions as well as with the status of the enclosers. Some enclosure, possibly piecemeal, was done by the cultivators themselves even in fourteenth century England. One instance of such enclosure by agreement in 1250 has been found, and it is certain that during later centuries agreements among farmers led to consolidation of arable strips or enclosure of commons. In peasant countries, such as France after the revolution or Russia after the emancipation of the serfs, agreements played the chief part in the process of enclosure; in Russia after 1906 the state allowed the individual to demand the withdrawal of his holding from the village fields and permitted a bare majority of the mir to decide that the whole of the land be cut up into individual farms. But important as was this movement the initiative, especially in England, was taken chiefly by the landlord.

The enclosing landlord had some freedom of action. He could withdraw the demesne from the village fields. As tenancies fell vacant he might add them to the demesne, and tenancies at will could be terminated at any time. The Statute of Merton (1235) and the Statute of Westminster II (1285) conferred or confirmed power to enclose parts of the common pasture or waste provided sufficient land was left to satisfy the tenants' common rights, and in this way the landlord could add to the demesne or carve out new tenancies. In Germany the introduction of Roman law after 1500 gave the landlord legal sanction to enclose commons, for the Roman code did not recognize common rights. But any further action was checked by property

rights which had to be respected, namely, those of the glebe, the tithe owner, freeholders, copyholders and tenants for life, lives or long leases. The landlord might buy up these rights, especially those of the freeholders; he might wait till tenancies expired, try to convert copyholds into leaseholds and leaseholds for lives into shorter tenures; he might try to expel tenants or take advantage of real or technical defaults to seize holdings; he might impose so heavy a fine when a holding passed from the hands of one generation to those of another that the newcomer could not pay it and had to surrender. He might seek agreement among the owners of these rights and have it confirmed by a decree in chancery or an engrossment in quarter sessions. Finally, after 1688 he could appeal to Parliament for a private enclosure act which would impose on recalcitrants an agreement reached by the owners of three fourths or four fifths of the "rights, shares, and interests"; and as he by this time owned possibly at least half of them, it was not difficult to get the tithe owner and a few others to join hands in a petition to Parliament.

The prominent part played by the landlord class in the English movement may be explained partly by the extent to which that class was refreshed by constant infusions of capital and blood from the commercial and financial groups. The social prestige and later the political power attached to landownership attracted the bourgeoisie; except in times of rural depression land has seemed a good investment and the mortgage a gilt edged security. London merchants of the fourteenth and fifteenth centuries bought land for social advancement or for investment of their idle capital. Land held by the old feudal families or the monasteries passed largely into the hands of men drawn from the city, and the opportunities for feeding towns and of meeting the demand for wool had given a commercial flavor to rural life by Tudor times. The rising prices of the sixteenth century tempted owners to get the most out of their estates, and leasemongers rented lands in order to sublet them at a profit; the sequestration of royalist estates after the civil war and the land hunger of the industrial and commercial leaders in the eighteenth century brought new brooms to sweep the countryside. Finally, the profitable possibilities of high farming were seen first by the landed class and led it to enclosure as a preface to the investment of large sums of capital on improvements and the reorganization of estates in larger farms.

The attitude of the state toward enclosure has

been determined by consideration of social as well as economic results and partly by the relations between landlord and state. The Tudors tried to check enclosure of arable and commons for grazing purposes, since this caused rural depopulation, weakened the country's man power and accentuated pauperism. In Denmark landlords were forbidden in 1682 to absorb serfs' holdings into their demesnes lest the supply of militiamen be reduced. Prussian and Austrian rulers tried to protect the peasants in the eighteenth century for similar reasons. On the other hand, a government controlled by landowners would permit and even encourage enclosure. English landlords dominated Parliament, which in turn dominated the government after 1688; and the path to enclosure was smoothed. In Prussia the Junkers were strong enough to be able to frame the details of the emancipation decrees in such a way that the peasant lost a third or a half of his land. In Estonia and Livonia the large landowners could do as they wished, and when the serf gained freedom he paid for it by losing his holding.

Governments also favored enclosure when some urgent need had to be met or where it was evident that the open field system was standing in the path of agricultural progress. Bad seasons, rising prices, the demands of growing industries and population and the threat of starvation during the wars from 1793 to 1815 would have driven any kind of British government to foster enclosure after 1760. The French royal decrees of 1760, 1764 and 1766, encouraging reclamation, division of commons and limitation of common rights, were prompted by English example and the desire to end the famines which so frequently gripped France. The Danish government in 1781-82 realized that the open field plan barred agricultural improvement and therefore gave peasants power to withdraw their holdings. Forty years later Prussia led the German states in authorizing the division of village lands and reformed the laws of inheritance to prevent further subdivision of small properties into still more strips and still smaller estates. Austria on the eve of the World War was vigorously encouraging the consolidation of peasant holdings, and Stolypin's Russian reforms of 1906 were an attack on the conservatism and inefficiency that came from village control and dispersed holdings. Since 1918 countries attempting land reform have given attention to consolidation of arable strips (e.g. Czechoslovakia and Poland) or to the dissolution of the mirs (Latvia and Lithuania).

We cannot measure accurately the extent of enclosure in any country at any period. Analysis of the data bearing on the Tudor enclosures has toned down the exaggerated pictures painted by contemporaries and shown that the area and population affected at that time were fairly small. But the material is far from complete; it deals with the great central plain and leaves the southeast and southwest shrouded in mystery. Similarly, we do not know exactly how much land was affected by the thousands of enclosure acts passed after 1700 and know nothing about the area enclosed by other methods. Before 1700 about half the parishes in England had open fields; there was still a vast area of waste land, estimated by Gregory King at 10,000,000 acres. After 1700, 4800 acts and awards authorized the enclosure of an area which has been estimated at 6,500,000 acres, or nearly one fifth of the whole country. In fourteen counties between a quarter and a half of the land was enclosed by legislative sanction alone. In Prussia between 1870 and 1911 nearly 50,000,000 acres, owned by 2,500,000 peasants, were recast in solid holdings; this was an area equal to about two thirds of the total cultivated area of the German Empire. In Russia the Stolypin reforms led between 1907 and 1916 to the enclosure of 10.9 percent of the holdings and 10.7 percent of the area held in village allotments. In Lithuania 1510 villages with a common ownership were reorganized up to January 1, 1928, and Latvia is steadily proceeding with the liquidation of 3600 village communities taken over from Russia.

The economic effects of enclosure were generally beneficial. Enclosure in itself did nothing to improve farming methods, and many eighteenth century observers were surprised to find old rotations and fallows on enclosed land. It did, however, liberate for productive use much land which had been wasted in balks, footpaths and the like; it saved the cultivator's time by concentrating his work in one place, stopped trespass and ended boundary disputes. Its chief merit lay in what it permitted rather than in what it did; it gave the individual cultivator freedom of action and opportunity to practise better farming. Drainage, cross cultivation, root crops, new rotations, better manuring, substitutes for fallow, all could now receive attention. Light soils yielded more abundantly when turnips or clover replaced fallow; meadows and pastures could be nourished; cattle breeding

need no longer be haphazard; abundant fodder was forthcoming for larger herds, which in turn meant more manure and better crops; while land could be put to the use for which nature or the market made it most fitted. Waste lands could be made more productive and swamps and sand hills be systematically treated. There was inducement to landlord or cultivator to sink capital in improvements or equipment; and rising productivity, especially if accompanied by rising prices (e.g. in England between 1760 and 1814 and from 1849 to 1873), allowed rent and profit to be increased. Sir William Beveridge estimates that since the Middle Ages there has been at least a threefold increase in English wheat productivity. The credit for this cannot be apportioned among the various factors responsible, but there is probably a measure of truth in the various eighteenth century assertions that enclosed land yielded about 25 bushels per acre while adjacent open land gave 15 to 17 bushels. Perhaps the best measure of enclosure and its sequel, better farming, is seen in the United Kingdom's ability to feed a population which grew from 15,000,000 in 1801 to 21,000,-000 in 1821 and to supply nine tenths of the wheat requirements of 27,000,000 people in 1841.

On the continent too enclosure gave the farmer freedom to discontinue fallowing and to develop rotations based on alternation of cultivated grasses and cereals; it made possible the improvement of livestock and of dairying, the cultivation of the potato and beet and the building up of larger grain exports from the lands south of the Baltic. Where holdings were small, consolidation of strips or plots allowed the peasant to make the most of the little he had.

Of the effects of enclosure on rural society it is less easy to make generalizations. Where arable was converted to pasture and tenants' holdings or commons were swallowed up in sheepwalks, there were depopulation, eviction and possible destitution. In Tudor England and in Scotland two centuries later there was much suffering, but in the eighteenth and nineteenth centuries the dispossessed could migrate to the growing industrial towns or emigrate. Enclosure after 1760, and especially between 1793 and 1815, was carried on under the shadow of bad seasons and rising prices, the promise of the new agricultural technique and the worship of the large farm. Hence the chief sufferers were the small leaseholder and the cottager who supplemented his wages by keeping livestock on the commons. Tenancies at will could be termi-

nated at any time, and all leases except those for life or lives were voided by an enclosure act. The small leaseholder was squeezed out in order to make possible the creation of larger tenancies. Cottage tenants received no land in lieu of common rights, for the land went to the owner of the cottage; cottage owners did get some, but it was usually too small to be of much use and often money compensation was paid instead. Thus the small lessee became a wage earner and the poor lost room for their livestock. There is general agreement between contemporaries (such as Young) and modern scholars that the divorce of these classes from the soil was, as Curtler says, "the great blot on the enclosure movement" and that the injury was indisputably great. On the continent the loss of "servitudes" (i.e. the small peasant and laborer's right to use the forests and pasture lands) cut away an important source of supplementary income; in post-war Poland, for instance, the breaking up of the large estates has deprived the laborer of employment, while the distribution of the commons has taken away his "servitudes."

Enclosure helped to build up larger holdings, especially where the demand for grain, wool or high farming was urgent. The small leaseholder's land went to make larger units in eighteenth century England; the holdings of Prussian peasants were absorbed in the large grain farms of the Junkers after 1807; and many small or less successful owners in Russia sold their lands to others after 1906, thus helping to swell the kulak class. By the eighteenth century most of the unenclosed land in England was being cultivated by tenants who held at will or on short leases, and the landlord was therefore free to redivide most of his land in such units as he wished. But Professor Clapham's analysis of census returns destroys the old view that enclosure put an army of laborers under a small group of big farmers. In 1831 it was estimated that 47 percent of the British farmers employed no hired labor or omitted to mention any; in 1851 the percentage was 45; and two thirds of the farms in that year were less than 100 acres in area.

It is hard to disentangle the effect of enclosure from that of purchases and price fluctuations on landownership. The growth of trade in land, the extension of leasehold at the expense of copyhold, the ban on entail from the fifteenth to the seventeenth century and the political and religious disturbances combined in England to cause mixed movement, in which some large estates and many small ones disappeared but in

which apparently the moderate sized owners increased in number. After 1660 and especially after 1688 there was marked diminution in the number of small and medium owners and a growth of large estates. A recent survey of 2000 parishes in eight counties which were the scene of much enclosure during the eighteenth and nineteenth centuries shows that in 1780-86, 90 percent of the land was in the hands of tenants at will or on short leases and that occupying owners (including freeholders, copyholders and tenants for life or lives) had ceased to be an important feature of rural life. During the years 1780 to 1815 parliamentary enclosure gave full weight to the claims of these owners, and they received compact farms. Some of them, however, could not bear the cost of enclosure and sold out; others sold their land in order to lease larger farms or to get capital for investment in industry or commerce. The rest flourished, thanks to war prices, while many successful tenants bought land, thus adding to the number of farming owners. The depression and lower prices after 1815, plus the burdens of taxation and poor rates, ruined many of these men; yet the number of occupying owners in the eight counties examined was larger in 1832 than it had been in 1780, and during the intervening years no large new estates had been formed at the expense of such owners. We have therefore to look to other forces than enclosure for an explanation of the decline in the area cultivated by owners in England; it fell from at least 15 or 20 percent of the country in 1830 to 10.7 percent in 1913. This was partly due to the landlord's inability to sell in bad times because of entail and his willingness to buy more land in good times. He bought extensively during the prosperous period that began in 1837 and culminated in the early seventies; thus he reached the peak of a development which had been going on by fits and starts for at least five centuries and which made general that distinctively British system in which the big landlord supplied land and fixed improvements, the tenant farmer supplied management and working capital and a landless class supplied the hired labor.

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See: AGRICULTURE, SECTIONS III and IV; AGRARIAN MOVEMENTS, SECTION III; MANORIAL SYSTEM; MIR; VILLAGE COMMUNITY; ENTAIL; LANDED ESTATES; RECLAMATION; STOCK BREEDING; WOOL; PEASANTRY; FARM TENANCY; LATIFUNDIA; AGRICULTURAL LABOR; POOR LAWS.

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ENCYCLOPÉDISTES were the group of scholars, men of letters and philosophes who under the direction of Diderot and d'Alembert collaborated in the great Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers of the French Enlightenment. The Encyclopédie was originally designed as a commercial enterprise in the form of a translation of Chambers' Cyclopedia or an Universal Dictionary of Arts and Sciences, which had been published in London in

1728. In 1746 after divers fruitless efforts to launch the work the publisher, Lebreton, approached Denis Diderot, who at that time possessed a mediocre reputation resting chiefly on his translations of a few English books. Diderot perceived the opportunity to construct an original encyclopaedia of far broader scope than that of Chambers and having won Lebreton to his scheme immediately secured the mathematician d'Alembert as editor-in-chief. D'Alembert, who was perpetual secretary of the Académie des Sciences, brought the support of academic circles.

The spirit of the Encyclopédie was defined by d'Alembert in his famous Discours préliminaire, which prefaced the first volume. But it was Diderot who really set the enterprise afoot and to whom is due the credit for completing it in the face of obstacles extraordinary even for eighteenth century France. It was he who was chiefly responsible for soliciting and securing the service of collaborators. Celebrated men of letters, Voltaire, Montesquieu and Buffon, were induced to furnish a few articles; but the last two never displayed more than lukewarm interest and Voltaire's position was chiefly that of a sympathetic and, on occasion, critical observer. For the bulk of the articles the editors relied on writers far less known. The most indefatigable contributors were men whose fame rests almost exclusively on their association with the Encyclopédie: de Jaucourt, Boulanger and Boucher d'Argis, who wrote on the history of moral philosophy, social science and law respectively. Others like Toussaint, Eidous, Dumarsais, Beauzée and Cahuzac were writers or scholars of second rank. The most famous churchman among the encyclopédistes was Morellet, but others of a far more orthodox persuasion—the abbés Yvon, Mallet, Pestré—also belonged to the group. There were a great number of specialists: the medical men Tarin, Louis, Malouin; the watchmaker LeRoy; the mechanician Goussier; the cartographer Bellin; and the architect Blondel. Baron d'Holbach wrote on chemistry. Rousseau, whose philosophy was still in the process of development, was assigned the articles on music and wrote the one on political economy. Most of the articles on economics, however, were written either by Forbonnais or Quesnay. Besides revising the work of his collaborators Diderot supplied missing articles and reserved to himself all subjects pertaining to the history of philosophy as well as to the description of industrial processes, a field in which his work was that of a pioneer.

Freedom from civil and ecclesiastical interference had been guaranteed by a royal decree issued in 1746. Nevertheless, the privilege was revoked twice during the course of publication. In 1752 at the instigation of the Jesuits the Conseil du roi suppressed the two volumes already published, but the editors were allowed to continue with the work. After the appearance of the seventh volume in 1757 the wrath of the church created a far more serious storm, gravitating partly about the publication of Helvetius' De l'esprit, the dangerous principles of which were laid to the door of the *Encyclopédie*, partly about d'Alembert's article Genève, in which by lauding the tolerance of the Presbyterian citadel the author was supposed to have indirectly censured the intolerance of the Sorbonne. The unfortunate article was fraught with momentous consequences. It antagonized not only the Roman church but the Genevans, who did not relish d'Alembert's compliment; it transformed the immanent irreconcilability between the ideas of the philosophes and those of Rousseau into open enmity; and the reactionary opinion which it evoked so disgusted d'Alembert that he thereupon withdrew from the *Encyclopédie*. To cap the difficulty the Conseil du roi, dealing the blow which the Parlement of Paris was more deliberately preparing, formally suppressed the Encyclopédie in 1759 and forbade its continued publication. Diderot was not to be deterred. Under his direction the ten remaining volumes were secretly printed by Lebreton, who, however, in his solicitude for his own safety mutilated many of the articles; and in 1765 they were delivered under a Swiss imprint to the four thousand subscribers. Diderot remained associated with the enterprise until 1772 when six volumes of plates were published. With the five volumes of supplements and the two volumes of tables which appeared in 1777 and in 1780 respectively he had nothing to do. As soon as it was completed the whole work was copied by foreign publishers and issued in several editions.

The vicissitudinous history of the *Encyclopédie* indicates that it was regarded as a dangerous instrument of propaganda against the church. Its purposes were, however, far broader and more profound. "The aim of an encyclopaedia," wrote Diderot in the article *Encyclopédie*, "is to gather together the knowledge scattered over the face of the earth, to set forth its general plan to the men with whom we live and to transmit it to the men who will come after us, in order that the labors of past centuries may

not have been in vain in those that follow, that our children, better informed, may at the same time become happier, and that we may not die without deserving well of mankind." The Encyclopédie was therefore first of all a dictionary, a summa or bilan of all knowledge, scientific, moral and technical. Wishing to collect "all books into one," the editors drew heavily from all printed material, particularly the dictionaries of Bayle and Moréri, the learned collections published by academies and religious orders, books of travel and legal treatises. Thus the Encyclopédie is a vast compilation of very uneven value but containing a definitive record of the state of knowledge and thought-whether individual or social—in the middle of the eighteenth century. In their classification of this knowledge the encyclopédistes were deeply indebted to Francis Bacon, whom d'Alembert raised to an eminent pinnacle in the history of thought. Diderot's enthusiasm for Bacon was scarcely more reserved. "If we emerge from this vast operation," he wrote in his Prospectus, "our principal debt will be to chancellor Bacon, who sketched the plan of a universal dictionary of sciences and arts, at a time when there were not, so to say, either arts or sciences."

The enemies of the encyclopédistes frequently referred to the group as a sect or a school—the parti des philosophes, in Rousseau's phrase. While they do not deserve this title, it is nevertheless true that a common Weltanschauung predominates and that in fulfilling the purpose which d'Alembert had described in his Discours as the specific function of an encyclopaedia in contrast to a dictionary, namely, to establish a logical bond, un ordre et un enchainement, between all aspects of human knowledge, the encyclopédistes were in reality presenting the elements of a coherent sociological theory. In voicing their views they were forced to resort to divers subterfuges, some original, some borrowed from Bayle or other eighteenth century writers. They called in the pious abbots Mallet and Yvon to conceal the audacity of a Diderot, a Boulanger or a Damilaville. Many of their ideas were conveyed under cover of the history of moral, philosophical and theological doctrines—a type of historiography of which Diderot was one of the originators. It is nevertheless transparent that the encyclopédistes, taking their work as a whole, accepted as a fundamental premise of their thinking the eighteenth century thesis that a natural order exists in the universe. In this premise and its corollaries their real issue with the church inhered. Affirming the superiority of reason over revelation, they refused to admit the Biblical writings as an authoritative interpretation of human evolution. They declaimed against miracles, superstitions and sacerdotalism in all its manifestations. They attacked Christian morality as insufficient to insure the welfare of the individual, whom it attempts to distract from earthly life, and of society, which it subordinates to personal salvation. They set forth a concept of material, political and moral progress dependent not upon the plans of a transcendent and eternal divinity, but upon intellectual evolution, the influence of science and the light of reason o upon the development of social institutions.

The conception of a rational universe ruled by immutable laws, although it was at least as old as the stoic philosophy, owed much of its immediate potency to the dissemination of the Cartesian spirit. But in their general theory of knowledge the encyclopédistes represented that reaction from Cartesianism which had been initiated by Locke and popularized in France by Condillac. They denied the existence of innate ideas and condemned categorically if not always functionally all a priori reasoning. Holding with Condillac that all ideas derive from primitive sensations and that all mental functions can be explained as transformation of these sensations, they tended toward a broad positivism, as in the case of Diderot and Boulanger, or toward relativism, as in the case of d'Alembert. Reason gave them an infallible criterion for evidence and furnished the basis for their faith in progress. It remained nevertheless true that reason was merely a faculty combining the data of experience and that man was, as Protagoras had said, "the measure of all things." Or, in the words of Diderot, "one consideration especially that we ought never to lose from sight is that if we ever banish man, or the thinking and contemplative being, from above the surface of the earth, this sublime and pathetic spectacle of nature becomes no more than a scene of melanchely and silence."

Thus speculative interest centered about man and particularly, in view of the eighteenth century notion of progress and perfectibility, about the possibility of ameliorating his terrestial existence. In this sense the *encyclopédistes* were both humanistic and humanitarian. Their theory of human nature was crude, depending principally upon their psychological doctrines, which they integrated with the ideas of Buffon regarding human origins. Nevertheless, it marks the be-

ginnings of a definite anthropological doctrine designed to supplant the Biblical tradition. It was the natural man or man in his universal essence that they strove to present—a being belonging to the animal series, although at its summit, capable of receiving impressions and of obeying tendencies, subject like the whole universe to causal determinism, responding to external laws according to a universal pattern and progressing by reason of the evolution of these responses or the development of institutions to which he could react. Out of their theory of human nature grew their theory of social origins. Rejecting the contractual hypothesis no less than the supernatural explanation of the theologians, they ascribed the birth of society to the needs of the natural man and then proceeded, according to their characteristic method, to deduce its function from its origin. In order to satisfy human needs society must guarantee private property and furnish individuals with the greatest possible degree of well-being and independence. In their description of social origins the encyclopédistes devoted much space to ethnography of primitive peoples, about whom they became informed chiefly through the many books of travel in circulation at the time. Their faith in human progress was, however, too firmly rooted to permit them to slip into Rousseau's systematic apology for the bon sauvage or to identify the primitive with the natural man.

The ethical doctrine presented by the encyclopédistes was essentially utilitarianism, strongly tinged with the naturalism of Diderot. But while they held that man naturally seeks a good synonymous with pleasure and avoids an evil synonymous with pain they attributed to him an instinctive sympathy drawing him spontaneously toward his fellow men. Once society was established, the common weal began to take precedence over individual welfare; and in their calendar of moral virtues the encyclopédistes assigned first rank to those of a social nature: tolerance, labor, justice and philanthropy.

When they turned from discussing natural man and society to considering the principles of the actual social organization of their time the encyclopédistes did not conceive a violent rupture with traditional institutions to be necessary. They accepted the monarchical form of government, although they justified it not on the grounds of divine sanction, but by a postulated historical contract, according to which the reigning family promised to rule in the interests of the people and the people pledged itself to obey.

Hostile to tyranny and the regime of privilege. they would nevertheless have willingly adapted themselves to an enlightened despotism, provided that the philosophes were permitted to furnish the enlightenment. What they desired was a tolerant government functioning within the limits of the constitution, respecting the "fundamental laws" of the kingdom and manifesting particular solicitude to increase the welfare of the producing classes. In the domain of economic theory the Encyclopédie is chiefly important because in it were published the earliest writings of the founder of physiocracy, Quesnay. But certain ideas more or less common to the encyclopédistes as a group had an immense effect upon the immediate course of economic and political development. They were at one in perceiving the necessity of fiscal reform and, although their remedy was retrogression to the golden age of Henry IV and Sully, the effect of their protest was to emphasize the evils of the system of finance, as well as of government in general, which had descended from Louis XIV and Colbert. Still more important was their advocacy of the cause of industry, an advocacy in reality amounting to sublimation, since they linked the development of trades and industries, of which they gave detailed and illustrated accounts, to the physical and intellectual progress of mankind. By thus insisting upon the social importance of the commercial and industrial classes the *Encyclopédie* paved the way for their accession to political power. Without demanding revolution, probably without even wishing to imply it, the encyclopédistes contributed to the self-consciousness of the bourgeois class, which was destined to accomplish it. The practical reforms which they proposed as potentially realizable within the framework of the ancien régime -definition of the constitution, guaranty of individual liberty, state protection of science and industry, reform of the criminal law, limitation of privileges, improvement of administration and in particular of the fiscal system—became the program of the Constituent Assembly of 1789.

In conception, plan and execution the Encyclo-pédie represents the projection of the idea current in the eighteenth century that the progress of mankind can be achieved through the diffusion of knowledge and of reason. It is the typical as well as the consummate expression attained in France by the Enlightenment. A mighty instrument in the molding of eighteenth century French opinion, a force incorporating and uni-

Encyclopédistes - Endowments and Foundations

fying the scattered forces of the *philosophes*, the *Encyclopédie* also has paramount significance from the purely scientific point of view. It was in fact the first great attempt at a positive synthesis of human knowledge. It bestowed upon the social sciences the objective and experimental spirit of the physical sciences and prepared the materials for future research and thought. In the *Encyclopédie* may be found the roots of Turgot's and Condorcet's doctrine of human progress and of the positive systems later constructed by Saint-Simon and Comte.

RENÉ HUBERT

See: ENLIGHTENMENT; RATIONALISM; HUMAN NATURE; SOCIAL CONTRACT; MONARCHY; PROGRESS; FRENCH REVOLUTION.

Consult: Hubert, René, Les sciences sociales dans l'encyclopédie (Paris 1923), and Rousseau et l'encyclopédie (Paris 1928); Ducros, Louis, Les encyclopédistes (Paris 1910); Le Gras, Joseph, Diderot et l'encyclopédis (5th ed. Amiens 1928); Roustan, M., Les philosophes et la société française au NVIIII siècle (Lyons 1906), tr. by F. Whyte as The Proncers of the French Revolution (Boston 1926); Morley, John, Diderot and the Encyclopaedists, 2 vols. (new ed. London 1886); Giraud, Victor, "Les étapes du xviiie siècle" in Revue des deux mondes, vols. xxii—xxv (1924-25), especially vol. xxii, p. 344-75 and vol. xxiii, p. 882-917; Bury, J. B., Idea of Progress (London 1920) ch. viii; Delvaille, Jules, Essai sur l'histoire de l'idée de progrès jusqu'à la fin du xviiie siècle (Paris 1910) bk. iv, ch. i.

ENDEMANN, WILHELM (1825-99), German jurist. Endemann was an eminent authority on commercial law and civil procedure. He first attracted attention in commercial law by his valuable Studien in der romanisch-kanonistischen Wirtschafts- und Rechtslehre (2 vols., Berlin 1874-83), in which he followed the canonical doctrine of usury through the centuries and combated its errors, particularly that of the unproductiveness of money. Although he did not do full justice in this work to the economicopolitical bases of the law of usury in the Middle Ages he nevertheless provided an infinitely painstaking survey of older theories of commercial law and furthered in many ways the history of commercial law and of European economic evolution. Endemann also collaborated in the editing and writing of the great handbook of commercial law, Handbuch des Handels-, See- und Wechselrechts (4 vols., Leipsic 1881-85), a monumental work in its time but lately superseded by Ehrenberg's handbook. In his Das deutsche Handelsrecht (Leipsic 1865, 4th ed. 1887) Endemann strongly stressed economic aspects or practical jurisprudence as against abstract deduction.

Endemann was attracted to problems of civil

procedure as the result of his considerable experience as a judge, and he left his mark especially upon the law of evidence. In a series of works in the Archiv für die zivilistische Praxis from 1858 to 1860 he wrote against the formal theory of evidence strongly embedded in the common law procedure of the time and declared for the modern principle of the judge's right to pass upon the materiality of evidence. He was aided in gaining recognition for this principle by his collaboration on a committee for the reform of civil procedure as well as by his membership in the Reichstag. A concise exposition of the common law civil procedure, Das deutsche Zivilprozessrecht (Heidelberg 1868), criticized the antiquated procedure of the time in all its aspects and paved the way for its reform.

Endemann was an ardent champion of the economic and purposeful conception of law but, unlike his contemporary Ihering, he undervalued the traditional methods of jurisprudence; hence he was particularly important on the legislative side, where his somewhat one-sided and impatient views, setting comparatively little store upon the gradual improvement of the law through science and practise, were very effective. His historical works are of permanent value.

ERNST HEYMANN

Consult: Schulte, J. F., Allgemeine deutsche Biographie, vol. xlviii (Leipsic 1904) p. 358-62; Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 949-53.

ENDOWMENTS AND FOUNDATIONS.

The practise of devoting funded wealth to the pursuit of some continuous purpose designated by the donor has existed in almost every society where the necessary institutional and legal stability has been attained; and very rarely has it been challenged or denied. In former times far more than at the present communities were shot through with such manifestations of private will functioning more or less harmoniously alongside those of collective will; and apart from cases where the ends were in some sense individualchantry endowments, for instance—the causes of charity, religion, education and health have until recent years owed more to private than to public sponsorship. Thus Plato bequeathed his Academy to his successors with an endowment of productive land. The Ptolemies endowed their library at Alexandria; the younger Pliny a school at his native town of Como. Throughout the

Middle Ages the endowments of religious orders,

edifices and institutions were the means by which certain social services were regularly performed—the maintenance of the English roads by the monasteries, for example, as well as the upkeep of schools, colleges, orphanages, hostels and hospitals. The central place which the church occupied in mediaeval life, the fact that the unitary state had not yet emerged to take over the performance of public services and the tendency during the later Middle Ages to set up the corporate form of autonomous organization gave direction and spur to these endowments. By Henry VIII's time they were thought to comprise from one third to one half the public wealth of England. Following the Reformation the guilds and companies became the chief disbursing beneficiaries; and even today the status of many English hospitals, charitable institutions, colleges and church livings shows the historical contribution of private will to public purpose.

The eighteenth century saw in both England and France the rise of a critical attitude toward this way of organizing the performance of social services and of disposing of accumulated wealth. Turgot commented on the inability of a donor to "communicate his own zeal from age to age" and Adam Smith remarked that "the effect of endowment on those entrusted with any cause is necessarily soporific." Strict regulation by the revolutionary and succeeding governments in France permanently diminished the total of French charitable endowments. In England a succession of parliamentary commissions from 1818 to 1853, principally under the leadership of Lord Brougham, culminated in the establishment of a permanent Board of Charity Commissioners, which in 1860 on the accepted principle that "charities are trusts of a public nature" received wide powers of control and supervision, including the power to remodel obsolete purposes and amalgamate scattered funds. Despite the vast enlargements since the late nineteenth century in the sphere of collective purposes and the evolution of new organs of collective will the principle of private endowment has continued to discover useful ends not yet absorbed in the public pattern; while the harvest of the industrial and commercial revolutions has placed unprecedented sums at the disposal of private individuals—so much so that the modern foundation is a typically American phenomenon.

Partly on account of the comparatively late rise of large accumulations American endowments have been mainly secular. The religious

impulse has waned and has given way to the purposes of education, social melioration, research and propaganda. While the volume of the individual endowment has in recent times increased almost precipitously, some of the early endowments were interesting in their provisions and influential in determining the form and direction of later ones. Benjamin Franklin, a pioneer in philanthropy as in so many other fields, left f 1000 to Boston and an equal amount to Philadelphia in 1790 to be lent at interest to young married artificers of good character. Estimating what each fund would amount to at the end of a century, he provided for the distribution of the major portion of it in "public works which may be judged of most general utility" and for the accumulation of the remainder through another century, at the end of which the whole was to be distributed. The American-English banker, George Peabody (1795-1869), established in 1867 the Peabody Education Fund, which amounted finally to \$3,000,000, for "intellectual, moral, or industrial education among . . . the Southern and Southwestern States." This fund inaugurated and developed elementary and secondary schools until they were taken over by towns and cities, encouraged the development of state systems of public education and promoted the training of teachers. Perhaps the most famous and by example the most influential of early American endowments was the founding of the Smithsonian Institution in 1846 by an Englishman, James Smithson, "for the increase and diffusion of knowledge among men."

Until after the World War, when it lost ground to various forms of social welfare, education occupied the foremost place in American philanthropy. The United States Bureau of Education reported in the academic year 1889-90 that 315 universities and colleges had productive funds amounting to a total of about \$74,000,000, an average of about \$234,926 each. The figures for 1899-1900 showed 488 institutions with \$166,-000,000 of endowment, an average of \$340,000. In 1928 the endowments of 1076 institutions amounted to about \$1,150,000,000, an average of more than \$1,000,000 each. During the thirty years that elapsed between the Report of the Commissioner of Education for 1897-98 and the Biennial Survey of Education for 1926-28 there were reported accessions of endowment increasing roughly speaking from \$3,000,000 to \$24,-000,000 at Johns Hopkins University, from \$4,000,000 to \$58,000,000 at Yale, from \$9,000,-000 to \$63,000,000 at Columbia and from

\$10,000,000 to \$86,000,000 at Harvard. These developments are characteristic of privately supported institutions, which care for two thirds of the university and college students in the United States. The recent and increasing flow of gifts from individuals to institutions that are owned and controlled by cities and states is illustrated by private endowments of \$6,000,000 at the University of Cincinnati, \$10,000,000 at the University of California and \$12,000,000 at the University of Michigan.

How completely the typical large foundation of today is a product of modern conditions is attested by the fact that of the more important extant foundations in America only seven originated in the nineteenth century. "As generally understood today," says Frederick P. Keppel, "a foundation is a fund established for a purpose deemed 'charitable' in law, administered under the direction of trustees customarily operating under State or Federal charter and enjoying privileges with respect to taxation and continuity of existence not accorded to 'noncharitable' trust funds. The fund is to be used for a designated purpose, broad or narrow as the case may be, the donor specifying whether the principal is to be kept intact or whether not only interest but principal may be spent for the purpose named. Though the practise is not uniform, it is the tendency to designate the former as Foun-Jations and the latter as Funds." A survey of the field made in 1930 by Evans Clark, the director of the Twentieth Century Fund, finds that 108 important foundations of national or international scope operating in the United States control more than \$1,000,000,000 of funds and disburse about \$60,000,000 a year. The channels into which this distribution flows, as for the period 1929-30, are shown in the following table. It will of course be understood that the same foundation may appear in connection with several purposes: the last four objects on the list, for example, are all within the scope of the American Fund for Public Service established by Charles Garland.

The modern foundations are prevailingly the result of the benefactions of a handful of men. Of these the most widely known name is that of Andrew Carnegie, who retired from business to devote the ability and energy which had accumulated a fortune at that time almost without parallel to distributing nine tenths of it during his lifetime. Two thirds of his public distribution of \$300,000,000 went toward the establishment, endowment and development of eight perma-

THE FLOW OF AMERICAN PHILANTHROPY
ESTIMATE OF THE ANNUAL DISBURSEMENTS OF AMERICAN FOUNDATIONS

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Purpose	NUMBER OF FOUNDATIONS	Average Annual Grants
Education	36	\$30,500,000
Individual aid	48	9,000,000
Scientific research	33	7,000,000
Health	22	4,000,000
Child welfare	26	3,500,000
Aesthetics	9	1,000,000
Social welfare	18	900,000
International relations	12	800,000
Industry and business	7	750,000
Religion	3	600,000
Government	4	550,000
Genetics and eugenics	3	400,000
Aviation	1	1 50,000
Agriculture	3	130,000
Publishing	2	90,000
Public service	1	50,000
Propaganda for social theor	ries 3	45,000
Legal aid	2	35,000
Miscellaneous		59,000
Engineering	I	
Religious motion pictures	I	
Heroism in life saving	I	
Civil liberties	I	
Labor unions	1	
Birth control	1	
Strike relief	1	

Total annual grants

\$59,559,000

Source: Clark, Evans, "The Disposition of Foundation Gifts" in Twentieth Century Fund, Annual Report, 1930 (New York 1931) p. 35-40.

nent foundations, of which the Carnegie Corporation of New York, established in 1911, is the largest and which have among their purposes the advancement of research and education in various fields and the advancement of peace. John D. Rockefeller and John D. Rockefeller, Jr., have included in varied benefactions, which approximate \$600,000,000, the establishment, endowment and development of five large foundations having for their purpose research in medicine, social science and other fields, education and welfare programs. The various Carnegie and Rockefeller foundations constitute the most far reaching network of agencies for the administration of huge sums of money. Other well known foundations having resources of \$10,000,000 or more each are the Milbank Memorial Fund for studies and demonstrations of child welfare, mental hygiene and individual and community health; the Russell Sage Foundation in the field of social work; the Commonwealth Fund for varied welfare and social work; the Juilliard Musical Foundation of New York for musical education: the Duke Endowment for universi-

ties, hospitals and rural churches; and the Julius Rosenwald Fund for the health and education of Negroes, backward races and persons of small means. Of the European foundations with an international scope probably the best known is that of Baron Maurice de Hirsch, who founded in England the Jewish Colonization Association for Jewish emigration, schools, cooperative factories, savings and loan banks and model housing throughout the world; the Nobel Foundation in Sweden grants prizes for achievement in physics, chemistry, physiology, medicine, idealistic literature and world peace; the Rhodes scholarships support at Oxford students from the British Commonwealth, the United States and Germany. Similarly in the United States the Commonwealth Fund enables graduates of British or colonial universities to study in the United States; the John Simon Guggenheim Memorial Foundation sends American students for advanced study in Europe and has announced similar fellowships between the United States and Latin America; since 1919 numerous appointments have been arranged by the Institute of International Education.

Criticism of the foundation, both as to its nature and as to its function, has in recent years become increasingly acute. It has been pointed out that its economic basis is the concentration of wealth in a small class in a capitalistic society, its psychological basis the building of personal prestige or the salving of conscience and its ideological basis the relegation of important functions of education, melioration and control to the agencies of a militant individualism. There can be no doubt that the increase in number and magnitude of American endowments has coincided with a persisting inequality in the distribution of the national income. Recent studies suggest that the concentration of income is increasing rather than diminishing, and such facts as the increase in the number of million-dollar income recipients from 290 in 1927 to 496 in 1929 (of whom 24 were in the five-million class) have attracted much critical comment. It is interesting to note in this connection that the year 1927-28 added over \$93,000,000 to foundation funds apart from foundation gifts to universities, hospitals and the like. It is also relevant in this connection to point out the increasing control of economic life by a small number of giant corporations. A recent and important study (Means, Gardiner C., "The Growth in the Relative Importance of the Large Corporation in American Life" in American Economic Review, vol. xxi,

1931, p. 10-42) shows that the two hundred largest non-financial corporations control from 35 to 45 percent of all business wealth; their total directorates in 1927 comprised fewer than 2000 men, an important proportion of whom were of course inactive. To these facts may be added the concentration of the nation's financial resources under bank and insurance company control. It is thus evident that both the resources and a large part of the responsible personnel of the modern foundations may derive from an economic situation which is itself open to grave criticism.

The suspicion of the foundation as such which has thus arisen has been reenforced in certain cases by objections to the methods employed toward labor, competing concerns, or the public —in the amassing of the original accumulation, particularly in instances where those methods have been the subject of government investigation. The cry of "tainted money" has sometimes been raised by objectors on these grounds; and there may perhaps be occasion here and there for Burke's description of an endowment as "the usual fruit of a late penitence." Those for whom the very possibility of the accumulation of such individual fortunes as the Guggenheim, Rockefeller, Harkness and others is in itself a symptom of radical inequity in the economic system are unlikely to be satisfied by any amount of good intentions or good works in the disposal of such funds. To them Carnegie's doctrine of the stewardship of the millionaire, as expressed in his often quoted The Gospel of Wealth (New York 1900) will remain unconvincing—"the millionaire will be . . . intrusted for a season with a great part of the increased wealth of the community but administering it for the community far betber than it could or would have done for itself ... disposing of surplus wealth ... by using it year by year for the general good." Even if the processess by which such wealth were amassed contained in themselves a guaranty that every millionaire fitted Carnegie's description, objection might still be raised.

What a more uniform distribution of incomes or a more drastic appropriation of surplus by the state might accomplish with respect to the functions undertaken by the foundations must be left to collectivist theory and experiment. It can scarcely be denied that the foundation as representing private will operating through the power of wealth can more readily compass certain purposes. For example, there is an increasing tendency for the activities of recent foundations to take on an international character that state ac-

con, as it has been hitherto conceived under the influence of nationalistic ideas, seems hardly disposed to assume. It has also not yet been demonstrated satisfactorily that state action, which has in the past been intent on immediate results, would be ready to sponsor protracted and costly pieces of research the outcome of which may be entirely uncertain—a field in which, according to F. P. Keppel, perhaps the chief opportunity for foundation enterprise lies.

Similarly, the sponsorship of new social techniques that are still in the experimental stage and may require years to prove or disprove their value-for example, mental hygiene, adult education and radio education—is undertaken to great advantage by private foundations; but here the question arises whether the scope of experimentation with new social techniques is not seriously limited, by the source and administration of foundation funds, to those techniques which fit into the existing social system rather than change it in any essential way. Successful pioneering work by private foundations has, however, in the past encouraged public activity in the same field, particularly where the individualist tradition survives as strongly as in official America. The fact was recognized in the majority report of the Congressional Commission on Industrial Relations published in 1916, which went so far as to say that "almost everything that Government now does was done at first through private initiative. . . . "

The foundations have also done excellent work in providing opportunities for study or creative work for selected individuals. The best opportunity of this kind that public activity can at present provide (apart from a few instances like the British Civil List) is a scholarship system; the foundations by a different type of selection and support can fulfil a different need—as is signally illustrated in the awards to young creative workers in the arts and sciences made by the Guggenheim Foundation.

It is no doubt theoretically possible that public funds might be applied by public authority to all such purposes as the foregoing. But experience gives little encouragement to that prospect; and in the meantime it may be maintained that foundation activities, while by no means justifying the economic situation cut of which they spring, do at least in part wring good out of its defects. The argument has also been advanced that in return for the privileges of incorporation and tax exemption a larger measure of public control should be imposed upon foundations. It

is questionable, however, whether such control would add to the social efficacy of the foundations or whether it might not jeopardize their freedom in precisely those types of endeavor for which they are most suited.

The most generally canvassed defect in the present organization of foundations is that of the "dead hand"—the survival of purposes, conditions or limitations arising from the will of the donor in circumstances to which they are no longer suited. A number of early endowments were so rigid in their specifications as to make them inapplicable in later times; and there have been restrictive court decisions, like that concerning the McKay bequest to Harvard University: "The income of the . . . endowment must be administered according to the intention of the founder . . . even though it be at variance with our views of policy and expediency." In England the removal of any undue rigidity is now a simple matter through the Charity Commission, which may modify the procedure of a philanthropy or abolish it altogether. In the United States, when absolute compliance with the provisions of a charitable trust has become impossible, courts have sanctioned a carrying out of the donor's general intent. The right is retained by Congress to alter, amend or repeal at any time any act incorporating a philanthropy and by the various legislatures to impose later limitations upon any philanthropic charter granted by them. The change in the attitude of donors is indicated by Franklin, who set a standard of desirable flexibility by entrusting the procedure of his donations to the discretion of their managers; while Carnegie empowered his trustees to spend the income of his endowments for purposes different from those he specified, should this come to seem desirable. During the last fifteen years a considerable number of community trusts, in which funds are cared for by banks and trust companies and income is distributed through committees named by judges and representative associations, have received large contributions for current expenditure and a considerable number of permanent funds, smaller than those of the larger foundations, for general or particular purposes, which are subject to change according to future conditions.

A wider aspect of the same question arises with regard to the conservation or distribution of the capital endowment. Both practise and theory show wide variations. The Duke Endowment is required to reinvest one fifth of its income until this accumulation equals the original gift. The

various Carnegie endowments and a majority of other philanthropic foundations may expend only their income. Among universities and colleges it is generally considered reprehensible to use capital funds for current expenses. On the other hand, the Rockefeller foundations are empowered to expend principal as well as income and have distributed approximately \$250,000,-000 from their capital funds. The Julius Rosenwald Fund is required to expend both income and principal within twenty-five years after the death of the donor. Julius Rosenwald has stated the case against perpetuities in terms that have won considerable assent. The danger of tying up trust funds to specific purposes, especially in times of rapid social change, has already been alluded to. In Rosenwald's view, however, even the most general purposes do not constitute a claim for perpetuity of endowment. "We may be certain," he says, "that . . . the acute social need of tomorrow will be different from that of today and will doubtless call for a new kind of agency to meet it. The splendid service that Hull House and Henry Street are giving under their present leaders is the strongest argument for putting all the resources they can obtain into their present activities." Recent endowments—particularly the \$10,000,000 Children's Fund of Michigan established by Senator James Couzens in 1929show the influence of this argument in their terms.

Most American foundations are under the control of self-perpetuating boards of trustees, whose duties — and whose problems — have marked resemblances to those of a college board. The self-perpetuating principle, although difficult to avoid, entails a certain danger: "I think it is almost inevitable," writes Rosenwald, "that as trustees and officers of perpetuities grow old they become more concerned to conserve the funds in their care than to wring from those funds the greatest possible usefulness." The Rockefeller Foundation and the General Education Board, it may be noted, have recently adopted the policy of retiring both trustees and officers at the age of sixty-five. A further danger, not altogether confined to the trustees of foundations, is that of "cliquishness"—drawing on too narrow a group or too restricted a type for their personnel.

The quest for worth while ends to serve in the field of social welfare is bringing the foundations into ever closer contact with universities and other organizations active in this field. Keppel notes, for example, that the first \$2,000,000

granted by the Carnegie Corporation in 1911 and 1912 was in direct response to applications; of the \$2,000,000 voted in 1928, 68 percent involved consultation with outside organizations. The practise of consultation is spreading among foundations which formally originate and carry out their own projects as well as among those whose main function is sponsorship. The Social Science Research Council—an association of seven professional societies—has frequently acted in an advisory capacity to various foundations and serves to some extent as a planning department for projects. Foundations also frequently engage specialists in particular fields as temporary advisers or executives in place of permanent staff officers.

Certain minor but embarrassing defects on the procedural side are generally admitted. One is the frequent absence of sustained interest in and evaluation of long term projects once their support has been arranged for. It is inherently difficult for a foundation to keep in close touch with the progress of a technical project and yet steer clear of interference. Persons (especially trustees) who are competent to do the former find a certain difficulty in doing the latter. Connected with this is the problem of judgment as to when to increase, diminish or withdraw support. Officers of foundations, like other people, are sometimes impatient for tangible results, and in certain cases promising endeavors have been left in mid-air or "wished onto" operating institutions for final codification through a premature failure of interest on the part of the endowing authority. On the whole, however, defect lies in a plethora rather than a shortage of support. It is impossible to deny that in some recent cases the mountain has brought forth a very small mouse. That there should frequently be extravagance in the personnel and equipment of the foundations is naturally to be expected.

For none of the above defects or difficulties, however, is more public supervision an obvious remedy; and it would certainly imperil the essential character of foundation activity as the manifestation of private will devoted to public purpose supplementary to and frequently in advance of collective will. The same reflection applies to a more general criticism sometimes directed to foundation work. Foundation policies, like their trustees, reflect to some degree their economic origins. It is no derogation of the able and public spirited men who serve in this manner to remark that their ideas are hardly likely to run counter to the basic trends of the society

that has produced the foundations or that their policies are likely to be palliative or ameliorative rather than radical. Cases on which their influence has been exerted in positive hostility to radical ideas or activities, although not absent from the record, are few and hard to substantiate; more important perhaps is the effect of an attitude of hopeful expectation on the part of those who would like to benefit by endowment in the future. The increase in publicity of foundation activities on the one hand and of public and professional vigilance on the other is probably a sufficient—and is in any case the only—safeguard against undesirable tendencies.

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See: CHARITABLE TRUSTS; CHARITY; EDUCATION, SECtion on EDUCATIONAL FINANCE; RESEARCH; INTERNA-TIONAL RELATIONS; UNIVERSITIES AND COLLEGES; HOSPITALS AND SANITARIA; PLUTOCRACY.

Consult: Keppel, Frederick P., The Foundation (New York 1930); Ogg, Frederic A., Research in the Humanistic and Social Sciences (New York 1928); Veblen, Thorstein, The Higher Learning in America (New York 1918); Kirkpatrick, J. E., The American College and Its Rulers (New York 1926); Hobson, John A., Free Thought in the Social Sciences (London 1926); Taussig, F. W., Inventors and Moneymakers (New York 1915); Flexner, A., Universities-American, English, French, German (New York 1930); The New Social Science, ed. by Leonard D. White (Chicago 1930); Escarra, Jean, Les fondations en Angleterre (Paris 1907); Hobhouse, Arthur, The Dead Hand (London 1880); United States, Department of the Interior, Bureau of Education, "Philanthropy in the History of American Higher Education" by J. B. Sears, Bulletin, no. 26 (1922); Rosenwald, Julius, "Principles of Public Giving," and "The Trend Away from Perpetuities" in Atlantic Monthly, vol. exliii (1929) 599–606, and vol. cxlvi (1930) 741–49; Zinsser, II., "The Perils of Magnanimity" in *Atlantic Monthly*, vol. cxxxix (1927) 246-50; Laski, H. J., The Dangers of Obedience (New York 1930) ch. vi.

ENEMY ALIEN. The concept of enemy alien and the treatment accorded to individuals falling within this category have passed through various historical stages, from the time when every foreigner was regarded as the foe of the political community to the more modern period when the concept has been subjected to legal definition and refinement and has become the basis for a well recognized portion of the international law of war. This development commenced as soon as the problems of war, jurisdiction and allegiance ceased to be colored by the ideology of feudalism and began about the time of Grotius to reflect the realities of the state system of modern Europe and the emerging nationalism which has become its most distinctive characteristic. For

the past four centuries western European jurisprudence has recognized that nationals of a state at war with the local state may lawfully be subjected to various restrictive measures. In the language of the British Aliens Restriction Order of 1914 (no. 1374, September 9, 1914, § 31), " 'alien enemy' means an alien whose sovereign or State is at war with His Majesty" [see Sparenburgh v. Bannatyne, 1 Bos. & P. 163 (1797)]. Such persons are placed in a quasi-criminal class and treated in such fashion as to prevent them from aiding the enemy state in any way, from interfering with the conduct of hostilities on the part of the local state and, more recently, from becoming the victims of mob violence [Schaffenius v. Goldberg, 1 K.B. 284 (1916); Porter v. Freudenberg, 1 K.B. 857 (1915)].

During the later Middle Ages and the Renaissance it was the general practise of states to arrest all enemy aliens at the outbreak of war, detain them as prisoners of war and frequently confiscate their property and treat them as outside the protection of the law. With the growth of commercial contacts and the rise of an international law directed toward mitigating the hardships of war, states began to conclude treaties specifying a period of time after the outbreak of war between the parties during which their subjects should be permitted to depart freely from each other's territory. The American treaty of 1799 with Prussia contained provisions, reenacted in the treaty of 1828 and still in force in 1917, under which citizens of either country in the event of war could depart from the other with all their goods within a period of nine months. Such treaties became so general during the seventeenth and eighteenth centuries that it came to be accepted as a customary rule of international law that enemy aliens who were not members of the enemy's armed forces should be allowed a reasonable time for departure (see United States, Code of Laws, Title 50, sect. xxii; Oppenheim, L. F. S., International Law, 2 vols., 4th ed. London 1926-28, vol. ii, p. 204-06).

These tendencies have recently been reversed as a result of the revolution in the nature of warfare in the nineteenth and twentieth centuries. With the introduction of universal military service and the transformation of war from a contest between professional standing armies into a struggle between whole peoples, military necessity dictated an effort, on the one hand, to limit the human and material resources of the enemy in every way possible and, on the other, to prevent any interference by resident nationals

and edited several volumes of a source book of statistical material as well as the yearbooks and the magazine published by the Saxon statistical bureau. In Prussia he introduced publications of similar type and reformed the census methods by the introduction of the individual census card. He also initiated international steam power statistics and in 1862 founded the first German seminar of statistics and social science in Berlin. Engel also demonstrated the fruitfulness of the use of statistics in studying consumption. He calculated the percentages for types of expenditure in the budgets of workingmen's families published in Le Play's Les ouvriers européens (Paris 1855) and Ducpétiaux' Budgets économiques (Brussels 1855) and stated the so-called Engel's law. As generally formulated at present it reads: the smaller the family income, the greater the proportion of the income spent on food. He also devised a new measure of consumption, taking as a unit (named quet in honor of Quételet) the value of consumption of a child up to one year of age and adding o.1 of this unit for every further year until the end of the period of growth—twenty-five years for males and twenty years for females. He used this method effectively in a comparative study of Belgian workmen's budgets and found a considerable rise in their standard of living between the years 1853 and 1891. He hoped to make similar studies of other population groups, German as well as foreign, with a view to establishing the degree to which their standard of living approximated the "normal" level of welfare, the Volkswohlstand, which he understood to be that level of welfare at which people spend a maximum of 80 percent of their income for the "reasonable" satisfaction of material needs, with the remainder reserved for "higher" cultural needs. He hoped to incorporate his monographs into a synthetic study of the basic elements of society, by means of which he intended to work out the balance between cost value and productivity value of man; but only one small tract of it appeared in the form of a pamphlet, Der Werth des Menschen (Berlin 1883). Engel was of the German liberal school, much inspired by Carey's social optimism, with definite leanings toward labor and the cooperative movement.

STEPHEN BAUER

Consult: Article on Engel in Handwörterbuch der Staatswissenschaften, vol. iii (4th ed. Jena 1926) p. 726, containing a bibliography of his works; Blenck, E., in Biographisches Jahrbuch, vol. i (1897) 221-30; Feig, Johannes, and Földes, Béla, in Allgemeines

statistisches Archiv, vol. vii (1907) 349-59, and vol. xi (1920) 229-45; Berridge, W. A., Winslow, E. A., and Flinn, R. A., Purchasing Power of the Consumer (Chicago 1925) p. 168-72, 203-04.

ENGELS, FRIEDRICH (1820-95), social theorist and revolutionist. Engels shares with Karl Marx the distinction of being the founder of scientific socialism. He was born in Barmen, Germany, of a prosperous commercial family. Although reared in an intensely pietistic Protestant atmosphere he soon broke completely with his religious traditions. He was affected by two intellectually dissident movements, Young Germany and the Young Hegelians, and was influenced especially by Börne and Gutzkow among the former and Strauss, Bruno Bauer and Feuerbach among the latter. His first book, Schelling und die Offenbarung (Leipsic 1842), for many years attributed to Bakunin, was an anonymous attack upon Schelling from the standpoint of left Hegelianism. During the early fortics Engels contributed to periodicals on belleslettres, politics and philosophy under the pseudonym of Oswald. In 1842 he left Germany to take a position with a firm in Manchester, England, in which his father had shares; there he acquired a knowledge of laissez faire economics, the social presuppositions of which he subjected to criticism in his essay "Umrisse zu einer Kritik der Nationalökonomie" (in Deutschfranzösische Jahrbücher, ed. by A. Ruge and Karl Marx, Paris 1844, p. 86-144). He also wrote at this time for Chartist and Owenite papers. In the fall of 1844, when in Paris on his way to Germany, Engels met Marx, whom he had previously known in 1842, and their lifelong friendship and intimate collaboration began. Engels first acquired a European reputation through his book Die Lage der arbeitenden Klasse in England (Leipsic 1845, 2nd ed. 1848; tr. by F. K. Wischnewetzky, New York 1887), which reflected Chartist influence. The years from 1845 to 1850 he spent in France, Germany and Belgium, organizing the underground revolutionary groups and collaborating with Marx on various publications including the Communist Manifesto. In 1849 he took active part in the republican insurrection in Baden. After 1850, when hope of immediate revolution in Europe faded, he reluctantly returned to England to engage in business and from his income was able to provide for Marx while the latter was engaged in writing Das Kapital. He retired from business in 1869 and devoted the rest of his life to literary and practical revolutionary activity. He

was a member of the General Council of the First International and played an important part in the early years of the Second International. In this period he developed the philosophy and sociology of Marxism and after Marx' death edited the second and third volumes of Das Kapital from rough drafts and notes left by Marx. His periodical articles and letters on moot points of socialist tactics and theory, written at this time, exerted considerable influence.

Engels' important polemical work, Herrn Eugen Dührings Umwälzung der Wissenschaft (Leipsic 1878, 5th ed. Stuttgart 1904; tr. by A. Lewis as Landmarks of Scientific Socialism, "Anti-Duehring," Chicago 1907), presents a Marxist synthesis of the dialectic method of German classical philosophy liberated from its husk of idealism; of the tradition of empirical naturalism sharply distinguished from the metaphysical varieties of materialism; and of the socialist principles of the French and English reformers freed from utopian phantasy. An emphasis upon Marxism as a theory of social revolution is manifested throughout the book. Marx wrote a section (pt. ii, ch. x); and as Engels submitted the entire book to him before publication, some critics regard it as an expression of common views.

An exposition of the fundamental principles of dialectical materialism together with a suggestive treatment of the nature of social causation is found in Engels' Ludwig Feuerbach und der Ausgang der klassischen deutschen Philosophie (Stuttgart 1888, 2nd ed. 1895; tr. by A. Lewis, Chicago 1903). He differentiates dialectical materialism from traditional materialism by pointing out that it is a monism not of stuff but of law. Since it denies that all categories are reducible to the categories of mechanics, the progress of science toward a more tenuous conception of matter cannot invalidate its position. The necessary and sufficient conditions of matter are defined to be an independence of the knowledge relation or any other aspect of consciousness and the exercise of specific compulsions upon human behavior. Dialectical materialism differs from metaphysical materialism in accepting a radically evolutionary view of the universe. It recognizes the autonomy of the historical process and avoids fatalism by insisting that the nature of social causation must be distinguished from the type of causation which operates in the physical and biological sciences. In his letters to Mehring and Bernstein in the last years of his life Engels extended the scope of the materialistic conception of history. He acknowledges the importance of tradition, the presence of interaction and reciprocity and the relative independence of formal elements in the cultural process.

Engels' views on the origin and nature of the state were expressed most clearly in his Der Ursprung der Familie, des Privateigenthums und des Staats (Hottingen-Zurich 1884, 8th ed. Stuttgart 1900; tr. by E. Untermann, Chicago 1902). This work as a whole was based on Lewis H. Morgan's Ancient Society (1877) and Marx' notes to the book and applies the evolutionary hypothesis of classical anthropology modified by historical materialism. But his views here presented on the nature of the state were derived primarily from an analysis of contemporary state forms and were expounded in the Communist Manifesto and subsequent writings long before either he or Marx had heard of Morgan and are not therefore dependent upon the validity of the latter's anthropological theories. Marx and Engels' conception of the state as an executive committee of the ruling class was forged from their revolutionary experience in the class struggles of the day, from their disillusion with the forms of bourgeois democracy and from their belief in the necessity of a proletarian dictatorship as a transitional state form between bourgeois society and the classless society. The influence of this theory upon recent revolutionary politics is best illustrated in Lenin's State and Revolution and in contemporary Communist philosophy.

SIDNEY HOOK

Works: Engels' works are being collected in Karl Marx, Friedrich Engels historisch-kritische Gesamtausgabe, ed. by D. B. Goldendach (D. Ryazanov), published in Frankfort since 1927. For a select bibliography of Engels' works see the compilation by Ernst Drahn in Handwörterbuch der Stuatswissenschaften, vol. iii (4th ed. Jena 1926) p. 727-30. See also Der Briefwechsel zwischen Friedrich Engels und Karl Marx, 1844 bis 1883, ed. by August Bebel and Eduard Bernstein, 4 vols. (Stuttgart 1913).

Consult: Mayer, Gustav, Friedrich Engels, vol. i- (Berlin 1920-); Goldendach, D. B. (D. Ryazanov), Karl Marx and Friedrich Engels, tr. from the Russian by J. Kunitz (New York 1927); Mehring, Franz, Geschichte der deutschen Sozialdemokratie, 4 vols. (12th ed. Stuttgart 1922); Kautsky, Karl, Friedrich Engels (Berlin 1895), tr. by M. W. Simons (Chicago 1899); Sombart, Werner, Friedrich Engels (1820-1895) (Berlin 1895); Mondolfo, Rodolfo, Il materialismo storico in Federico Engels (Genoa 1912); Adler, Max, Engels als Denker (2nd ed. Berlin 1925).

ENGINEERING is an inclusive term embracing the discovery through research of laws and the formulation of principles and methods of

utilizing them through the design, construction, maintenance and operation of mechanical and other devices. The content of the science and art was first identified with discovery and utilization of the physical, chemical and electrical properties of matter, as in the design and construction of roads, bridges, buildings and machines. Later it was extended to include problems of the service and economy of such devices, as in determination of the commercial value of a proposed railroad. At present there is a tendency to enlarge its content still further and identify as engineering any organized activity which involves research, formulation of principles and design of mechanisms, including even systems of group conduct, for the benefit of man—as illustrated in management, production and sales engineering. The extent of this tendency is indicated by the recent appearance, although they have not established their validity, of the terms human and social engineering.

Engineering of some type and in some degree has existed since the beginning of recorded history and every civilization has contributed to iss development. Man as a tool using animal early made contrivances for his convenience and thus began to store up principles of design and construction. For many centuries this body of experience was in the nature of craft knowledge and skill, but recently it has achieved the status of a body of professional knowledge and technique. Exactly when craft merged into profession it is impossible to say, for the evolution has been gradual and continuous. One may safely generalize so far as to say that the transformation began with the influence of scientific method in the Baconian period, was accelerated by the accumulation of wealth during the period of exploration, discovery and the development of commerce following Drake and burst into full flower during the century following Watt's invention of a means of harnessing the gigantic powers of nature. The experimental method, the substitution of natural for human energies, the vast extension of human wants and the acquisition of a surplus of wealth over immediate needs for application in contrivances designed to create satisfactions of future needs-these are the foundation stones on which have been reared the science, art and profession of engineering.

In the premodern period the absence of power other than that contained in individual human energy and, for restricted uses, in wind and water limited the application of engineering ingenuity to simple contrivances for individual

use, such as the lever and pulley; to larger contrivances of a static nature which could be constructed by the application of individual energies, such as roads, bridges and public buildings; and to contrivances of a dynamic nature which could be operated by human energy organized in gangs, such as small blast furnaces and galley ships. Hydraulic power was utilized in an occa sional water wheel, and wind power in windmills and ships under a hundred tons. At every turn dependence on human energy imposed restrictions on the application of creative ingenuity. Notwithstanding these limitations the premodern period was remarkably ingenious and creative and developed an aggregate of basic although disconnected arts and mechanisms which constitute important elements of modern engineering. Before the Christian era there were mines and quarries with shafts and tunnels of amazing depth and length; a metallurgy which knew all basic metals and some alloys and used granding mills, crucibles and even small air blaving furnaces; metal working which mechanically and chemically possessed a technique that in some respects has not been surpassed; woodworking which utilized saws, planes, drills and carving tools; an agriculture with hoes, sickles, scythes, crude plows, machines for grinding cereals and presses for oils and fruits; small factories for the ceramic arts; glass manufacture by casting, blowing and rolling into small sheets; and a textile industry with spinning wheels, hand and foot operated looms, bleaching, dyeing and pressing. The engineering involved in this culture knew and used devices for measuring and weighing, levers, screws, pulleys, wedges, inclined planes, runners, wheels, cogwheels, slings, small cranes and capstans.

Engineering more like that of the modern era was involved in the construction of early public works. In many of the ancient empires there were graded, crowned and bridged military roads and fortifications with walls, towers, gateways and moats planned and constructed according to mathematical calculations and measurements. Sections of many early cities were planned and laid out according to design. There were simple systems of public water supply and sewerage and reclamation systems with dams, irrigation and drainage. Harbors were constructed with great care and included lighthouses, dredged channels, breakwaters, wharves, warehouses, cranes, windlasses and water supply. The size and design of temples, cathedrals and other public buildings are more familiar to students of premodern culture. The premodern engineer-contractor was held in high esteem and was an individual of power and influence.

The industrial revolution, based on the substitution of nature's energies for man's, was essentially an engineering revolution. During the following century engineering and its allied arts became the basis of western civilization. The relations between it and other elements of that culture were reciprocal. Engineering created the surplus wealth which permitted culture to make ever greater demands upon its service, thus leading to the development of a more extensive and intensive, differentiated and creative engineering technique.

It was in western Europe that modern engineering had its origin, and these countries were long preeminent and have never been surpassed in engineering science, invention and design; but it is the United States, the first nation to apply modern engineering to the exploitation of a virgin continent of rich resources, which has been outstanding for the variety and scale of its practical application of engineering design and technique. The magnitude of the task in the new continent and the abundance of the resultant social income permitted specialization and the differentiation of engineering into many special fields, first of practise and later of research. As a result the United States is at present noteworthy for the scientific quality and the precision of its engineering technique. Russia, now beginning her industrial revolution with twentieth century techniques, may in the next century achieve results equally noteworthy and influential.

The accumulated data of modern engineering knowledge constitute a very considerable literature, which is constantly being enlarged by the activities of the vast laboratory of engineering research and education constituted by the universities and large private enterprises of western Europe and North America. Modern engineering has an increasing knowledge of the nature of materials and the methods of creating new synthetic materials, greater knowledge of the nature, origins and forms of energy, and greater precision in measurement. It has an ability to design and construct mechanisms of huge size, power and certainty of performance. It has even gone one step further and developed innumerable attachments of similar precision which regulate and control these huge contrivances without dependence upon variable and uncertain human energy and attention.

Another characteristic of modern engineering

technique is the extension of the area of its concern to the organization, direction and economics of the use of mechanical contrivances. This larger responsibility has been forced upon it by circumstances. The majority of engineering works both public and private require the raising and appropriation of large capital funds which compel predetermination and comparison of costs and service values. Only the engineer has the specialized knowledge necessary to the making of such computations. In the United States special circumstances favored this extension of the scope of engineering. The creation of a national market by rapid construction of railroads after the Civil War created such a demand for new factories and equipments as to constitute essentially a second stage of the industrial revolution. The young engineering profession, experienced in emergency problems during the war, met the summons not only to design, construct and install the new industrial equipment but also to organize and supervise what was essentially a new system of factory operation. Thus was generated the management movement and its identification with engineering.

Another important characteristic of modern engineering is its specialization as a profession and the further specialization within the profession. As a rule the earlier engineers even as late as the end of the nineteenth century were also owners, organizers and operators of enterprises. Many of their discoveries and inventions were by-products of efforts to solve operating problems. As the demand upon the engineering function increased, however, specialization in engineering as a research, teaching or service career began. Following military and civil engineering, which trace their ancestry back into the premodern period, came mechanical, mining and metallurgical, chemical and electrical engineering. More recently other special fields have been differentiated, as is indicated by the following suggestive list of identifying prefixes: aeronautical, agricultural, architectural, bridge, construction, forest, gas, highway, hydraulic, irrigation, management, marine, naval, railroad, radio, sanitary, transportation. With respect both to training and professional service, specialization is greater in the United States than in Europe, which adheres more closely to the concept of the unity of all engineering and where the members of the profession are more broadly trained. This difference is undoubtedly due to the influence of the economic environment; the demand for engineering service in the United States has been

so great as to permit the gaining of professional livelihoods within narrowly specialized fields.

As a profession engineering has achieved a status comparable to that of law and medicine. It deals with concrete affairs; it has a body of organized, recorded knowledge and a procedure which is continually enriched by research and experience, of which the mastery requires special study and practise; it has concepts of good professional conduct and formulates regulations for their protection; and its application of professional skill is increasingly influenced by motives of public service. In nearly every country an individual must meet qualifications imposed by the government before he can offer himself to the public as an engineer. This professional status is further expressed through the numerous engineering associations which have been organized in every country of advanced culture and in all the major branches of engineering.

Schools of engineering are relatively less numerous in Europe than in the United States, but the average quality of their instruction is higher with respect both to the theoretical basis of professional knowledge and to the relation of engineering to social life. This difference, as in other fields of higher education, may be attributed in part to European superiority in preparatory training. In contrast the American schools lay greater emphasis on laboratory, field and shop experience and produce practitioners of exceptional ingenuity and adaptability in meeting practical problems. With respect to specialized research there is little if any difference. The curricula of American schools have been justly criticized as too narrow, but in recent years there has been a tendency to broaden them by the inclusion of courses on such subjects as the principles of economics and industrial organization. The fact that the majority of graduates of American engineering schools pursue strictly professional work for only a short time and gradually become business and operating executives concerned with problems of economic and other public policy has stimulated them to demand a broadening of engineering curricula.

Engineering associations are perhaps fully as important as an educational force and compensate in large measure for the narrowness of the curricula of the schools. They bring engineers under the influence of what is essentially a system of adult education which has not only the highest quality of technical content but a gradually increasing breadth as well. The influence of these associations in raising the standards of pro-

fessional conduct has been great. The early engineers were at the same time business men and too frequently their standards of conduct were colored by those of the market place. All the major engineering societies now have their codes of professional conduct and committees which constitute essentially courts of inquiry into conduct concerning which there may be complaint. These codes, which are usually brief and have a general rather than a definitely prescriptive force, regulate principally the relations of engineers among themselves, with owners, with contractors and subcontractors and with the public.

The economic status of modern engineers is anomalous for the reason that so large a proportion of graduates of engineering schools, belonging by academic label and legal status to the profession, are salaried employees in industry and not professional practitioners. Generally engineering as an economic function and as a profession is held in the highest esteem as an essential cog in the economic system, and great engineering experts and administrative executives receive large fees comparable to those of great lawyers and physicians. Professional fees are usually a sliding scale percentage of the cost of the engineering work done, and the different standard scales of percentage are applied according to the inclusiveness of the engineering service. On the other hand, the rank and file, the less ambitious or less gifted employees of public and private organizations working for specific annual salaries, receive incomes comparable to those received by other routine workers. A survey made by the Engineering Council in 1919 (in American Institute of Electrical Engineers, Journal, vol. xxxix, 1920, p. 182-88) indicated that salaries of engineers in public civil institutional service varied from an average of \$5867 for chief administrative engineers to \$1719 for those on general duty and \$975 for non-professional aids. As somewhat of an offset to these moderate incomes industry's dependence upon engineering has been so great that the young engineer has had reasonable expectation, under average economic conditions, of immediate and continuous employment.

The economic problems created by the rapid development of modern engineering challenge the ingenuity of students and administrators of human affairs. Engineering has created for individualistic enterprise a tool which has multiplied many times the latter's powers and achievements and yet threatens to become too complicated for such enterprise to use without social

confusion. Until the opening of the present century the commerce and industry of the world were dominated by the economics of physical frontiers of exploration, appropriation and exploitation. Under such conditions individualism was presumably the natural and effective form of organization for enterprise. In the absence of accumulated capital for investment in huge power mechanisms and in the absence of the engineering to create such mechanisms economic progress had to be on the whole the sum of individual physical efforts and progress.

During the past half century, however, the very richness of the resources of these frontiers yielded an income which permitted savings and their investment in improved mechanisms and which called modern engineering into existence. The impact of this engineering transformed industry and commerce into a system of large scale production and world wide interrelationships. The increase in the productivity of industry has been continuous and accelerating; from 1899 to 1927 in the United States alone physical production increased 180 percent, the number of wage earners 87 percent, the primary power per wage earner about 100 percent and the productivity per wage earner about 55 percent. These are indications of the material results of modern engineering.

There have been, however, other results which although less measurable are more disconcerting. One reason for this productivity has been increasing specialization and division of labor between commerce and industry, between the provision of capital and the direction of the use of capital goods, between ownership and management and among enterprisers and wage earners. This in itself has established a complexity of delicately adjusted relationships—a huge social mechanism with precisely related parts susceptible to maladjustment throughout if any important part fails in functional performance. A second cause or risk of maladjustment has resulted from the specialization of capital in fixed forms, some of them huge and costly mechanisms, which are subject to the destruction of their values through technical or economic obsolescence. Finally, as a third factor increasing susceptibility to maladjustment, the contractual relations of specialized participants in the operation of this huge economic mechanism have come to be formulated less in terms of physical goods and more in terms of estimated money valuations and profits, many of them forecast for long periods in advance.

Under the regime of modern engineering, industry has experienced a succession of periodic maladjustments which have resulted in a degree of stoppage of economic processing sufficient in each instance to jeopardize the continued existence of many enterprises and the livelihood of many participants. There is growing opinion that these maladjustments are a consequence of the inability of individualistic business enterprise, with its attention focused on values and profits. to manage a complicated, technical social machine which requires that attention be focused on the planned adjustment and manipulation of that machine to meet qualitatively and quantitatively measured variable demands for commodities. Although these maladjustments have been induced by the creative work of engineers, the onus of the problem does not rest primarily upon them, who have been scientific and professional, creating what enterprise has desired, but upon the enterprisers in commerce and industry who have called upon engineering to create the mechanism and upon that social statesmanship which has encouraged such enterprising.

The broader social consequences of modern engineering call for brief attention. Because it has made possible wider distribution of wealth and created innumerable specific commodities and services for the satisfaction of human impulses, life has become more democratic and richer in the variety of its activities and enjoyments. Power production and transportation have permitted more abundant and varied foods and articles of dress among all classes; the telegraph, telephone and radio have eliminated distance in communication and together with the power printing press and the cinematograph have given peoples of formerly diverse customs and habits intimate knowledge of each other; the railroad, steamship, airplane and automobile have vastly reduced isolation; opportunities for the satisfaction of play and other social impulses have been immeasurably increased. Such rapid changes in the material basis of life have been largely responsible for the transformation of ancient moral codes and forms of social organiza-

There is evidence that modern engineering is becoming conscious of these problems and is beginning to assume some responsibility for the proper social use of the mechanisms which it has created. The beginning of this tendency may be traced back fifty years to the work of Frederick W. Taylor, the engineer who originally applied inductive science, or, more specifically, the basic

principles of engineering, to factory management. This idea involved research into the problems of operation, standardization of facilities and methods, measurement of forces and their results and control of operations in accordance with designed objectives and programs. During the half century since Taylor this technique of management has been developed and applied successively to the unit work place, the shop as a group of unit work places, the entire production department, the sales department, the coordination of production and sales and to the individual enterprise as a whole. Today enterprises consisting of a score of geographically scattered plants are managed, in so far as internal operations and relations are concerned, as effectively as the small factory of a half century ago.

This contribution of engineering to management has been in the service of individual, competitive enterprises. It has not yet been extended to embrace the problem of society's management of enterprise conceived as an organic whole. Broadly speaking the engineer has been indifferent to social problems; he has been concerned with the technical efficiency of his mechanisms rather than with their social consequences. He has also not been entirely a free economic being; he has been too individualistic and competitive within the profession, and the relations with industry which he has permitted to develop have tended to make him a servant rather than a master of enterprise. It has taken him over a generation to appreciate the situation pointed out by Thorstein Veblen—his potential power and social responsibility in the service of business enterprise.

Since the World War, perhaps as a result of a greater consciousness of professional power and a new social outlook derived from that experience, the engineer has been turning attention to the social problems which his work has generated. He asserts today that it is he who must solve the problem of economic maladjustment. The principal economic surveys in the United States since the war have been made under the auspices of and largely by engineers. The President's Conference on Unemployment in 1921 was conceived, organized and directed by an engineer, and as an outgrowth of it three national surveys were set up to "enlarge the general understanding of our economic system and to stimulate the continuing reduction of unemployment": the first, a study of business cycles and unemployment; the second, a study of seasonal operations in the construction industry; and the

third, a survey of recent economic changes. These applications of fact finding, the basic factor in the technique of engineering, have yielded useful data. The question remains whether engineering as a profession will take the next step and apply to the social problem the basic factor of design. Will it design for industry as an organic whole the same technique of organization and management that it has made so effective in individual enterprise?

Undoubtedly, by compulsion of economic circumstances this will eventually be done, but probably not by engineering as an organized profession. Individual engineers will of course take an important and constructive part, but as an organized profession they appear to be too closely tied, because of the particular types of business enterprise with which they have made the closest connection, to the a priori concept of individualistic enterprise. As a group they may not be able to overcome this inhibition; but engineering as a technique has passed beyond the sole possession of the engineer and is now available to the economist, to other social scientists. to the owners and managers of industry and to other men of affairs. The greatest experiment in social engineering that has ever been attempted, that of designing and constructing an integrated economy in the Union of Socialist Soviet Republics, was conceived and is being engineered by others than professional engineers, although the latter play a major part in the detailed work.

II. S. Person

See: Machines and Tools; Science; Power; Invention; Public Works; Industrial Revolution; Electric Power; Chemical Industries; Factory System; Industrialism; Large Scale Production; Scientific Management; Rationalization; National Economic Planning; Gosplan; Professions; Professional Ethics.

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ENLIGHTENMENT. "Enlightenment is the liberation of man from his self-caused state of minority. Minority is the incapacity of using one's understanding without the direction of another. This state of minority is self-caused when its source lies not in a lack of understanding, but in a lack of determination and courage to use it without the assistance of another. Sapere aude! Dare to use your own understanding! is thus the motto of Enlightenment." This famous passage from Kant's Beantwortung der Frage: Was ist Aufklärung? (1784) characterizes most clearly the decisive intellectual tendency as well as the historical character and mission of the philosophy of enlightenment. To the view of the world which derived its strength from a belief in divine revelation and which was mainly supported by the powers of authority and tradition enlightenment opposed another which rested on reason and the powers of the understanding. The basic idea underlying all the tendencies of enlightenment was the conviction that human understanding is capable, by its own power and without any recourse to supernatural assistance, of comprehending the system of the world and that this new way of understanding the world will lead to a new way of mastering it. Enlightenment sought to gain universal recognition for this principle in the natural and intellectual sciences, in physics and ethics, in the philosophies of religion, history, law and politics.

Historically speaking, one understands by enlightenment primarily the development undergone by this principle during the seventeenth and eighteenth centuries in England, France and Germany. But although the main ideas of enlightenment reached their complete development and their final victory in the intellectual movement of these two centuries, their roots lie deeper in the past. The enlightenment represented only the continuation and consistent development of certain tendencies in the European mind, the origin of which can be traced back to the fifteenth and sixteenth centuries, the centuries of the Renaissance. Here on the threshold of modern times in the great clash of Middle Ages and Renaissance the problems and questions, of which the Enlightenment attempted the solution, were first seen and raised. It is its chief merit that it did not raise these questions separately but arranged them around a single center.

In the realm of nature it represents the starting point of modern natural science. Modern natural science, as it was founded in the seventeenth century by Galileo and Kepler, is based

on the presupposition that nature is a closed system of causes and effects, of reasons and implications. The axiom of sufficient reason as Leibnitz formulated it represents its methodological starting point. According to this there is nothing accidental or arbitrary in nature; everything in it is ruled by universal and necessary laws. But these laws are not derivable from mere experience, i.e. immediate sense perception. Experience presents events of an infinite complexity which at first sight completely confuse the understanding and can be neither comprehended nor conceived by it. In order to achieve such a comprehension, the interpretatio naturae of Bacon, it is necessary to disentangle the manifold threads interwoven in every individual event. It is a conceptual analysis of natural phenomena rather than their immediate observation which supplies an insight into the laws of nature. Galileo reached his first decisive results by such a method of analysis. He maintained that all natural knowledge must go a twofold way: the way of the "resolutive" and that of the "compositive" method, the way of "analysis" and of "synthesis." Natural knowledge reduces every complex event to its simple conditions—and the truth of the hypothesis by which these conditions were assumed must be tested by its success in reconstructing from them the real event as observed in nature. The stone which is thrown travels along a complicated path which is incomprehensible to the observation of the senses, but scientific thought reduces it to two elementary conditions: the force of the original impulse, preserved according to the law of inertia; and the force of gravity, which at each separate instant affects the moving body according to a simple law. The path is thus determined as being a relatively simple geometrical form, a parabola. This reduction of natural events to mathematical theory was confirmed and enlarged by Descartes' discovery of analytical geometry, Leibnitz' analysis of the infinite and Newton's calculus of fluxions.

The next step of enlightenment necessarily consisted in introducing the principle established in the realm of nature into the realm of social and historical fact. Here too it is insufficient to remain satisfied with the simple existence of facts as they present themselves in morals and customs, in political structure and social behavior, in codes of law and articles of religious faith. Instead of being accepted on faith their origin must be discovered and their cause proved valid by the criteria of reason otherwise the existing institution can expect no recognition. It was the

common presupposition of all thinkers of the Enlightenment that the being of man is implied in and subordinated to the being of nature and that it must accordingly be explained by the same universal laws. The world of man, as Spinoza says, may no longer form "a state within the state"; it may not demand an exceptional place within the cosmos of knowledge. For the stirrings and movements of the will on which the world of man is founded are subject to rules just as universal as the movements within the world of physical bodies. There is a mechanics of human inclinations and urges, of passions and emotions, as there is a mechanics of celestial bodies. This analogy was emphasized so severely by the philosophy of the Enlightenment that it became finally a complete logical identity.

It was already a predominant trait of mediaeval political and social theory to conceive of the whole of society as a "social body." But the idea was then founded upon a purely spiritual view. Humanity appeared as a unified state, created and dominated by God, expressing itself in the two institutions of universal monarchy and universal church. Humanity was a corpus mysticum at whose head stood God and Christ. This spiritual foundation of state and society was gradually replaced from the beginning of the seventeenth century by a purely materialistic one. It found its most radical protagonist in Hobbes, who in his philosophy of the state explicitly refers to Galileo as his model in method. He starts with the presupposition that the concept of body is the common term which includes and unites both nature and society. The term body in its most general meaning denotes, according to Hobbes' definition, anything which may be divided into parts and composed from them. It is only by means of this separation and reintegration that one is able to understand the essence of any body, whether physical or social. These presuppositions determine the method which Hobbes and the other political and social theorists of the Enlightenment followed. They considered all political and social being as a sum of effects which must be dissolved and reduced to its simple elements in order to be understood. The collective will of the state is the product of the individual wills. Accordingly, the fundamental problem of political philosophy consists in discovering the procedure by which those wills, which are confined exclusively to their own interests and which originally are the only ones given, should combine to form a cooperative body.

In solving this problem the philosophy of enlightenment continuously refers to the ancient theory of contract by natural law. Society and state originate in the act of individuals who on the basis of an original contract enter into a relationship of mutual obligation and impose upon one another certain restrictions of the will. The content of this original contract is interpreted differently by the various thinkers of the Enlightenment, but the idea of contract remains as a common and dominating method. Only the individual can be considered a true "person" and the true and original subject of law, whereas the state and all social organizations possess only an artificial personality (persona artificialis). This persona civilis or persona moralis is not an independent entity; it is merely the name and the shortened formula for a legal relationship. All social organization, all consociatio, is based on the explicit or silent consent of the associates; it originates in restrictions accepted voluntarily by individuals. Even the sovereign rights of the state are merely a product of the voluntary sacrifice and socialization of such individual rights (Althusius). The organic conception of the state which was predominant in the mediaeval theory is thus replaced by a mechanical one.

The fundamental principle of the Enlightenment is here preserved primarily by the fact that any purely theocratical theory of the state or of society is rejected; the postulates are throughout those of "natural reason." The political theory of Johannes Althusius has proved in this connection to be of epochal significance. His *Politica* methodice digesta (1603), although expressive of a strong religious conviction (Althusius was a thorough Calvinist), refuses to seek the foundations of political theory in religion or belief in revelation and deduces by a strictly rational procedure a purely secular conception of society. An independent and unified system of politics is to be derived from a limited number of axioms intelligible by pure reason—just as in mathematics the totality of theorems follows from the system of axioms and definitions. Divine Being and the Divine Will are therefore not referred to in the foundation of political and social theory; they are retained by certain theorists merely as their crowning point. In Germany this tendency of Althusius is accepted and carried on mainly by Samuel Pufendorf and Christian Wolff.

In the development of the theory of natural rights the distinction between social contract and contract of sovereignty plays a decisive role. By social contract (pactum societatis, contrat so-

cial) is understood that act by which individuals originally united and by virtue of which they transcended the mere "state of nature." By virtue of this pact the individuals, the singuli, are transformed into a real universitas: thus originates the common will, which being established by free consent (consensus) of the individuals has also the power of obligating them to carry out certain actions. The contract of subjection (pactum subjectionis) was distinguished from this social contract; it was the pact by which the community transfers to a sovereign certain rights originally derived from the social contract.

The theorists of absolutism consider this transfer unconditional and irrevocable. Thus Bodin and Hobbes declare that any division or restriction of a ruler's sovereignty is logically selfcontradictory. The right of sovereignty can be transferred either totally or not at all; it cannot be divided or limited by any reservations, whether ethical or religious. For Hobbes the right of the state, being concentrated in the ruler, is therefore a "right to all" (jus ad omnia). The ruler is the "mortal god" who controls completely the property and life, even the opinion and religion, of his subjects. In order to derive these extreme conclusions Hobbes is obliged to alter essentially the outlines of the contract theory. He denies the dualism of social contract and contract of sovereignty; he knows of only one undivided act by the power of which individuals oblige one another to resign all separate rights and to transfer them in their totality to the ruler. Thus for him society does not exist as a legal and competent subject which as such submits to a ruler; rather the act of submission unites into a social whole the individuals who until then were nothing but a mere aggregate of wills. The contract of submission is unalterable, since its alteration would imply a return to the state of nature, to the "war of all against all." The people possess their universitas only in the king; without him they are a chaotic heap of volitions contradicting and excluding one another.

Exactly the opposite conclusion was reached by Althusius, who retained the duality of the contracts and worked out their essential difference. This point of view led necessarily to the doctrine of the sovereignty of the people. Althusius teaches that the social contract must necessarily precede the contract of submission, since only a community preexisting as a legal subject could enter a legal obligation. It follows that such an obligation can never be absolute but must take place under certain reservations. The people

do not give up their original majesty even if they voluntarily resign a part of it; for this resignation always concerns only the execution of power, not its legal possession. The people can as little deprive themselves of their genuine majesty to transfer it to the sovereign as one could resign one's soul and life to transfer them to another. The sovereign can be considered only the administrator of the popular will, whose function ceases as soon as he fulfils it improperly or as soon as it is taken away from him by a new act of majesty of the people. This applies to the monarchical constitution as well as to the aristocratic or democratic one, for the difference between these is not one of political form but merely one of administration and government.

This line of thought reaches its completion within the philosophy of the Enlightenment in Rousseau's doctrine of the contrat social. In stressing the conception of sovereignty Rousseau's doctrine agrees with those of Hobbes and Althusius. He too starts with the proposition that sovereignty by its very nature is indivisible and unlimited; that the individual in entering society transfers all his rights unreservedly to it. In the relation of the social contract to the contract of sovereignty, however, Rousseau takes exactly the opposite view from that of Hobbes. He eliminates the contract of sovereignty altogether and declares the social contract to be the sole foundation of a political community. The only possible and legitimate source of community, the act by which a people first becomes a people, is the voluntary assent of the individuals to a common will (volonté générale). By this act all individual right ceases and is transferred to the whole. Nevertheless, society does not rule by mere force; for it is so organized that the individuals by submitting to it find the pure expression of their own being in its general laws. True freedom, according to Rousseau, consists not in the lack of restriction as such but in a certain form of restraint—in a law which is not imposed upon the will from the outside but which it rather establishes by itself and for itself. This fundamental idea of Rousseau's political theory was raised to general philosophical significance in Kant's theory of ethics. Concerning the details Rousseau maintains that the people as the bearer of the general will can be represented by individuals or by certain communities in the execution of this will, but that in thus choosing a representative it can never resign its fundamental rights. A mandate once conceded can be reclaimed at any time.

The mental attitude of the philosophy of the Enlightenment was of particular and decisive importance for the philosophy of law. In its derivation of law the philosophy of the Enlightenment goes back to the theory of natural rights. The positive law, which is based exclusively on custom (Satzung) and which can accordingly be altered or annihilated by mere custom, is subordinated to the totality of those legal precepts which are of necessary and immutable validity and are the same for all times and all individuals. They cannot be diminished by any subsequent obligations into which the legal subject might enter; they are absolutely inalienable. This doctrine of inalienable fundamental rights was systematically carried out in the Netherlands by Hugo Grotius, whose main work, De jure belli ac pacis (1625), belongs to the most prominent and fruitful achievements of the Enlightenment. Grotius develops the plan of a "universal jurisprudence" which comprises private as well as public right and which allows the total content of both to be reduced to fixed principles. These principles, according to him, are no less evident and necessary than the axioms of mathematics. The content of this "natural law" is so unconditionally valid that it is binding not only for man but "for all reasonable beings at large"; even God is not able to alter it, since it does not depend upon His will but is the pure expression of His essence, which as an eternal entity is incapable of transformation. "Just as even God, then, cannot cause that two times two should not make four, so He cannot cause that that which is intrinsically evil be not evil" (De jure belli ..., 1: 1, 10, 5).

These fundamental ideas entered into the German philosophy of the seventeenth and eighteenth centuries mainly through the mediation of Leibnitz and Christian Wolff, and here they quickly received universal recognition and further development. Leibniz confronts the jus strictum with a higher law of purely spiritual origin-the law of reason and of reasonable beings. The privilege of the latter is that they are essentially free and that they cannot lose or alienate this freedom by any subsequent obligations of whatever nature. Christian Wolff developed this view completely and methodically in his theory of natural law. Wolff distinguishes between acquired rights (jura contracta) and innate rights (jura connata); among the latter he numbers particularly the right of personal security (jus securitatis). Every individual is entitled to the undisturbed performance of all those

actions which are indispensable for his physical preservation and mental perfection. This theoretical view of the Enlightenment received an eminent political significance by its effect on the Declaration of Independence in the United States and its reception as a model for the American constitution. According to Jellinek's work it seems certain that the American bills of rights, particularly the Declaration of Right of the Free State of Virginia (1776), decisively influenced the Declaration of the Rights of Man and of the Citizen of the French Constituent Assembly of 1789. The theory of natural rights as developed by the Enlightenment thus entered directly into the practical arrangements of politics and often determined the development of even their most individual traits (see Cassirer, E., Die Idee der republikanischen Verfassung, Hamburg 1929).

Just as in the theory of law the Enlightenment opposed the "unwritten" law to the "written" one, the pure law of reason to the "positive" law, so it sought to carry the same fundamental distinction into religion. According to it the kernel of religion is not to be found in single dogmas which are received by revelation and accepted on faith as they are handed down by tradition; religious truth, as any truth, rather deserves recognition only as it is founded on ultimate principles of reason. Thus the primacy of natural religion above the religion of revelation is constantly emphasized. In religion too the principle of mere authority and Scripture must be given up so that religion may be founded the more firmly on the nature of man, on his genuine innate faculties. This fundamental view of the Enlightenment was developed with clarity by Herbert of Cherbury as early as 1624 in his book De veritate and was accepted with increasing recognition by the "rational" theology of the eighteenth century. Religious truth, in so far as it is based on authority and revelation, possesses, according to Herbert of Cherbury, no more than presumptive value; and universal content of religious experience can be found only in the pure belief in God which is in no need of revelation but can be derived immediately from the essence of the mind and demonstrated by means of human understanding. The being of God as such cannot become the object of doubt but merely the more specific determinations of that being, the individual predicates which man attributes to divinity. This being is immediately evident to all reasonable minds in the order of nature, its inner lawfulness and teleology, and in the universal moral order, which is the same for all intellectual and volitional beings. In order to confirm this identity of morality Herbert refers to the stoic doctrine of the consensus gentium. Such a universal consent proves the descent of all individual volitional beings from a single divine origin, and it is upon this origin that all possibility of knowing the truth and all standards of truth depend. Moral self-certainty is thus considered the fundamental standard of religious truth; the use of conscience alone can lead to the objective certainty of God and a future life.

The pressure toward eliminating all merely accidental elements from the essential content of religion became connected in the Enlightenment with the idea of religious tolerance. This tolerance was not meant to be merely practical toleration; it was rather based on the idea of an ideal equivalidity of all positive religions, since each contains the universal meaning of natural religion as the purely moral religion of reason. The individual religions differ from one another only with regard to the symbols by which they describe this meaning. This idea had been propounded during the Renaissance by Nicholas of Cusa ("Una est religio in rituum varietate") but in the philosophy of the Enlightenment it received its widest recognition. In strict analogy to Cusa's book De pace fidei (1490?) Jean Bodin in his Colloquium heptaplomeres (1588) introduces the disciples of seven different religions contending with one another and defending their respective views and shows that true religion is common to all. This idea is finally taken over in the parable of the ring in Lessing's Nathan der Weise. But Lessing adds to the general conception of the Enlightenment by subsuming the whole of religious development under the idea of "education" (Erziehung des Menschengeschlechts, 1780). According to this the various positive religions follow one another in such a way that they form the elements and phases of a unified plan of education by virtue of which humanity is led step by step from crude and primitive beginnings to the highest goal—the goal of "rational belief," morally clarified and finally dissolved into a purely moral idea.

Within the religious philosophy of enlightenment the attitude toward the problem of miracles is of particular importance. Most of the representatives of this philosophy do not altogether deny miracles but declare that they are not to be understood as a singular supernatural interference of divinity with the course of nature. The very fact of the universal and immu-

table lawfulness of the course of nature is itself the true test of divinity, proving the origin of the world in a supreme understanding. It is not the exception but the rule which ought to form the starting point of religious consciousness.

> Der Wunder höchstes ist, Dass uns die wahren, echten Wunder so Alltäglich werden können, werden sollen

(Lessing, Nathan der Weise, 1: 2). The universal miracle of moral and natural laws is the funda mental and sufficient revelation of divinity, and this universal miracle dissolves all particular ones and renders them superfluous. The human mind is itself the supreme miracle which comprises all others: "Tout est plein de miracles, mais des miracles de raison" (Leibnitz).

The development of religious enlightenment proceeded differently in various countries. In England the movement of rational theology began in the seventeenth century, represented in the Anglican church by John Hales and Chillingworth and in philosophy especially by the Cambridge Platonists—Whichcote, John Smith, Cudworth, Henry More. It was followed by the deists, or free thinkers—in England notably John Toland and Anthony Collins, in Germany Hermann Samuel Reimarus-who confined the content of religion to the belief in God and the recognition of certain fundamental moral truths. In the circle of the German theology of the eighteenth century the religious conviction of enlightenment was represented in strict adherence to the philosophical principles of Christian Wolff, by Semler, Jerusalem, J. J. Spalding and others. In France the religious enlightenment entered into general literature and received a predominantly polemical turn by giving the call to arms, in the name of reason, against tradition and superstition, against dogmatism and clerical fanaticism. Here Voltaire became the real leader and protagonist of the Enlightenment. The most impressive cultural document of the Enlightenment and at the same time the most effective in propagating its ideas was the Encyclopédie of Diderot and d'Alembert. The whole development reached its philosophical culmination in Kant, who in Die Religion innerhalb der Grenzen der blossen Vernunft (1793) defined the range and limits of natural religion by almost completely reducing the latter to a moral consciousness.

The attempt of the Enlightenment to reduce the total content of religious experience to that of moral experience presupposed that the latter was previously self-contained and complete within its own realm. Unless ethical standards

were certain they could not be made the foundation of religion. Thus the Enlightenment came more and more to set forth the self-sufficiency (autarkeia) of morality as its fundamental postulate. It derives the ideal of self-sufficiency from ancient ethics, elements of stoic philosophy having contributed from the beginning to its formation. This development too can be traced back to the beginnings of the Renaissance. Pietro Pomponazzi's De immortalitate animae (1516) represents one of the earliest attempts of modern thought to emancipate ethics from the despotism of religious metaphysics. The decision of religious and dogmatic problems, it is here argued, is irrelevant to the truth and certainty of morals, for these possess their center of gravity in themselves. Good carries its own reward, evil its own punishment. In Pierre Charron's De la sagesse (1601) this idea is made more explicit. Here the ideal of a purely "natural" morality (prud'homie) is developed in such a way that it is based upon internal compulsion and is no longer in need of authoritative or religious support. This morality is always constant, never deriving its rule of action from changing circumstances, never relying upon promise or threat. "I consider the words: 'Were I not a Christian, were there no God and no eternal damnation to be feared, I should do this or that,' as disgusting and terrible. I demand that you be nonest because nature and reason,—that is, God —demand it, because the general order and constitution of the world, of which you are a part, require it—an order against which you cannot rebel without denying your own being and without fighting against your own purpose; as to the rest, may there come what will" (De la sagesse, bk. II, ch. v). In this passage is the fundamental theme which is developed in a series of variations in the ethics of the Enlightenment. Grotius explicitly distinguishes the natural derivation of ethics from the religious one. The propositions of natural right do not depend in their validity upon religious presuppositions: they would retain their meaning and their certainty even if there were no God. In Germany, Lessing fought for this principle of ethical autonomy even before it received its strictly systematic foundation in Kant's Critique of Practical Reason.

ERNST CASSIRER

See: RATIONALISM; SECULARISM; INDIVIDUALISM; SCIENCE; HUMAN NATURE; STATE; SOCIAL CONTRACT; SOVEREIGNTY; ABSOLUTISM NATURAL LAW; NATURAL RIGHTS; DEISM; ENCYCLOPÉDISTES; ETHICS.

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ENSENADA, MARQUÉS DE LA, ZENON DE SOMODEVILLA (1702-81), Spanish economist and statesman. After holding various positions in the Ministry of the Marine he was made Marqués de la Ensenada in 1736. He became minister of finance, war, marine and the Indies in 1743 and continued his control of the government of Spain after the accession of Ferdinand VI.

Ensenada accomplished significant reforms and projected others which were partially carried out after his death. By reorganizing the fiscal administration and reducing the concessions to tax farmers he increased the net revenue of the state while alleviating the actual burden of taxation. The poverty and depopulation of Spain he attributed to the antiquated and complex system of indirect taxation, and the great object of his fiscal policy was to substitute for the numerous small taxes the única contribución, apportioned according to an exhaustive survey of the wealth of the realm. Although he insisted that the government's credit was dependent upon its good faith he nevertheless adhered to the pernicious doctrine that the government was not bound to honor the obligations contracted by Ferdinand's predecessors and suggested that the entire question be relegated to theologians for settlement.

Ensenada supported the unpopular view that the precious metals were merchandise but argued that Spanish industries should be subsidized and the export of capital controlled to prevent foreigners from taking gold from Spain. He sanctioned the century old policy of excluding foreigners from trade with the Spanish colonies but advocated opening up this trade to all Spanish ports, as was done by Charles III in 1778, and he helped to destroy the monopoly of the colonial trade by sending out independent ships. The prosperity of Spain was increased also by Ensenada's policy of promoting internal trade. This he effected by improving roads, building canals and abolishing the provincial customs dues on grain.

Ensenada's fiscal reforms were intended to release a greater part of the state's revenue for the expansion of the army and navy. He advised the king to pursue peace in order that the population, depleted by continuous wars, might increase. Preparedness he held to be the surest guaranty of peace, and in accordance with this theory he greatly improved the Spanish navy. While considering the gains Spain might make as the price of neutrality during war between England and France he would have joined either side to regain Spanish dominions usurped by the other. Ultimately he favored an alliance with France; this policy aroused English enmity, which supported by the opposition of the Anglophiles in Madrid resulted in his dismissal in 1754. Although Ensenada was allowed to return to court in 1760 he never regained his former power and was again banished from the court in 1766.

The memorials which Ensenada prepared for the king are published in Rodriguez Villa's biography.

ROBERT S. SMITH

Consult: Rodriguez Villa, Antonio, Don Cenon de Somodevilla (Madrid 1878).

ENTAIL, or fee tail (feodum talliatum), signifies a proprietary interest which has been cut down and appreciably curtailed by restraining alienation on the part of the donce in order to defeat the expectant interest of the issue specified in the gift or the reversion of the grantor. The term finds an equivalent in the fideicommissum, or family trust entail, of the modern civil law. The concept was shaped in part by a superficial consideration of the ancient fideicommissum of Roman law, which actually was a trust imposed upon the heir or legatee in order to pass the

inheritance or legacy to a third person, who was regarded as the real owner. The device gained recognition in Roman law as a means of evading the numerous formalities surrounding the institution of heirs and the creation of legacies and also to circumvent the disabilities imposed upon certain classes who were ordinarily incapable of inheriting; and it consequently differed in both character and purpose from the modern forms of entail in continental and English law.

The modern entail is a feudal idea grafted on the Roman jurisprudence and called forth by a desire to prevent the disintegration of large landed estates through divisible inheritance or the ineptitude, extravagance and irresponsibility of heirs. Thus, among the higher feudal aristocracy of mediaeval German states, it was recognized by the latter half of the thirteenth century that partition of the family possessions could be prevented only by the substitution and development of a fixed law of primogeniture and through dynastic statutes or customary practise of a special law of entailed estates (Stammgüter, bona aviatica, stemmatica), family holdings which are inalienable and are inherited agnatically and in accordance with primogeniture. Whether the ownership of the entailed property rests with the family as a corporate association with its own legal personality—a view of the majority of the Germanists—or whether the ownership is attributable to the head of the house, who is restricted by the special end to which the family estate is appointed and by the real rights in expectancy held by the agnate members, is a moot problem of the civil law.

The lower nobility, which had no powers of private legislation, endeavored to accomplish its ends by consensual agreement and entails. Such entails were found in Germany from the eleventh century onward and considerably earlier among the Anglo-Saxons; but they first became widespread in the sixteenth century. After the Thirty Years' War they were recognized as the most effective means of preserving the family estates from the disintegration to which they were doomed by the Roman law of inheritance. The lesser nobility, following the example of the Spaniards and Italians, combined the Roman fideicommissum with certain ideas of the feudal law, particularly that of a successio ex pacto et providentia maiorum. Philipp Knipschild's Tractatus de fidei-commissis familiarum nobilium (1654) determined the actual theory of the family entails down to modern times and became the basis of both the common law

and the legislation of the different German states. The fideicommissum could be created by a declaration of the donor's will, given either inter vivos or mortis causa. It established an inalienable estate, the temporary occupant of which had the right of possession, management and usufruct, and the other members of the family an irrevocable real right in expectancy. In the family trust entail, if the donor did not appoint the order of succession, the statutory rule applied. This rule embodied the principle of majorat in a broad sense, whereby succession might fall to the oldest member of the entire family irrespective of the line or degree of kinship or to the nearest kinsman of the last occupant capable of inheriting according to the degree of kinship or according to the rule of primogeniture by which the nearer parentelic group preceded the more remote and the elder line preceded the younger within each group.

The family entails followed the same lines of development in mediaeval France and among the Italian monarchies. In the latter the older nobility were spurred on by contempt for and hostility to the newer nobility. To preserve the unity of their family estates they formed societies (consozi) governed by agreements such as the fideicommissa, which rendered the patrimony inalienable and indivisible for generations. By the end of the seventeenth century the greater part of the landed property was thus entailed.

In England by the beginning of the thirteenth century gifts expressly limited to a donce "and the heirs of his body" or to a husband and wife "and the heirs of their body" appeared with increasing frequency just at the time when the man who held "to himself and his heirs" was gaining a full liberty of alienation, both as against his lord and as against his apparent or presumptive heir. By the middle of the century these gifts were curiously interpreted as conditional fees and the grants as conveyances to the donee upon condition that he should have heirs of his body. Once the condition was satisfied by the birth of an heir, the donee had the power of complete alienation. This judicial construction can be explained only on the ground of a strong bias in favor of free alienation. Since this doctrine ran counter to the expressed intention of settlors, an act of 1285, the first chapter of the Statute of Westminster 2, the famous De donis conditionalibus, converted conditional fees into fees tail. Originally the duration of the entail was restricted, but the courts by a piece of judicial legislation shortly after the passage of the

act restrained alienation to the fourth generation (Belyng v. Anon., Selden Society Publications, vol. xxxi, London 1915, p. 176) and gradually made the entail perpetual.

The disadvantages of the entail were soon evident both in England and on the continent. With the expansion of commerce creditors found that entailed property could not be attached for the payment of debts. Agriculturists maintained that as holders of entailed estates had no permanent interest in improving the land they prevented progress in cultivation; at the same time a drastic displacement of the small peasant holdings was being brought about. Kings were disturbed because in forfeitures of estates for treason they were deprived of more than a life interest. In civil law countries it was felt that by means of the entail a new form of succession was being substituted for the ordinary one. The secrecy of the entail on the continent was a target for critics, since by this means the possessor of an encumbered estate was enabled to pass for the absolute owner and enjoy a fictitious credit. Continental countries resorted largely to statutory enactment in attacking the entail; England effected reforms by judicial legislation.

Under the old regime in France certain modifications were introduced. Sixteenth century ordinances limited entails to two degrees, not including the first holder, and provided for publicity. These provisions, brought together in the Ordinance of August, 1747, were not effectively carried out. The encyclopédistes resumed the attack and out of hatred for all feudal institutions entails were abolished in the course of the revolution on November 14, 1792, and were prohibited on principle by the Code civil (art. 896). A Napoleonic decree, however, conferred upon the new nobility perpetual entails; and an attempt was made during the restoration regime of Charles x to reintroduce primogeniture by a law of May 17, 1826, which, however, was repealed in 1849. In modern Germany the entail also encountered violent opposition. During the supremacy of French law in the regions west of the Rhine the institution completely disappeared, and the French example was soon followed in other German states only to be overthrown when the entail was reestablished in the first period of reaction following 1815. The entail was again under fire in 1848; it was actually abolished in some states-notably Prussia by article 40 of its constitution—but it was restored in the reaction that soon followed. With the sole exception of a few states in westEntail 555

ern Germany it was preserved through the World War. After the war the national convention embodied in the new constitution of 1919 a general clause declaring that entailments were to be dissolved (art. 155 of the Weimar constitution). In pursuance thereof most of the German states in the following years enacted statutes providing for either the immediate or gradual dissolution of entails. In the post-war period liberalizing enactments in southeastern Europe, such as the work of the Jugoslavian convention which drafted the constitution of 1921 and abolished entails (art. 38), were counteracted by reactions like that of Rumania, where alienation and subdivisions of the land of the peasants have been restricted within definite limits in order to avoid undesirable effects resulting from equality under the civil code. Eighteenth and nineteenth century legislation in the Italian states severely curtailed the institution, denying in a number of states the right to create fideicommissa to all save the nobility and forbidding perpetual entails, the property becoming free again after a certain number of transfers—four according to Piedmontese laws, for example, two according to enactments of Maria Theresa. The abolition of entails in Italy during the French Revolution was temporary; the fideicommissum in restricted form returned to favor only to be abolished in every form in the modern code (art. 899).

In England objections to the estate tail resulted in the judicial sanction in 1472 of a method of evading the effect of the statute De donis by means of a fictitious suit known as a common recovery, which barred both the entail and the donor. After the doctrine had been established that an estate tail could be transformed into a fee simple by a common recovery, a somewhat similar effect was given by statute to the levying of a fine. The difference was that a common recovery barred both the entail and the donor, whereas a fine barred only the entail. The alienability of the entail called forth in the sixteenth century new devices to preserve the large domains of the aristocracy intact. By means of claborate methods, known to lawyers as contingent remainders, shifting and springing uses, executory devises and powers of appointment, it became possible so to settle property that it must for an indefinite period continue to be enjoyed by a series of limited owners, no one of whom had complete powers of alienation. These family settlements aimed at the restoration of the old unbarrable entails; but the courts, zealous in their adherence to the principle of

freedom of alienation, were compelled to lay down rules to prevent what the lawyers of the sixteenth century called "perpetuities." In the seventeenth century the courts sought to prevent the remoteness of time at which a future interest was made to vest. In the Duke of Norfolk's Case in 1681 Lord Nottingham in the Court of Chancery laid down the general rule which is now known as the modern rule against perpetuities, according to which, as finally settled, any interest which must vest within a life or lives in being and twenty-one years thereafter is valid; any interest which may vest at a period more remote is invalid.

Among the sweeping legal reforms effected by Parliament in the nineteenth century a statute in 1833 abolished fines and recoveries and enabled the tenant in tail to alienate his lands by deed. The Law of Propeny Act of 1925 permits the tenant to dispose of his estate by will as if he had disentailed. Otherwise entails remain untouched, and they are permitted to include personalty as well as realty. While descent to the heir-at-law has been abolished, entailed interests are not affected but descend according to the general rule of descent prevailing before 1926 (Law of Property Act, 1925, 15 Geo. v, c. 20, sect. 130, subd. 1 and 4 and Administration of Estates Act, 1925, 15 Geo. v, c. 23, sect. 51, subd. 4).

In Scotland the institution of entails in its complete form was not introduced until the seventeenth century, and it was finally authorized by a statute in 1685. Objections similar to those raised in other lands brought about restrictive legislation in the eighteenth and nineteenth centuries, and a statute in 1848 aimed to approximate the English law of entail as nearly in substantive effect as the difference in forms of conveyancing in the two countries would admit and allowed the tenant in many cases to acquire the estate in fee simple by executing an instrument of disentail. Successive statutes have continuously enlarged the rights of tenants in tail, and the Entail Act of 1914 finally prohibited the creation of fresh entails (4 & 5 Geo. 5, c. 43).

The American experience dates from the colonial era, when the practise of entailing land was extensive; it steadily increased in the eighteenth century. It was most common in the manorial and plantation systems of the middle and southern colonies. Just as primogeniture proved inapplicable to American conditions, so the attempt to restrict alienation was very early found adverse to colonial interests. The opposition to both sprang from the feeling that they would

nurture and perpetuate an undesirable social and political class. In Georgia the colonists appealed to the trustees to abandon their policy of making entailed grants on the ground that it was ruinous to the colony, and after much controversy the Common Council in 1750 enlarged all grants already made to absolute inheritances. The common recovery was frequently suffered, but in some colonies, such as Virginia, statutes forbade the use of the fine; and common recovery and private legislative action were necessary to release an estate from an entail. This type of relief although expensive, elaborate and at times dilatory was generally preferred to resort to the courts. As a result of the unfavorable colonial experience the legal profession by the close of the colonial period was inclined to look with disfavor upon the institution of the fee tail. The legislation in Virginia, culminating in 1776 in Jefferson's successful attempt to abolish entails and supplant "an aristocracy of wealth" by an "aristocracy of virtue and talent," is typical of this changing attitude. It is estimated that this act released from entail at least half and possibly three fourths of the entire "seated" area of the state. The confiscation of the great loyalist estates during and after the War of Independence brought about the subdivision of vast entailed estates, among them the properties of Sir William Pepperrell in Maine, the Philipse estate in New York and the estate of the Penn family, proprietaries of Pennsylvania. In the great majority of American states, in emulation of Virginia, there is legislation aimed at the abolition of entails. Today the entail is possible although rare. Its elimination has been brought about roughly in three ways. In some states the fee tail has been made a fee simple in the first taker. In others the entail has been preserved merely for the life of the donce in tail or has been made a life estate in the first donee with remainder in fee simple either to the latter's children or the person to whom at common law the estate would pass at his death. In a third group the fee tail subsists, but the tenant is permitted to convey the property in fee simple, usually by ordinary deed. Such statutes do not abolish entails, and today in Massachusetts and Maine in the event of the failure of the tenant in tail to convey in fee simple the land descends according to the common law rule of primogeniture.

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See: Inheritance; Feudalism; Land Tenure; Primo-Geniture; Landed Estates.

Consult: Roby, H. J., Roman Private Law in the Times

of Cicero and of the Antonines, 2 vols. (Cambridge, Eng. 1902) vol. i, p. 356-79; Brissaud, J. B., Manuel d'histoire du droit français, 2 vols. (2nd ed. Paris 1908), pt. iii tr. by R. Howell, Continental Legal History series, vol. iii (Boston 1912) p. 726-33; Calisse, C., Storia del diritto italiano, 3 vols. (4th ed. Florence 1903), tr. by L. B. Register, Continental Legal History series, vol. viii (Boston 1928); Hübner, R., Grundzüge des deutschen Privatrechts (4th ed. Leipsic 1922), tr. by F. S. Philbrick, Continental Legal History series, vol. iv (Boston 1918) p. 308-16, 761-62; Klässel, Oskar, "Auflösung der Familiengüter" in Handwörterbuch der Rechtswissenschaft, ed. by F. Stier-Somlo and A. Elster, 6 vols. (Berlin 1926-29) vol. i, p. 369-73; Holdsworth, W. S., A History of English Law, 9 vols. (3rd ed. London 1922-26) vol. vii, p. 193-238, and An Historical Introduction to the Land Law (Oxford 1927); Updegraff, C. M., "The Interpretation of 'Issue' in the Statute De Donis" in Harvard Law Review, vol. xxxix (1925-26) 200-20; Plucknett, T. F. T., A Concise History of the Common Law (Rochester 1929) bk. ii, ch. vi; Rivington, H. G., Law of Property in Land (London 1930) ch. iv; Irvine, Patrick, Considerations on the Inexpediency of the Law of Entail in Scotland (2nd ed. Edinburgh 1826); Duff, Alexander, A Treatise on the Deed of Entail (Edinburgh 1848); Bell, G. J., Principles of the Law of Scotland, 2 vols. (8th ed. Edinburgh 1885) vol. ii, p. 245-80; Evans, Ifor L., The Agrarian Revolution in Roumania (Cambridge, Eng. 1924); Yovanovitch, N., Etude sur la constitution du Royaume des Serbes, Croates et Slovènes . . . 1921 (Paris 1924); Tsouderos, E. J., Le relèvement économique de la Grèce (Paris 1920); Morris, R. B., Studies in the History of American Law (New York 1930) ch. ii, and "Primogeniture and Entailed Estates in America" in Columbia Law Review, vol. xxvii (1927) 24-51.

ENTICEMENT OF EMPLOYEES. The concept of the enticement of labor is based upon an interest of lord, master or employer in his servants or employees and describes an interference with the relationship existing between them. That interference may arise between employers competing for help, and in such a case is usually acute in times of labor shortage, e.g. war or pestilence; it may arise between industries, as, for instance, between the essential and nonessential industries during the World War; between employers competing for a worker possessed of unique ability; between employers and employees, when employees unite and seek to entice their fellow employees from employment unless conditions be changed in accordance with their demand. Prevalent throughout is the notion of scarcity of labor as to quantity or kind. At various times, when scarcity has become evident, employers have sought to protect their interests through legislation, the action of the courts and social pressure.

Prior to the Statute of Labourers, which was the first general enactment prohibiting enticement, there had been no common law action for procuring a servant to leave the master's service (Year Book, 11 Henry IV, f. 23, pl. 46). There had been an actio indirecta arising in favor of the lord for violence done household servants and slaves, in so far as it was to the lord's interest not to be deprived of their services thereby (Bracton, f. 115).

In 1349, following the visitations of the Black Death and the consequent decimation of the population, there was great difficulty in getting laborers, and those that remained were exacting high wages. Since Parliament was afraid to convene during the pestilence, the king issued an ordinance [Ordinance of Labourers, 23 Edw. III, c. 2 (1349)] providing among other things that no laborer should depart from his employment under pain of imprisonment and that none should receive or retain in his service any laborer so departing. There was an insufficient supply of labor and the ordinance was largely disregarded. In the following year Parliament, therefore, reenacted the ordinance as the Statute of Labourers [25 Edw. III, st. I, c. I (1350)]. Despite strenuous efforts in its enforcement in 1360 it became necessary to amend the statute to provide for more severe penalties (34 Edw. III, c. 9, 10, 11). By the force of these enactments and a later act [Statute of Artificers, 5 Eliz., c. 4 (1562)] an attempt was made to fix the status of labor and to punish enticement. With the passage of time a right in the employer to the uninterrupted services of the servant as against an enticer was recognized without recourse to the statutes [Blake v. Lanvon, 6 T. R. 221 (1795)].

The industrial revolution and the consequent overcrowding of labor in some of the industries, notably cotton weaving and spinning, led to a revival of control by statute. The Statute of Labourers had been aimed at the enticement of the servant from employment. A new development due to the factory conditions is now to be noted. Enticement suffered a change and addition in character. Groups of laborers forming themselves into societies were interfering with the relationship of master and servant for the purpose of ameliorating the conditions of employment. They sought to induce workers to leave their employment in order to exert pressure upon the employer. To meet this situation the Combination Act of 1799, which was amended and reaffirmed in 1800, was passed (30 Geo. III, c. 81; 40 Geo. III, c. 106) prohibiting combinations of workmen. Attempts on the part of labor to have the provisions of the Statute of

Artificers enforced were denied under the influence of the laissez faire ideas, and those provisions relating to wages were repealed [53 Geo. III, c. 40 (1813)].

The Combination Act in the meantime although not strictly enforced had a very definite retarding effect on the organization of the workers, and finally in 1824 largely because of the efforts of the more courageous economists, particularly Francis Place, it was repealed [5 Geo. IV, c. 95 (1824)]. But violent efforts toward organization on the part of the workers followed the repeal, and the Combination Act of 1800 was substantially reenacted [6 Geo. IV, c. 129 (1825)]. The Statute of Labourers as modified continued in effect until 1875.

The next phase of preventing the enticement of labor is found in the development of the doctrine of inducing breach of contract. This dates from the year 1853, when it was held actionable for a third person to induce the breach of contract of employment in order that he might obtain the services of the employee (Lumley v. Guy, 2 El. & Bl. 216).

Employers seeking to prevent unionization required employees to sign agreements not to join unions (so-called yellow dog contracts). Such contracts were the basis of appeals to the courts for relief enjoining unionization. The question whether such relief may be had is still unsettled, although in Hitchman Coal & Coke Co. v. Mitchell [245 U. S. 229 (1917)] it was successfully obtained from the Supreme Court of the United States. The decision has been criticized on numerous grounds and its basis in law seems indefinite. It has even been suggested that it was based on the doctrine that it is illegal to entice servants even in the absence of contract. Inasmuch as this doctrine arises under the English Statute of Labourers, which has never been enforced in the United States, it is questionable.

As the shortage of labor caused by the Black Death brought about keen competition resulting in the Statute of Labourers, so the increased demand for labor caused by exigencies of the World War brought similar need for social control. Manufacturers of essentials in the United States found themselves in competition with those of non-essentials and amongst themselves for a sufficiency of man power. There was at the same time a great migration of Negroes from the south to the manufacturing plants of the north. To meet the first condition there was inaugurated under the Department of Labor a War

Labor Policy Board, which allocated labor among the factories. A Federal Employment Service was set up for the distribution of labor. In the south drastic legislation was passed to prevent Negroes from going north. In Arkansas, Georgia and Alabama laws were enacted to suppress the activities of labor agents. An ordinance adopted in Montgomery, Alabama, subjected any person who enticed any laborer to leave the city to certain penalties. Advertisements urging laborers to leave the south were made illegal. In the main such preventives were ineffectual, for high wages proved greater as an inducement than law as a deterrent.

This was in a true sense social repetition. When labor is scarce, labor is sought, and employers seek methods to stop competition. They are, however, largely ineffectual and enticement continues until the conditions which cause it lessen.

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See: LABOR; LABOR CONTRACT; TRADE UNIONS; LABOR TURNOVER; MOBILITY, SOCIAL.

Consult: Cunningham, W., The Growth of English Industry and Commerce, 3 vols. (5th ed. Cambridge, Eng. 1910-12); Putnam, B. II., Enforcement of the Statutes of Labourers . . . after the Black Death (New York 1908); Webb, Sidney and Beatrice, The History of Trade Unionism (rev. ed. London 1902); Sayre, F. Bowes, "Inducing Breach of Contract" in Harvard Law Review, vol. xxxvi (1922-23) 663-703; Wigmore, J. II., "Interference with Social Relations" in American Law Review, vol. xxi (1887) 764-78; Wehle, L. B, "War Labor Policies and Their Outcome in Peace" in Quarterly Journal of Economics, vol. xxxiii (1918-19) 321-43; Employment Managers' Conference, Rochester 1918, Proceedings, United States, Bureau of Labor Statistics, Bulletin no. 247 (1919); United States, Employment Service, "The War Labor Policies Board" in Bulletin, vol. i (1918) no. 40, p. 13; Densmore, J. B., "Lessons of the War in Shifting Labor" in American Academy of Political and Social Science, Annals, vol. lxxxi (1919) 28-37; Scott, E. J., Ilegro Migration during the War (New York 1920).

ENTREPRENEUR. The term entrepreneur was used by Cantillon in his *Essai sur la nature du commerce* (1755) to designate those dealers who "buy the wares of the country...give for them a fixed price to sell them again wholesale and retail at an uncertain price." The distinguishing characteristic of the entrepreneur was thus the bearing of uncertainty. Among French writers the distinction between the capitalist, or passive investor, and the entrepreneur was common, together with the parallel distinction between interest and profit. But among English economists down to J. S. Mill the distinction

was absent, the single term capitalist and the single income category of profit being used. The new attention, toward the end of the nineteenth century, to the special function of the entrepreneur and to profit as distinct from interest on loan funds must be largely attributed to the influence of Francis A. Walker. J. B. Clark and less explicitly Marshall are the foremost among recent economists to lay special stress on the unique importance of this function.

There remains, however, no great agreement as to the essence and the frontiers of this function. Among many writers the work of coordination or management has been stressed. The entrepreneur has been identified with the captain of industry, ordering and marshaling the company under his control. Profit has been defined as the wages of management or the gross earnings of management, and a distinction was drawn between profit and interest parallel to that between the shares of the active and of the sleeping partners in a business. Marshall described "the supply of business power in command of capital . . . as consisting of three elements, the supply of capital, the supply of the business power to manage it, and the supply of the organization by which the two are brought together and made effective for production," the gross return to these services being governed by causes "less arbitrary" and presenting "closer analogies to those which govern other kinds of earnings than is commonly supposed" (Principles, 8th ed., bk. vi, ch. vii, sect. 7).

Other writers, however, following Cantillon, have stressed the facing of uncertainty as a unique function qualitatively different from other economic functions and have represented this as the essential mark of the entrepreneur. In so far as uncertainty as to the future is an integral feature of economic change the bearing of uncertainty must necessarily be identified with the making of the ruling decisions in the economic system. Hence the entrepreneur is in a very special sense the key factor in economic life. This conception has been carried furthest by Knight, who has pointed out that the significant feature of economic change is precisely the incalculability of the results of economic activity. The entrepreneur in taking the ruling decisions is the person who gains or loses according as the actual outcome of events exceeds or falls short of the anticipated outcome. According to Knight, "with uncertainty absent, man's energies are devoted altogether to doing things; . . . in a world so built that perfect knowledge is theoretically possible, it seems likely that all organic readjustment would become mechanical, all organisms automatic. With uncertainty present, doing things, the actual execution of activity, becomes in a real sense a secondary part of life. The primary problem or function is deciding what to do and how to do it" (Risk, Uncertainty and Profit, p. 268).

This difficulty of definition is more complex than would appear at first sight, and the confusion which exists in economic literature on the subject seems rooted in a formal difficulty rather than in a practical one; that is, in a question of logic rather than in any inability to decide what the business man actually does. It is most conspicuously in the theory of the entrepreneur and of profits that contradiction seems to arise from that common failure to realize whether one is solving a logical problem or pursuing a purely empirical inquiry. Economic theory in its classical forms has essentially been a theory of equilibrium concerned with the pricing of a collection of commodities and services, the unknown of the problem being determined by the requisite number of known constants in the situation. It is clear that in such a problem uncertainty, in the sense of the incalculable, has no meaning: the very possibility of a solution of the problem excludes any deviation of the actual from the calculable. In a system of economic equilibrium the work of the entrepreneur cannot be qualitatively different from that of any other agent of production. But in so far as a given set of historical circumstances necessitates that the work of management and coordination should be combined with certain other attributes, with the possession of capital and certain business connections and good will, a realistic theory of distribution must include a category of entrepreneur profit separate and distinct from the categories of wages, interest and rent. The entrepreneur function is in fact a composite function, the elements of which are not completely separable; and since the conditions of supply and demand for this composite function are different from those for its separate elements in isolation, the price of the whole is not equal to the sum of the prices of its separate parts. For this reason capitalist profit, as the historically conditioned income of the capitalist entrepreneur, is essentially an institutionally determined category, and least of all economic incomes is it a "natural" category of distribution.

As soon, however, as the concept of the incalculable is introduced, the problem becomes totally different and incapable of solution within the framework of economic theory as customarily conceived. To "explain" the entrepreneur's function and his reward in terms of uncertainty is not an explanation in any deterministic use of the term, but rather the negation of it. There is no normal profit, since ex hypothesi profit is the incalculable deviation of the actual from the anticipated. Because the entrepreneur is simply a gambler in the economic lottery, one cannot interpret his actions in terms of any rational calculus; for in this lottery the size and number of the prizes as well as their distribution are unknown.

There is left then only the purely empirical definition of the entrepreneur as the recipient of the non-contractual, or residual, income. The entrepreneur bargains with all the agents of production, the agents necessary for the actual doing of things, contracts to give them a certain income and appropriates the difference between the sum of these contracts and the actual outcome of the productive process. The entrepreneur is, as it were, the windfall absorber of the economic system. But the role is not a merely passive one, since his work of contracting for the hire of the agents of production inevitably implies the taking of the ruling decisions of economic life, decisions which will themselves influence the incompletely calculable future. All the productive functions concerned with the execution of decisions already made, routine management and coordination, can, theoretically at least, be delegated to particular persons and hired for a contractual income. But the inseparable nucleus which remains consists of the taking of those decisions with regard to the future which involve uncertainty; and it is this political, as distinct from executive, element in the conduct of economic affairs that is the entrepreneur function par excellence.

The distinction on which this definition rests is both actual and important. But it is by no means easy to establish in concrete situations. It does not necessarily follow personal lines: certain persons may combine in their income both contractual and windfall elements, and it may often be difficult to attach the label of entrepreneur to any clearly defined class of persons. Bondholders and debenture holders are clear cases of contractual capitalists. But what are the holders of preferred stock? Are ordinary holders of common stock to be classed as entrepreneurs? Or only the chosen few of them who exercise control in a modern corporation and hence make the ruling decisions? And do not fluctuations in

earnings and employment on the part of wage earners represent a partial shifting of the fruits of uncertainty upon labor? In earlier types of business, preceding the joint stock company, it was much easier to single out the active partner of a business as the entrepreneur. With the modern prevalence of joint stock enterprise it is difficult to localize actual control over key decisions; it is difficult to identify such control with the bearing of the results of uncertainty; and it is difficult to draw a clear line of demarcation between contractual and non-contractual income.

A guiding motive behind modern theories of the entrepreneur has been to rebut the Marxist estimation of the capitalist as an exploiter, performing merely a historically transitional role and receiving an income created by certain historical institutions and not by a natural or inevitable order of relationships. The justification of the entrepreneur which has been implicit in most of these modern theories has consisted in postulating certain functions which are not merely institutional and historically relative but possess some absolute significance in the sense that they would be required in any conceivable economic order, and in showing that the entrepreneur's income is related to these functions in some particular way. The function of routine management and coordination, to which most of the older writers made reference, clearly need not be associated with capital ownership and the receipt of profit: with the growth of corporations this function has been increasingly delegated to persons remunerated by a contractual salary or wage. There remains the function of bearing uncertainty and of taking those ruling decisions which involve uncertainty. In an alternative economic order, say a socialist system, uncertainty would be borne by the community as a whole and the taking of crucial decisions would presumably rest with those persons to whom the community agreed to delegate them. The question then becomes a purely administrative one: would wiser or less wise decisions be made under the one system than under the other? And to the extent that such decisions are ex hypothesi a gamble, in the dark, it is hard to conceive of any rational answer to the question. At any rate, a merely empirical definition of the entrepreneur seems to sustain no a priori implication that the association of this function with a particular class of persons is necessarily desirable or inevitable.

Maurice Dobb

See: PROFIT; RISK; DISTRIBUTION; STATICS AND DY-

NAMICS; CAPITALISM; CAPTAIN OF INDUSTRY; BUSINESS ADMINISTRATION.

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ENVER PASHA (1881-1922), Turkish statesman. Enver Pasha attended Turkish military schools and became an officer in Macedonia, where he acquired the Young Turk ideas of reform which were embodied in the program of the Committee of Union and Progress. Early in 1908 he and Niazi Bey inaugurated the first Turkish revolution, which brought about the fall of Abdul Hamid and the introduction of a number of reform measures. Appointed military attaché in Germany, Enver became acquainted with the German plan in the event of world war of blocking the British road to India at the Suez Canal and opening a way toward the conquest of India through Transcaucasia and Transcaspia as well as through Persia and Afghanistan. These ideas became associated in his mind with his own plan for the achievement of pan-Islamic and pan-Turanian ideals-more concretely, for the recovery by Turkey of control in Egypt and for the union of all Turkish speaking peoples of the world under one government.

In 1913 Enver took part in the overthrow of the conservative government and the restoration of the Young Turks to power. A year later he became minister of war and was active in negotiating with Germany the secret treaty of alliance of August 2, 1914. He is believed to have helped essentially in bringing Turkey into the war on the side of the Central Powers. In 1915 and subsequently he supported Talaat in destroying the Armenians of Turkey, who were an obstacle to complete Turkish control and to the

achievement of the pan-Turanian plan. After the Russian collapse Enver vigorously supported an advance eastward in pursuit of pan-Turanianism. Forced to resign after the Armistice, he fled to Germany and thence to Russia, still cherishing pan-Turanian dreams. During his period of power Enver had cooperated steadily with the Germans and had aided considerably in the Turkification of the Ottoman Empire and in the attempt to free Turkey from foreign control. In 1921 he was allowed to go to Russian Turkestan, where after a break with the Bolsheviks he joined and reorganized their opponents in Bokhara, the Basmachi. He was slain in battle shortly afterward.

ALBERT H. LYBYER

ENVIRONMENTALISM is the tendency to stress the importance of physical, biological, psychological or cultural environment as a factor influencing the structure or behavior of animals, including man. Although the two are inextricably intertwined, environment is often contrasted with heredity. Throughout history ruling groups have stressed heredity as a rationalization for their status, while rising insurgent classes, advocating changes in institutions, have considered the social environment to be the basic determinant of behavior and achievement.

The influences of physical environment have received attention from early historical times. Hippocrates attributed many diseases to climatic or atmospheric conditions. The localization of religious and medical influences, as at Delphi and in the incubation rites at Epidaurus, tended to stress the importance of definite environments. The color of the Ethiopian was attributed in the myths to the great heat of the sun, which also produced the deserts. Herodotus emphasized the geographical conditions underlying Egyptian civilization, and Thucydides called attention to the importance of geographical factors in Greek civilization. Strabo and Diodorus Siculus were alive to the importance of geographical details. Modern views on this subject date from Bodin, who attributed much importance to climatic zones and to longitude, latitude and altitude as determinants of individual and ethnic qualities. Montesquieu refined the arguments by discussing the correlations and the reasons for them in greater detail. Herder oriented man and civilization in the world of material things and forces and indicated the influence of place on life, thought and civilization. Buckle carried the argument forward in amplified form, and the anthropogeographical schools of Ratzel, Kirchoff, Semple and Huntington now hold the thesis that physiographical factors determine the fundamental character of civilizations. A reply to this position had already been made by Turgot and d'Holbach, who pointed out that there is no constant association of a given type of civilization with a given environment, that similar civilizations flourish in dissimilar environments and dissimilar civilizations in similar environments. Turgot insisted that geographical factors must not be accepted as an explanation of the characters of civilizations until other methods of explanation have been tried and found wanting.

The influence of environment on living beings through the adaptation of biological structure was emphasized by the Greeks and in modern times especially by Lamarck and Erasmus Darwin. Charles Darwin and Alfred Russel Wallace gave many instances of the influence of environmental selection upon the characteristics of species, and the selective agency of environment has since been continuously emphasized. The importance of social or cultural environment was first stressed in some detail by the sophists, who considered ethical standards, laws and customs to be a reflection of the accidents of social circumstance. According to their teachings the individual merely reacted to the culture to which he had become habituated. The stoics, however, emphasized the importance of controlling the will as a means of attaining independence of circumstance. A theory of social determinism is implicit in Plato's and Aristotle's utopias and in all later utopias, for they shape individual careers by remodeling the social and political order, but there is little explicit statement of the doctrine by utopian writers. The doctrine that the past determines the present and that the present is the amplified past-the doctrine of culture continuity—is equivalent to stressing the importance of historical cultural environment. This view, illustrated in many Greek and Roman writers, is first explicitly expounded by the French writers—Bodin, Fontenelle, Turgot, d'Holbach and Condorcet. It is an expression of the more inclusive view that environment influences the mental life of man. Its more explicit statement and illustration in terms of psychology begin with Pavlov and with the subsequent exploitation of the theories of conditioned responses, but the background of psychological environmentalism is the tabula rasa theory of Locke and the associationism of

subsequent psychologists. Applications to the problem of crime would seem self-evident but they were not made until More published his *Utopia*. Robert Owen was the first vigorous exponent of the view that character is the result of circumstance. In the United States Lester F. Ward stressed the importance of the environment through his emphasis on the role of opportunity. In Europe the historical materialists developed their social philosophy upon the environmentalism implicit in the writings of Karl Marx. Environmentalism is now the dominant social philosophy underlying the program of the leaders of the Soviet Union.

Any discussion of the influences of environment implies the recognition of at least two main factors or variables, one of which has influence, immediate or indirect, upon the other. Neither factor is wholly passive, else there would be no influence, because there would be no response. The environment which influences is itself influenced and therefore either may be considered variable or constant. Strychnine does not disintegrate the physical organism unless the strychnine is disintegrated; typhoid germs do not kill the patient unless the patient reacts to them; pollens do not cause hay fever unless the patient is sensitive to them. Unless therefore the two factors are brought into rapport either directly or through a medium in which the influence of the one is exerted upon the other and conversely, there is no environmental influence. The temperature of the center of the earth or that of the atmosphere twenty miles above the earth does not influence man unless these temperatures are somehow transmitted to man; that is, are made effective. These considerations apply to all phases of environment whether social, psychological or biological. It follows then that the influences of the physical environment cannot be discussed without first defining the range of reaction of the things acted upon. Experiments with Drosophila show that certain individuals inherit in sex linked form a defective abdomen. But the abnormality appears only in individuals with the defective gene who are kept in a moist atmosphere. Those which have the defective gene and are grown in a dry atmosphere do not, despite the defective gene, exhibit the abnormality. Only a specific combination of gene and humidity and temperature therefore produces normality or abnormality, as the case may be, and the result may be attributed to any factor involved, for it occurs when all are found together.

Another sex linked abnormality which shows similar fluctuation is the occurrence of double joints or double legs in these flies. Although the defective gene is present, the abnormality appears only when the flies are grown under a certain maximum temperature. If the temperature is lowered to a certain point, the defective gene inspires the abnormality; in the higher temperatures the defective gene does not occasion duplication of legs. Thus the influence of either variable depends upon the character of the other. It is entirely a matter of choice in either case whether the result is attributed primarily to gene constitution or to temperature. Only by holding one of two or more factors constant can one judge their relative importance; otherwise one is in the quandary of Pepys, who did not know whether to ascribe his preservation to his hare's foot or to his daily pill of turpentine.

The Himalayan rabbit usually has white hair except at the extremities, which are black. It has been found experimentally, however, that if the temperature is lowered beyond a certain point the young grow white hair over the entire body. One may cite this fact as an obvious influence of temperature. But changes in temperature do not affect other animals in this way, and this instance is therefore not a rule but an exception. The phenomenon may be characterized as the Himalayan rabbit's typical plastic response to certain variations in temperature. It is arbitrary whether one refers to the phenomenon as the influence of temperature or as the response of the rabbit, for both factors are essential to the result. The temperature influences the rabbit only in case the rabbit reacts to it and to the extent that the rabbit reacts.

In identical twins the hereditary factor is the same, for they have identical genes, a condition not likely to occur in any other filial relatives. Even when reared separately, however, the environments may not be significantly different in kind; and even when this is the case, so far as external environment is concerned, the mental environments of the two individuals may be important factors in the result. The relative influence of social environment in the case of identical twins has not yet been satisfactorily determined, and much of the evidence is conflicting.

Many diseases with a possible hereditary basis are also a matter of environmental influence. Thus some may inherit a weak constitution and so be susceptible to many diseases, but most of the diseases will not be contracted unless the individual is exposed to them. In such cases control of the environment could effect the same immunity as could control of heredity. The introduction of vaccines and serums into the system may enable the organism to cope with its environment in more adequate fashion, and thus man's artificial environment may modify nature's pathology. A hereditary marked deficiency in the production of thyroid leads to cretinism, an underdevelopment of both body and mind; the administration of thyroid extract improves the metabolism, and body and mind are benefited.

There is of course a relation between physical environment and biological type. Fishes do not swim on the land, and mammals do not walk on the bottom of the sea. The coats of animals are adapted to climatic conditions, and often even color of skin, hair or feathers shows adaptation. The converse of the influence of environment is the response of the animal to its environment. For this reason the Darwinian phrase natural selection is often meaningless. When a small jawed lobster struggles with a large jawed one and the large jawed one survives, nature is little concerned except in so far as nature is embodied in the two lobsters. They decide the issue, and the cunning and persistence of a small jawed lobster may more than counterbalance the indifference or the stupidity of a large jawed one. The influences of the physical environment upon the structure of man, so far as these vary racially or geographically, are still undetermined. That food influences stature is known, but it appears improbable that differences in food are ultimately responsible for the difference in stature between, for example, tall and short Negroes in Africa or between Welsh and Scotch. There is a significant correlation between size of nasal aperture and temperature and humidity, with temperature more highly correlated than humidity. In the Old World the more heavily pigmented peoples predominate in regions in which the actinic rays of the sun are more potent, but no such correlation appears to exist in the aboriginal New World, and there are many marked exceptions in the Old; so that a correlation of inherited pigmentation with environmental conditions is still a debated question. There is, however, considerable evidence that a change from tough to tender food, with decreased use of chewing muscles, affects size

of teeth, length and massiveness of jaw and shape of head and face; and the general increase in stature which has characterized European peoples in both the Old World and the New during the last hundred years or longer is usually attributed to better nutrition. Experiments in controlled room temperature and humidity indicate a decrease in physical efficiency when the temperature is raised above 68 degrees. Variations in temperature appear to affect ability to do either mental or physical work to a greater extent than do comparable variations in humidity when temperature is held constant. It has been found also that when the air is in gentle motion the ability to do mental work increases. Such experiments have an immediate application to modern life, but it is doubtful that temperature itself will ever be an important indication of mental achievement. Within ascertainable bounds the intellectual significance of temperature will depend upon the environed minds and their problems rather than upon temperature and humidity.

It is therefore almost meaningless to speak of the influence of geography upon history unless the civilization and the times are known. The seas which once isolated the British Isles have become highways to all parts of the globe not because the physical factors changed but because the civilization changed. In some regions rivers separate peoples; in others they are utilized as a means of communication; and for the same people their significance changes with changes in technology, trade and political relations. The influence of environment upon primitive cultures then can be discussed only in terms of the achievements of the respective cultures. Man can work only in and upon his environment, but the tools with which he shapes his civilization are not the creations of the physical environment. The environment furnishes the materials for his houses, but man as the architect furnishes the plans. Hence in comparable environments man sometimes builds contrasting types of habitations, because in various places he selects different building materials and arranges them in different fashion. The primitive hunter is dependent upon game, but he is no less dependent upon his bow and arrow, his traps and his knowledge of the habits of the animals. In short, his culture makes his environment significant, for game is useless unless he has the tools and the skill to secure it. Every utilization of environment is indeed a culture achievement, an assertion that man to

that extent is master of his environment; for the environment influences man only when and in so far as man reacts to it. In many cases the higher civilizations have shown little respect for a particular type of environment. In both the New World and the Old the highest civilizations of their day have flourished in tropical and subtropical regions-the civilization of the Mayas in the New World, the civilizations of Egypt and Babylonia in the Old. Through the centuries the higher and the highest achievements in civilization have shifted from one environment to others, which in some cases are as contrasting as that of Egypt and that of Great Britain. No one type of civilization has characterized a given environment. Egypt, Mesopotamia, Iran, North India, Spain, northern Europe, have all harbored very different types of civilizations in successive centuries. No one type of civilization is constantly associated with a given environment, and, conversely, similar civilizations flourish in contrasting environments. Indeed, at least in all the higher civilizations the changes which the culture has made upon environment are more notable than the changes which environment has effected in the culture. The culture's ability to cope with environment depends largely upon two factors—technology and knowledge. These are inseparably connected; each amplifies and supports the other. The development of larger sea craft makes waters which previously were an isolating factor a means of communication; irrigation and cultivation convert the desert into a fertile area. The measure of man's technological development is the measure of his control over his environment. Knowledge discovers and to that extent creates new elements in the environment, as when man learns the uses of coal and the metals, the application of water power, the presence and uses of new substances such as oil or aluminum. His knowledge is the yardstick which determines the compass of his environment, its constituent elements and their applications.

The mind of man like the body of man cannot develop in a vacuum. It develops only in reaction to environing influences, in reaction to its immediate environment and to the intellectual and cultural content which it has built out of its environment. Hence mind always partakes of environment, and any analysis of mind will yield elements of its environment. Ulysses' statement, "I am a part of all that I have met," is the unwitting testimony of every

mind: it is a part of all that world with which it has contact through the senses or through sense. This view was emphasized by the impressionists and the associationists of the older psychology, and it is a central doctrine in the position of those who emphasize the role of conditioned responses. One behaviorist has proclaimed the doctrine in the extreme form of the assertion that, given a child at birth and complete control over it, one can make him what one will. But this doctrine leaves out of the reckoning another factor essential to any influence of environment, namely, the unique reaction of the child; it presupposes that every individual will react in identical manner to the same stimuli. But no two individuals are identical in structure, and no two react identically to the same stimuli. Individuals may conform to a pattern, but no two people react identically at any time to the same stimulus; indeed, no individual reacts in identical manner to the same repeated stimulus, as, for example, to identical food, light or color. The history of psychological doctrine and dogma is itself an example of the reaction of mind to environmental stimulus. Psychological theories have had a continuous and coherent development from the earliest phases of thought to the present time: the psychologies of one decade are but a modification of those which prevailed previously. They are, moreover, related to the prevalent scientific and philosophic doctrines of the day in which they are enunciated and of which they are in truth but a phase. In short, the interpretations of mind are as environed and as environmental as mind itself. Development in any science presupposes environmental influence, for unless a phase of thought is influenced by its own past it dies; and contemporary psychology is much more a reaction to past psychology than a naïve or native reaction to its data. In no other way is scientific development possible.

In all phases of social and cultural life the influences of environment are potent. The play of custom, tradition and the mores, the influence of institutions, the binding force of legislative and executive acts, are essentially responses to social environment. Law abidance or the lack of it is a state of mind and is contagious; the prevalent types of reaction to the social environment become an important part of the environment itself. A prevalent disposition to obey laws is a more effective influence than the police and the courts; thus the unwritten sanctions are more important than the written, for

they determine the reactions to the written. Similarly, delinquencies, lapses from law abidance, are in large part environmental. The character of crimes varies somewhat with culture; where people do not wear clothes pickpockets do not flourish; where writing is not known there is no forgery; and where there are no habitations there is no housebreaking. It is not easy to be a thief in a culture in which the community is small and one's possessions cannot be concealed; the conditions which make it difficult to protect one's property also make such protection superfluous. The more complex life of the higher cultures makes possible many crimes which are not possible in the primitive cultures, and every new device added to the culture-factories, banks, automobiles, for example—makes possible a new kind of crime. The studies of the rates of juvenile delinquency in areas of Chicago show that these differ regionally within the city and irrespective of the nationality group; so that although the population may change its national and to a considerable extent its cultural complexion, the rate ot juvenile delinquency for a given district remains relatively constant. The persistence of certain delinquency patterns in given geographical areas suggests environmental influence, although the basic factor is probably not physiographical but cultural. Each individual has a vast number of capabilities and potentialities and is able to respond to diverse conditions and situations. The stimuli which play upon him, especially those in the early years of his life which determine the direction of his development, decide the nature of his career.

The lowest forms of life react to the environment mainly by adaptation to stimulation through the sense organs or through sensitiveness to changes in temperature, light, pressure or chemical processes upon or within the organism. There is adaptation to environment, but the manner of adapting and the elements of the environment to which adaptation is made differ throughout the gamut of animal life. The plasticity of the organism, the character of the enclosing integument, the specialization of parts and of functions and perhaps most of all the mobility of the organism affect the character and often the degree of the adaptation. Thus the kind of adaptation possible for crustaceans differs from that of the non-crustaceans; that of simple organisms from that of the more complex; that of the slow, restricted to short range activity, differs from that of the swift,

with long range activity. The Paramecium responds to changes in temperature, and birds respond presumably to seasonal changes in air temperature, but the character of the response is very different in the two cases. The bird may become adapted by molting or by growing more and larger feathers, and it may travel thousands of miles to warmer or to cooler climes, whereas the Paramecium merely moves slowly from one place to another. Similarly, the types of adaptation within various human culture groups exhibit a wide range. In one group the adaptation to temperature may involve the utilization of all modern technology and science; in another it may merely lead to hunting a shady spot or a sunny one. Reaction to environment is also modified through conscious selection. The hunt for food and the search for better habitation are examples of such active selection by the mobile organism. By the selection of new materials from the environment and by the development of new techniques for dealing with them man has built an artificial environment. From early times to the present man has modified the range of his environment. Trade and communication enable him to live in larger environments; history and prehistory recover the past and make it a part of present environment; the microscope reveals a new world of the infinitesimally small, unknown to the unaided sense organs, and man greatly increases the range of his environment in the new dimension; the telescope brings previously unseen stars and star universes within his ken, and his environment now expands into one of hundreds of thousands of light years. To this artificially created universe, not less real than the universe of the unaided senses and immeasurably greater, he now responds because it has become a part of his environment, although previously, so far as he was actively or consciously concerned, it did not exist. Thus the environments in which various men live even within the same culture group may differ significantly, especially in the higher cultures. The world of the business man is not that of the chemist, the environment of the physician is not that of the literary critic, and the world of the physicist differs more from that of the miner than Adam's world differs from that of an illiterate descendant of today. Even the same objective stimulus may belong to different environmental universes. For example, on the morning now known as the day of the battle of Austerlitz the sunshine fell upon a certain spot of ground. The lowly forms of life

wriggled in the slime; insects unfolded their wings and flew; men rubbed their eyes and uttered irrelevant remarks; an emperor arose, made a gesture and his command moved an army into action. Thus the responses to environment as well as the environments may belong to different universes. The patterns of reactions of each of the two variables limit the influence of one upon the other. A change in the dimension of either poses a new problem, which can be answered only empirically.

WILSON D. WALLIS

See: HEREDITY; EVOLUTION; EVOLUTION, SOCIAL; CLIMATE; BIOLOGY; BEHAVIORISM; ADAPTATION.

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EÖTVÖS, JÓZSEF, Báró (1813-71), Hungarian statesman and publicist. In the period of reaction both preceding and following the struggle for national liberty in 1848 Eötvös ranks with Kossuth, Stefan Szechenyi and Ferencz Deak as a champion of a social and spiritual reconstruction which was to serve as the basis of a new Hungary. A member of the feudal landowning class, he championed causes aimed at the destruction of feudalism; a devout Catholic of deep religious feeling, he became the instrument of religious toleration; an intense nationalist, he did not confine himself to mere chauvinism but concerned himself with the rights of other minority nationalities, predicting with prophetic vision for both Austria and Hungary the catastrophe which would overcome them on the refusal of these rights.

Eötvös was a successful novelist before his thirtieth year. During his travels abroad he came into intellectual contact with the currents of west European thought which had been set in motion by the French Revolution, and as

early as 1838 he wrote vigorously on prison reform, advocating the humanization of Hungary's mediaeval jail system. In the feudal parliament of 1839-40 he raised his voice in behalf of the religious and political rights of Protestants and Jews, whose emancipation he effected a quarter of a century later as a member of the Andrassy cabinet in 1867. In his satirical novel A falu Jegyzoje (3 vols., Budapest 1845, tr. by O. Wenckstern as The Village Notary, London 1850) he denounced the subjection of the masses and emphasized the need of reform in county government. In Magyarország 1514ben (Hungary in 1514; 3 vols., Budapest 1847), a historical novel, he pointed out that the cruel suppression of the peasant revolt led by Dózsa in the sixteenth century had resulted in two centuries of foreign rule, and drawing a parallel for the nineteenth century he advocated the immediate abolition of serfdom. As minister of education and cults in the parliament of 1848 he secured academic freedom for the universities, and later through the law of 1868 declared popular instruction to be the duty of the state.

His political theories were mainly embodied in Der Einfluss der herrschenden Ideen des 19. Jahrhunderts auf den Staat (2 vols., Leipsic 1851-54). As a means of resolving the conflict between the ancient concept of the authority of the state and the Christian emphasis on individual liberty Eötvös suggested a distribution of power between the central government and the autonomous local units which would safeguard individual liberty without undermining state authority. In his opinion the ruling ideas of the nineteenth century—liberty, equality and nationality-must be adjusted to the state. He pointed out that if the state were based on complete equality, the imposition of the will of the majority would menace individual personal liberty. To resolve this conflict between political equality and personal liberty was the task of the political philosopher, who must devise and secure guaranties against the misuse of the power of the state without, however, endangering its existence. Despite his unwarranted optimism as to the outcome of these conflicts and although Eötvös did but little justice to contemporary political economy, the sweep and profundity of the book led to its recognition far beyond the borders of Hungary. Rusztem Vámbéry

Works: An edition of collected works was published in Hungarian in 20 volumes (Budapest 1901-09).

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EPICTETUS (first century A.D., exact dates unknown), Roman philosopher. A crippled slave, Epictetus studied under Musonius, became a freedman in later life and was exiled in 89 A.D. in consequence of Domitian's edict against the philosophers. His view of the world was substantially that of the stoics. Unconcerned with science or metaphysics, he considered skepticism and agnosticism unworthy of elaborate refutation and sought to teach the right way of life. He allegorized the popular polytheistic cult, teaching the worship of an all pervading, all embracing, thoroughly rational divinity; he did not believe in individual immortality. Epictetus regarded man as essentially weak and in his lower, animal nature irrational. He considered therefore a consciousness of the contrast between man's imperfection and the rationality and perfection of the universe as the condition of striving for moral amelioration. General ethical principles are innate, and philosophy has but to develop them through dialectic elaboration and logical criticism of possible errors of judgment. Wisdom is submission to the inevitable cosmic fatality. All striving after exterior aims must be abandoned. The essential is for man to know that the only thing within his power is his conscious attitude in accepting whatever happens to him. Through preserving deliberate equanimity, man can always be free and happy; he can will fate or, as we should prefer to say, imagine that he wills it. Ascesis, the habit forming exercise of his mental reactions, is the main way to this goal. Suicide is permissible as soon as man is convinced that death is imminent anyhow; the impossibility of making an honest living is to be interpreted as a divine invitation to the soul to return to its source. This non-resistance against fate implies that the philosopher will not demand perfection of others or of the social order. He will not react angrily even against criminals, for they are unfortunate and blinded by ignorance. Selfish emotions are to be subdued and a generous love for all fellow creatures cultivated. All men-whether slaves or free-should be considered as brothers and children of one divinity. Man should love even those that torture him. Men should be social beings; virtue consists in attention to duties proper to one's social position and human relationships, such as those of master, slave, parent,

child, magistrate, citizen. The perfect sage will neither marry nor breed children; he will hold aloof from national politics, which is narrow compared with the ideal of a universal state.

In spite of fundamental general differences, striking parallels exist between a number of sayings of Jesus and of Epictetus; the latter's discourses must be read to understand Pauline morality. It is interesting to see how deeply this wisdom of one who in a lowly condition was anxious to preserve a proud feeling or a consoling illusion of inalienable freedom appealed to Marcus Aurelius, an emperor who considered himself the first servant of the Roman state. Such a philosophy as that of Epictetus goes far to explain the bitter reflection of the proud aristocrat Tacitus—himself a disciple of stoicism on his Roman compatriots "rushing into slavery" instead of defending their republican liberties. The transformation of Rome into a despotic monarchy was conditioned by the evolution from early revolutionary stoicism through the "gentlemanly" doctrines of the "middle stoics" to the pious humility of the slave Epictetus. Both are characteristic of the progressive orientalization or "barbarization" of the empire, Epictetus being the nearest western approach to the eastern ideal of a bodhisat.

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EPICUREANISM. Epicureanism, a Greek philosophy named after its founder, Epicurus (341–270 B.C.), belongs to the post-Aristotelian, Hellenistic period in which Greek culture extended its influence throughout the East and

was itself transformed in the process. The citystate, of which the individual Greek felt himself an integral part by race, religion, tradition and aspirations and which he regarded as the necessary condition for the attainment of his spiritual autonomy and perfection, became absorbed and subjected to a new and larger unity. An indifference to the life of the state developed, which in the case of the cynics and stoics expressed itself in the form of a broad cosmopolitanism or, as with the Epicureans and skeptics, in a preoccupation with individual ends and relations and with the problem of the highest good, to which every interest, even the theoretical, was subordinated. Knowledge was valued only as a means of solving the ethical problem, that is to say, as a condition and instrument of attaining that state of spiritual tranquility (ataraksia) in which the mind makes itself independent of every external discord and which is realized in the ideal type of the wise man. Therefore the various kinds of naturalism propounded by cynics, stoics and Epicureans are all forms of response to a need for spiritual liberation.

For Epicurus this spiritual liberation was best to be achieved by a naturalistic explanation of phenomena and a naturalistic conception of life based on the underlying principle of the infallibility of sensation, which was to free the mind from the disturbing factors of error and superstition. Epicurus thus combated the fear of the supernatural and the religious superstitions particularly rife in his time owing to oriental influences, as well as Platonic and Aristotelian finalism and the providentialistic fatalism of the stoics. For the concept of a little finite world fashioned by design he substituted the idea of the infinity of the universe, of words and of beings that resulted mechanically from the fortuitous shufflings of atoms, dissolving if unfit, persisting as individuals and as species if fit, to survive. The divinity that Epicurus recognized was a model of perfection who by this very essence of his being was precluded from interfering in human affairs, and religion was thus a matter of pure disinterested homage to this absolute ideal. As a materialist he likewise combated the depreciation of nature and the eschatological preoccupations of idealistic philosophy. In ethics he developed a system of egoistic hedonism which, unlike the crude doctrine of the Cyrenaics, was raised to the level of a serene spirituality in which even egoism is vanquished by the longing for spiritual perfection and the claims of friendship, justice and the moral conscious-

ness. For the idealistic religious myth of the golden age he substituted the affirmation of a primitive condition of uncultured simplicity, from which mankind has developed toward spiritual perfection by means of the social compact and the resulting communal relations from which are progressively born affections, language and the arts. Selfish interest and utility although they are the initial driving forces become converted into moral consciousness and an altruism capable even of sacrifice. The observance of justice although arising out of convention and based on utilitarian fear of the injuries and dangers of injustice comes to be for the wise man an act of inner compulsion. In regard to political affairs the Epicureans were completely negative in their attitude toward the state. The ideal state of tranquility was best achieved by remaining aloof from public life, and any form of political authority was welcome so long as it assured peace and order.

A certain partial development of the teaching of Epicurus took place in antiquity, as in the unfolding of the principle of inductive logic by Philodemus and the inquiries into the psychogenesis of friendship and the growth of the theory of progress among the Roman Epicureans. Moreover, it received its widest currency as a result of its formulation by Lucretius in his De rerum natura. But the religiously dogmatic character of the school, which saved it from losing itself like other schools in eclecticism, without preventing important infiltrations of its spirit into the eclecticism of others, as in Seneca and Marcus Aurelius, did succeed in checking its development. As a result of the works of Cicero, Plutarch and the Christian writers a vulgar interpretation of Epicureanism as egoistic sensualism and as the negation of all idealism and religion became widespread and still persists. In its true form, however, it contained a lofty message capable of stirring the minds of men, and for centuries in the Hellenistic Roman world it served practically as a new religion for great numbers of enthusiastic followers. It was overpowered by a soteriological mysticism and was revived in the Middle Ages only as a heresy. But its vindication, begun by humanists like Petrarch, Boccacio, Leonardo Bruni, Filelfo, Valla and Ficino, was perfected by the work of Montaigne, Bruno and Gassendi and exerted wide influence upon many developments of modern philosophy. The influence of Epicureanism upon naturalism and modern rationalism is evident in the materialistic metaphysics of

Hobbes, La Mettrie and d'Holbach, in Voltaire's battle against superstition and Diderot's against religious faith itself, in the naturalistic cosmogony of the encyclopédistes and in the modern doctrine of the social contract; but above all it is revealed in the philosophers who move in the orbit of sensationalism, of utilitarianism and the theory of progress. They depart somewhat from Epicurus, however, in insisting upon the fruitful efficacy of the passions, which Epicurus like the stoics wished to repress, and in passing from the individualistic bonds of Epicurean friendship to those universal ones of society and all humanity, denying Epicurus even his reserve of prejudice regarding barbarians and slaves. In education Epicureanism is important not only for its stress on the exercise of equal cultural rights by women but for the declared reciprocity of the educative relationship between teacher and pupil, which is also characteristic of the idealistic pedagogy of Fichte. By such reciprocity, which is also the basis of friendship, utilitarianism attained in Epicurus the capacity—which it loses afterwards in Hobbes, but regains in Helvetius, Bentham and John Stuart Mill-of laying the theoretical basis for the transformation of egoism into altruism and the formation of the conscience, interpreted as the creation either of an inward mentor and judge or of an impartial and disinterested spectator.

Rodolfo Mondolfo

See: Ethics; Philosophy; Cynics; Cyrenaics; Stoicism; Hedonism; Naturalism; Rationalism; Utilitarianism.

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EPIDEMICS. One might expect that the memory of the sudden onset of a universal sickness would become deeply incorporated in the traditions of primitive peoples; but since the greatest pandemic of modern times, the pandemic of influenza in the year 1918, has left no permanent memorial of its ravages in India, where it caused over seven million deaths in the space of two months, the scanty information regarding ancient epidemics is not surprising. The first extant account of epidemics during the period of antiquity is contained in the *Hippocratic* Collection, which described in some detail the Periclean bubonic plague of 429 B.C., the typhus plague of Athens in the time of Thucydides, malaria and influenza. The chief epidemiological event of which there is any record during the dark ages in Europe is the bubonic plague in 543 A.D. in the reign of Justinian. The outstanding epidemic during the mediaeval period was the Black Death (q.v.), which decimated Europe in the fourteenth century. The accounts of epidemics become more numerous and more detailed in modern times but owing to the absence of scientific methods of observation and induction they are not very informative. In England, for example, influenza, malaria, relapsing fever, typhus and certain forms of plague were classified symptomatically as "pestilential," "putrid," "malignant" or "nervous and comatose" fevers; smallpox was not clearly differentiated from measles and scarlet fever, while the nature of the "sweating sickness" of the fifteenth century was and is still unknown. The records furthermore are suspect on account of the metaphysical outlook of the observers as well as by reason of their rhetorical language and their slavish adherence to the letter rather than to the spirit of ancient Greece. As the result of the great advance made by medical science during the latter half of the nineteenth century it is now clear not only that the number and variety of human pestilences is far greater than would be inferred from the scanty records of preceding ages but that scarcely a year elapses in which some considerable portion of the world is not the scene of a fulminant epidemic. It is justifiable to assume, since such diseases as plague, influenza and typhus have always exhibited a remarkable fixity of type, that epidemics have not materially changed in character.

The brilliant achievements of medical science during the past half century have not, however, been associated with a corresponding increase of knowledge in regard to the genesis of pandemics and epidemics. Among primitive peoples epidemics were and still are attributed to malignant spirits or the displeasure of an offended deity. The first attempt to provide a more reasonable and reasoned explanation of their origin was made by Hippocrates, who observing the sudden and almost simultaneous emergence of epidemics over wide areas was led to attribute an important part in their causation to perceptible changes in the physical properties of air, the secular oscillations of which, in response to cosmic influences, were regarded as the cause of periodic variations in the incidence of disease. This theory, termed the theory of epidemic constitutions, was revived and extended by Sydenham, who held that during an epidemic epoch all diseases tended to conform to the type of the "reigning" epidemic. He attributed cyclical and seasonal variations in the incidence of disease to occult instead of to perceptible changes in the atmosphere. It was later assumed that earthquakes and volcanoes, as well as celestial phenomena, played a significant part in the causation of epidemics; and the miasmatic theory, a modification of the theory of epidemic constitutions, was propounded, which postulated that epidemics were due to the corruption of the atmosphere with noxious effluvia generated in damp and polluted soil. In the middle of the nineteenth century von Pettenkofer put forward the view that the seasonal character of epidemics was occasioned by changes in the level of the subsoil water, which, it was assumed, caused the expulsion into the atmosphere of the germs of disease contained in contaminated soil.

The miasmatic theory held the field until the close of the nineteenth century, when, as the result of the new impetus given to epidemiological speculation through the discovery of the parasitic nature of disease, it was supplanted by the theory that epidemics were the outcome of biological changes of the specific parasite. According to this theory adverse circumstances affecting man or his environment periodically and temporarily enhanced the virulence and infectivity of epidemics. This theory, termed the biological modification theory, therefore postulated that epidemics were due to changes affecting the quality of the germ. In order to account for the rise and fall of the epidemic wave the hypothesis was advanced by W. Hamer

and others that epidemics were occasioned by the association of the specific parasite with an ultravisible virus. Some support was lent to this view by J. Brownlee, who reviving the suggestion of William Farr that epidemics follow mathematical rules demonstrated the close resemblance of epidemic curves to the normal curve of error, from which he was led to conclude that the infectivity of specific parasites underwent fluctuations in accordance with mathematical laws. The pandemic of influenza in the year 1918 was responsible for the resurrection of the theory of epidemic constitutions by W. Hamer, F. G. Crookshank and others. W. W. C. Topley and M. Greenwood and others in England, as the result of the study of artificial epidemics in mice, and L. T. Webster in the United States were able to throw new light on certain obscure aspects of human epidemics.

In opposition to the view that epidemics are primarily the outcome of biological modifications affecting the quality of the germ, S. F. Dudley in 1923 concluded as the result of his study of an epidemic of diphtheria in a closed community that most of the features exhibited by epidemics may be dependent upon a constantly changing relation between man and his parasites and the efforts of both to adapt themselves to each other. C. A. Gill in 1914 had reached the same conclusion in respect to epidemic malaria. As a result of a detailed study of epidemics in India he has contended in The Genesis of Epidemics that all types of epidemics can be explained in terms of a quantitative change in the relationship of the infection quantum, or dose, and the immunity quantum, or resistance. This theory, which is termed the quantum theory, postulates that three factors are concerned in the mechanism of epidemics and pandemics, viz. the human factor, the parasite factor and the transmission factor. Special importance is attached to the last factor since the emergence of an epidemic is held to be dependent upon a sudden increase of the infection quantum, which can occur only when the environmental conditions are favorable to the rapid transmission of infection. The characteristic features presented by epidemics—cyclical and seasonal periodicity, diffusibility, toxicity, intensity and the age distribution of mortalitybecome explicable in terms of a quantitative change in the infection and immunity quantum. The part played by climate and environment in determining the occurrence of epidemics is in large measure referable to the influence of at-

mospheric temperature and humidity upon the specific parasite and its carrier during its extracorporal phase. The close relationship existing between wars and famines and epidemics is attributed to the fact that the aggregation of large bodies of men under unfavorable hygienic and economic conditions necessarily occasions in the absence of precautions increased exposure to infection and lowered resistance to disease. The quantum theory, which appears to explain the causation of all types of epidemics--pandemics, regional epidemics and localized epidemics—marks a partial reversion to the theory of epidemic constitutions. It postulates, unlike the biological modification theory, a unitary mechanism of epidemicity; it envisages atmospheric states and environmental conditions as playing through their influence upon transmission an important part in determining the emergence of epidemics; and, since long term fluctuations of climate are known to occur as the result of extramundane causes such as sun spot cycles, it envisages a change in the constitution of disease as in some measure determined by extramundane influences. The accuracy of the quantum theory has yet to be substantiated, but it is no longer permissible to regard epidemics as catastrophes descending like bolts from the blue upon an unprepared and unsuspecting world. They must rather be regarded as the results of the working of natural laws governing infection and immunity, a full knowledge of which will rob these scourges of their terrors and enable them to be effectively combated if not prevented.

The influence exerted by epidemics upon human psychology and upon sociological and economic conditions has always been considered to be very profound. The appearance in 1348 of the Brotherhood of the Flagellants, and the dancing manias which spread widely in Germany and the Netherlands in 1374 are usually thought of as effects of the Black Death. As the combined result of the depopulation and migration occasioned by the plague large tracts of land went out of cultivation, trade was paralyzed and wages rose. Authorities now question, however, whether the Black Death occasioned social disturbances, economic changes and moral degradation to the extent that is ascribed to it. Similar but less conspicuous effects have been attributed to other pestilences. But in modern times the reactions of communities to epidemics, especially in civilized countries, only partially bear out the generally accepted views in regard to

their sociological effects. Perhaps because these visitations are still regarded as due to divine displeasure, their onslaught is marked by extreme humility and patience. In afflicted households an uncanny silence, only broken by the ceremonial wailing of women and the beating of breasts, is often the only outward sign of the prevailing misery. Life goes on as usual in the neighborhood and funeral processions wending their way almost unnoticed to the burial ground and the burning ghat may be the only indication of the tragedies of the epidemic. During severe epidemics some measure of hardship results from the temporary failure of the food supply, the disruption of trade, the interference with agriculture and the interruption of traffic; but even the most virulent pestilence is short lived and these ill effects disappear with astonishing rapidity and with them all memory of the epidemic. Nor are epidemics often the proximate or remote cause of civil strife. It is noteworthy, however, that the baiting of the Jews at the time of the Black Death had its precise counterpart in India in 1907, when political agitators took the opportunity of a great epidemic of plague to spread the rumor that the British government was poisoning wells with the object of thinning the population.

The effect of pestilence in causing depopulation is not always of permanent consequence. Such is the recuperative power of the highly fertile people of the Punjab, for example, that although during the past twenty years great epidemics of plague, malaria and influenza have destroyed over 6,000,000 in this province with a population of 20,000,000 in 1921, the loss has been met by a large natural increase of the population, sometimes half a million a year. It might be inferred that this great destruction of life must at least have exercised a baneful effect on the economics of the country. But since the brunt of epidemics is usually borne by children and old people, the survivors of an epidemic, who are mainly breadwinners, have in consequence of the epidemic fewer dependents to support. Epidemics are therefore sometimes followed by a temporary rise in the standard of living. A more serious effect of an epidemic plague arises out of its peculiar liability to attack females of childbearing age, as the result of which the sex ratio of the population in the Punjab has undergone a change and males now outnumber females by 2,000,000.

Even if the psychological, sociological and economic effects of modern epidemics are less

conspicuous than might have been anticipated, it is not permissible to regard this crude method of adjusting man to his environment as an unavoidable and inevitable calamity or to hold that it is not necessary to devise more humane means of providing for a large natural increase of the population. The reaction of modern man to epidemic visitations differs from that of his less enlightened predecessors in the fact that he is attempting to prevent them. The medical history of the nineteenth century indicates that the science of preventive medicine owes much to the spur occasioned by great epidemics. It was, for example, the first recorded outbreak of cholera in England in the year 1831 that was responsible for the formation of central and local boards of health, a small beginning from which sprang the sanitary reforms that have transformed England and added greatly to the health and welfare of its people and of the world. Similarly it was the outbreak of plague in India at the commencement of the present century that led to the appointment of a commission whose researches have made available assured methods of controlling this disease. An epidemic of yellow fever was responsible for the creation of the Reed commission, whose achievements constitute a notable advance in preventive medicine. It was a great epidemic of malaria in India in 1908 that led to the intensive study of malaria epidemics. The great pandemic of influenza in 1918 was responsible for a revival of interest in epidemiological science and for stimulating the prosecution of researches into the genesis of epidemics which may eventually enable medical science to obtain complete mastery over them.

C. A. Gili

See: BLACK DEATH; MEDICINE; TROPICAL MEDICINE; COMMUNICABLE DISEASES, CONTROL OF; PUBLIC HEALTH; HEALTH EDUCATION; SANITATION; DISASTERS AND DISASTER RELIEF; MORTALITY; MORBIDITY.

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EQUAL PROTECTION OF THE LAW. Class legislation is an integral part of the jurisprudence of any truly aristocratic society, but it persists even in an equalitarian society. It must not be supposed that when the doctrine of equality emerged in the late eighteenth century it meant the repudiation of all class legislation. In early American state constitutions there are high sounding statements of the philosophy of equality side by side with property and religious qualifications upon voting and officeholding, while the statute books retained many relics of the class legislation of an earlier day. Free and pioneer America, however, was not a place in which class distinctions in the law could long withstand the burning force of the ideal of equality so nobly stated in the Declaration of Independence. Class legislation affecting the right to vote and hold office, affecting the rights and privileges of servants and masters and affecting in various states the preferred status of an orthodox religion disappeared for the most part in the early nineteenth century. The slave alone remained, a challenge to the sincerity of the professed abhorrence of vicious class legislation, a legal and social enigma to be resolved only by civil war. When as a result of it the slave was freed, he was guaranteed equality of civil rights under the constitution by the Fourteenth Amendment, which contained a clause forbidding any state to deny to any person within its jurisdiction the equal protection of the law.

The equal protection clause was the first specific and verbal recognition of the doctrine of equality in the federal constitution. There is no similar clause limiting the powers of the federal government. Does it follow from this that Congress is under no restraints with respect to the

enactment of class legislation or discriminatory measures? Or does the more general guaranty of due process of law include within its scope protection against arbitrary discrimination? There is respectable authority for the view that due process includes equal protection of the laws-Cooley and Mott may be cited in its support and it has been pertinently urged that there are no state cases in which there has been any protection extended under the equal protection clause which could not be claimed under due process of law. In 1921, however, Chief Justice Taft in the case of Truax v. Corrigan [257 U. S. 312 (1921)] drew a distinction between the two guaranties. While admitting that due process includes a certain fundamental equality before the law he declared that the equal protection clause provided relief from types of discrimination to which due process could not extend. This doctrine was dictum in the case and has not escaped criticisms, the most cogent of which consists in emphasizing that no court has yet shown concretely just what equal protection actually adds to due process of law. The relation between the two clauses remains therefore debatable ground. Nevertheless, equal protection of the laws provides a textual criterion by which class legislation can be tested and invalidated and it embodies our main constitutional protection against legal discrimination. Most of the state constitutions contain clauses similar to the equal protection clause of the Fourteenth Amendment.

Equal protection of the law does not prevent classification in the law. Classification is necessary to all law. Equal protection, however, does provide a test for classification. It requires that classification must be reasonable and not arbitrary. When the law creates classes, those classes must substantially differ from one another; those differences must have some reasonable relation to the purpose of the law, and the classes created must include substantially all those who stand in a similar position with respect to the law. Furthermore, the basis of classification must be one which may reasonably be made the subject of legislation. In applying these standards to legislation the courts have not overlooked the practical problems which confront the lawmaker and administrator. Classification may proceed in good faith along practical lines and is not required to meet tests of mathematical accuracy. In upholding against the charge of discrimination an act requiring employers engaged in mining or manufacturing to pay wages in lawful money or its equivalent the Supreme Court

speaking through Mr. Justice Holmes said: "It is established by repeated decisions that a statute aimed at what is deemed an evil and hitting it presumably where experience shows it to be most felt, is not to be upset by thinking up and enumerating other instances to which it might have been applied equally well so far as the court can see" [Keokee Consolidated Coke Co. v. Taylor, 234 U. S. 224, 227 (1914)]. So also it is held permissible to create classes or groups upon the basis of numbers or size even though those just inside and just outside the lines of such classes occupy very similar positions.

It was the undoubted intention of the framers of the Fourteenth Amendment that the equal protection clause should afford adequate protection for the newly freed Negro against discrimination based on his race and color. In the Slaughterhouse Cases [16 Wall. 36 (1873)] Mr. Justice Miller expressed doubt that the clause would ever be invoked save in cases of race discrimination. Obviously, the clause has not been so restricted in its application but has been applied generally by the courts to all legislative classifications. In fact, the intentions of the framers of the amendment with respect to the application of the equal protection clause to the Negro have been in large measure defeated by judicial interpretation. The Supreme Court has held that the equal protection clause restricts only the states and not individuals, so that it affords no relief to the Negro from discrimination practised by individuals [Civil Rights Cases, 109 U.S. 3 (1883)]. Furthermore, the Court has held [Plessy v. Ferguson, 163 U. S. 537 (1896); Berea College v. Kentucky, 211 U. S. 45 (1908)] that race is a proper basis of classification with respect to the enjoyment of accommodations on common carriers, in inns, restaurants, places of amusement and public schools. Segregation of the races in respect to such privileges has been upheld as a legitimate exercise of the police power of the state as long as the separate accommodations required are substantially equal. On the other hand, segregation of the Negro through municipal residence ordinances received a setback from the Supreme Court in Buchanan v. Warley, 245 U. S. 60 (1917). Although race is not a proper ground for classification with respect to suffrage or the enjoyment of political or civil rights such as jury duty and the like, the states in the south have succeeded largely in disfranchising the Negro through the operation of general laws. The equal protection clause has

also been held available in cases of discrimination against aliens in private employment [Truax v. Raich, 239 U. S. 33 (1915)].

The principle of class legislation has come to have a new and important application to the problems of social and economic life. The individualism of the early nineteenth century with its doctrine of laissez faire was hostile to the growth of class legislation applicable to labor or capital. Government was to impire the game impartially, not to dispense privileges nor impose handicaps. But with the enormous expansion of industry and the rise of the wage earner there emerged in American industrial life economic classes which were not equal and which stood in need of protection against the consequences of their unequal bargaining power. Gradually the state of necessity intervened through its police power and enacted laws to secure to the laborer reasonable working hours, safe and sanitary working conditions and other necessary protections which he had been unable to secure for himself. At the outset judges and theorists of the individualistic school attacked this protective labor legislation as a reactionary return to class legislation which treated the laborer as one who was legally not quite selfsufficient but must be made the beneficiary of special guardianship. Those who had been brought up in the dogma of Sir Henry Maine that "the movement of progressive society is from status to contract" deplored the growth of a governmental attitude which returned the working man from his position as a free bargaining agent to a "status" in which he is surrounded by the special protection of the law. And on these grounds many early labor laws were held void as denying the equal protection of the law. Gradually, however, this view was abandoned in favor of the theory that class legislation in behalf of an exploited class may be necessary to restore the essential equality of classes which is desirable in a healthy society. Early class legislation had been indefensible since it sought the exploitation of classes and made existing inequalities permanent. Modern class legislation may be defended when its aim and result are essential equality.

The whole modern drift both in the United States and in foreign countries is toward an increasing differentiation of classes and a recognition of their special needs and opportunities. As long as the groups singled out are vitally different and as long as their protection or repression bears a reasonable relation to the general welfare,

the special laws for their regulation are defensible and desirable. But the conferring of special privileges or the imposition of peculiar burdens which cannot be so defended are now recognized to be contrary to sound political and economic theory and in the United States at least to be unconstitutional.

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See: EQUALITY; DUE PROCESS OF LAW; CIVIL RIGHTS; PUBLIC WELFARE.

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EQUAL RIGHTS. See Feminism; Equality.

EQUALITY. Like all great political abstractions the notion of equality bears rich associations with the complexities of human life. For many men these associations have changed a concept which to the logician appears an absurdity, or at best a problem, into a simple fact of experience. Since the historian is more apt than the logician to be aware of the windings of human desire, historical description had here better precede logical analysis.

Modern knowledge of primitive societies is sufficient to make generalizations about equality in prehistoric times very difficult. The once widely held notion of an actual golden age of communistic equality is dead. Primitive societies doubtless displayed as much variety in the status of the individual in respect to equality as in respect to property and family. Where there was a lack of differentiation in economic function, as among poorer peoples, there must have been a rough economic equality. But tribes in British Columbia display a considerable range of private wealth; and in certain Melanesian tribes rank depends on membership in secret societies, which can only be bought by wealth. As for political inequality the chiefs of most North American tribes were chosen democratically and lived in no better state than their followers. An African chieftain, however, was a definitely privileged person. The great empires of antiquityEgypt, for instance—were completely stratified societies. In the East the caste system took final hold in India; in China, although the career open to talents was provided for in the mandarin system, society was hardly egalitarian in any sense. Buddhism does involve the equality of men before God and especially in its early proselytizing and reforming period was animated by an ideal of social equality, but in general the history of egalitarianism finds little material outside Europe.

To Athenians of the fifth century, however, equality meant almost what it does to the modern age. This truth has been somewhat obscured by four factors: the fragmentary character of our sources for political theory prior to Plato and Aristotle; the prestige of these latter thinkers, both of whom denied human equality in its more obvious senses; the existence of slavery at Athens; and, finally, the credit given the partially valid generalization that true individualism, the best foundation for egalitarian ideas, did not arise in Greece until the Hellenistic age. Yet in spite of all these qualifications it remains true that the notion of human equality, like so much of the ethical coloring of our politics, is found in Periclean Athens. Herodotus is emphatic on the contrast between irresponsible Persian rule and Greek isonomia, equality before the law. Athenian isotimia, equal respect for all, and isegoria, equal freedom of speech and hence of political action, together with that regard for equality of opportunity so evident in Pericles' funeral speech make up a conception of equality not unlike that of the early, hopeful days of the French Revolution. Such equality does not of course imply economic equality, nor does it even assert the fundamental identity of human nature. Traces of this latter doctrine are not, however, lacking. The sophists often denied the absolute distinction between freemen and slaves, and Antiphon went so far as to assert that Greeks and barbarians were not wholly unlike. Lycophron is asserted by Aristotle to have denied the existence of any distinctions between men at birth thus anticipating Locke and the modern behaviorists) Euripides attacked the unequal status of women and Plato, not otherwise an egalitarian, maintained men and women to be psychologically alike)

Athenian ideas of equality, however, are scarcely more than in embryo. Their fuller development occurred under the influence of stoicism, Roman law and Christianity.) For the stoic the possession of reason marks men off

from the external world. But reason works in uniformity with itself. That part of one man which reasons, his soul, must therefore be like the reasoning part of any other man. Men are as men, not as animals, identical. From this metaphysical basis certain stoics advanced to astonishingly radical assertions that in this world of fact men are really alike.) Cicero's "Nihil est enim unum uni tam simile, tam par, quam omnes inter nosmet ipsos sumus" is as thoroughgoing an assertion of the rationalist idea of equality as has ever been made. At this point the fact of social and economic inequality arose to confront the stoic. Roman law afforded the solution. Administrative necessity had long forced on Roman lawyers a distinction between their own local uses and the uses of other peoples. By observation they had found certain common elements, certain fundamental but naturally rather abstract principles, which they called the jus gentium. The universality of these principles appealed to the stoic mind, which soon mixed them with rationalist ethics to make the jus naturale. Men were alike by natural law, unlike only by their failure to obey that law. Once long ago in the state of nature they had enjoyed practical equality) As to why men had fallen from the state of nature the stoics are of course no clearer than any other speculators on the origin of evil. The duty of the good man, however, is clear: to treat all men alike, to obey the law of nature as reflected in his own reason, to bring that law before the minds of his fellows.)

"Christianity asserted from the first the equality of men before God. "There is neither Jew nor Greek, there is neither bond nor free, there is neither male nor female; for ye are all one in Christ Jesus" (Galatians III: 28). In the primitive church there was unquestionably something like a communistic equality of goods. But even here the emphasis is not on a productive communism of this world, but on the loving participation of spiritual equals in whatever goods their special positions or capacities had endowed them with. To share in God is to share in an Absolute where more or less is inconceivable. In the patristic writings of the fourth century there is discernible an approach toward stoic rationalist ideas of the equality of man. But the triumph of the Augustinian doctrine of predestination definitely stopped the development of this stoic-Christian synthesis and established what was to be mediaeval orthodoxy on this subject. According to it worldly inequality is a part of the divine scheme of things, the consequence of a fall

willed by God and utterly different from the stoic law of nature.

Mediaeval thought, that of St. Thomas Aquinas, for instance, although it maintains the Christian dogma of the spiritual equality of men in the eyes of God, denies that men are equals on earth. Feudal organization suggested an organic view of the state, where quite different men perform different functions for different rewards; and church traditions suggested a patriarchal view of the state, where the unequal sufferings of men followed as punishment for original sin and where clergy and nobles, as God's lieutenants, protected the lower orders. Yet the Middle ges hardly achieved in fact this social equilibrium; and even orthodox doctrine holds that Christianity exists to combat the consequences of original sin, among which are merely worldly inequalities. The world may be denied, and then the solution is quietism or monastic asceticism; or the wicked world may be combated, and then the solution is heresy. Much mediaeval heresy, like that of the Hussites and the Lollards, is mixed up with the demand for something nearer to social and political equality. The complex currents involved in the three possibilities—acceptance of a hierarchical society, ascetic refuge from that society, revolt against that society in the name of equality—are all present in a movement like the Franciscan.

There have always been of course simpler demands for equality, demands not necessarily clothed in ethics or metaphysics: notably the desire usually attributed to democracies for a leveling of social habits—dress, taste, morals—and the desire of the poor to pull down the rich. If we may believe Aristophanes, the Athens of Cleon was jealous of social distinction and both classical antiquity and the Middle Ages witnessed slave revolts and *jacqueries*. Yet these latter were almost always revolts of despair, without a program and without influence, save perhaps for the Peasants' Revolt in England, which left behind it the egalitarian tradition of John Ball.

The Renaissance, since it was a period favorable to the flowering of individual differences, might seem at first sight hostile to equality. But its ultimate results in politics advanced that principle in some of its applications. Absolute rule of the prince leveled those below him and thus undermined the hierarchical system of relationships, paving the way for democracy, Modern ideas of equality were further and profoundly affected by Calvinism, politically the most significant form taken by the Reformation.

In reenforcing the notion of predestination, of the sinfulness of man, of the incommensurability of God's scheme and man's, Calvinism strengthened the notion that human inequalities cannot be remedied. Moreover, according to the school of Weber, it was largely responsible through its emphasis on labor, on saving, its removal of the mediaeval prohibitions of interest and its hostility to the mediaeval organic state for the growth of modern capitalism. On the other hand, Calvinism broke down completely the mediaeval distinction between laymen and clerics; it applied its rigorous moral code to all without distinction of rank or wealth; and in its extremer forms, as in the England of Cromwell, it imposed an extraordinary social uniformity on all alike. The English Revolution did produce, in the Leveller movement, a class conscious group armed with a program of economic equality. The Levellers, however, cannot be fathered wholly on Calvinism; they are simply an example, like the Anabaptists of Münster, of a discontented group rising to the top in times of violence and drawing arguments for equality from the teachings of Jesus.)

The eighteenth century saw the complete formulation of the modern doctrine of equality, as the first century B.C. had seen the formulation of the ancient doctrine. The philosophers of the eighteenth century were living in a world something like that of the stoics: it was a cosmopolitan world, a world where the conflict of sects had ended in a fashionable rationalism, a world of much humane feeling and much actual suffering. And of course the philosophes had before them the works of their Greek and Roman predecessors. But there are three elements in this modern notion of equality not wholly discernible in the ancient. First, physical science supplied the essential metaphysical basis, the concept of a real uniformity behind apparent diversity. The law of gravitation rather than the law of nations provided the model for the political reformer. The true laws of politics must be simple, like all good scientific laws. They could not be simple unless the entities with which they dealt-men-were assumed to be identical. Bentham's felicific calculus could hardly have been applied save to units with a like capacity for feeling pleasure and pain. Second, the powerful and recently enriched middle classes, especially in France and England, were anxious to achieve social and political equality with the nobility. Third, the notion of an actual previously existent state of nature, to the stoics hardly

more than a logical haven for their rationalism, became with Shaftesbury and Rousseau a belief in the natural goodness of man, a belief held with a mystic fervor rarely attached to so worldly a dogma. All these elements went into eighteenth century egalitarianism: reason and faith both showed men to be identical at birth; if they were now unlike, the cause must be sought in something outside them—their environment; but that environment could be manipulated, as the science of Newton had shown; if men were treated alike, they would become alike. The American and the French revolutions finally established as part of a creed the proposition that all men are born equal. Jefferson's phrase and the famous Liberté, égalité, fraternité entered into the ritual of the two great nations and acquired thereby something more and less than meaning.)

Throughout the nineteenth century the concept of equality stood in the background of a great variety of social movements and proliferated into an increasing number of fields. A detailed history of its development would touch upon most aspects of modern life. It will therefore be well to abandon the historical treatment of the subject at this point and attempt a systematic analysis of the possible meanings of equality which have been of importance.

3 First, there is equality of opportunity, the career open to talents. Men are born with quite different capacities, but for that very reason they should be given an equal chance to bring out what is in them. In this sense equality is merely a common sense accompaniment of individualism. But here enters a serious difficulty. It is clear that the son of the millionaire and the son of the laborer do not get equal opportunities. The social environment must be altered if one wishes to provide an equal start for everyone, and this can hardly be done except by collective action. The logical conclusion to be drawn from the principle of equality of opportunity is not laissez faire, but collectivism. The still numerous believers in this form of equality are, however, rarely logicians.)

Then there is equality before the law, equal administration of justice. This principle does not necessarily assume that men are in any tangible way alike. If there lies in its background an ethical feeling for the dignity of human beings, a feeling that man must always be treated as an end, not as a means, its foreground is a desire for practical administration of justice. There is, no doubt, a reciprocal influence of highly developed

systems of law on ethical ideas, and Roman lawyers ended by regarding the human stuff with which they worked as well as the rules by which they worked as equally abstract. In the modern world the struggle for this sort of equality began in England in the seventeenth and in France in the eighteenth century and was directed largely against royal and noble privileges and exemptions. In the United States popular feeling has always regarded wealth as the chief obstacle to equal administration of justice. Much of the bitterness of the antitrust movement came from the popular belief that corporate wealth in particular possessed unfair advantages in the courts. Election of judges, even recall of judges, has been regarded as legitimate means of protecting the independence of the courts. Historically the struggle for equality before the law is tied up with trial by jury, with habeas corpus or similar devices, with the independent tenure of judgeships. This machinery and its operation are, however, less important to the effectiveness of the principle than may seem at first sight. At present the principle is accepted, if not realized, in all civilized countries.)

Political equality is a more complex matter. It may be merely a spiritual consolation, the secular equivalent of religious equality in God. A good Frenchman shares in the republic of France as a good Christian shares in the kingdom of heaven. Or it may go so far in the direction of concreteness as to aim at something like social and economic equality. In practise the ideal of political equality has centered in universal suffrage and representative governmentmodern democracy, in short. The philosophic explanations of this principle of "one man, one vote" have a considerable range. It may be asserted that, although men vary greatly in political wisdom, there is something absolute in the fact of being human that gives man a right to a voice in government. It may be asserted that at any rate each man knows what is best for himself—this is Bentham's position—and that in a vote the majority is apt to take the wisest course. Finally, it may be held that although men have different abilities in their special occupations, quite ordinary men are possessed of good political judgment; therefore, although a majority vote of ordinary men could not be trusted to judge a musical composition, it could be trusted in a matter of foreign policy. A variant of this notion maintains that ordinary men have at least the capacity to select wise representatives. It has been found necessary to multiply devices and

machinery for obtaining political equality as older methods reveal abuses and failure to achieve tangible results. The direct primary and the initiative, referendum and recall were all regarded at one time as necessary to complete political equality. Of recent years there has been a reaction against such machinery, even where, as in the United States, certain British dominions and Switzerland, it has been most fully developed; and an increased tendency to trust in the expert, as in the city manager plan, the growth of special administrative bodies and the extension of the civil service. Government by experts is with difficulty reconcilable with the idea of political equality.,

Adeas of social equality have worked out into concrete forms in several different directions. They had an influence in the humanitarian protest against slavery. They find expression in protests against the aristocratic principle. They animate the struggle for racial equality and constitute one of the goals of those who seek sex equality. Although there is precedent for sex equality in Plato and in the later Roman lawyers, the full extension of the idea is essentially modern. The extent to which the feminist movement has gone is indicated by the fact that in the recent attempted revision of the Anglican prayer book the elimination of I Corinthians XI: 1-16 ("... the head of every man is Christ: and the head of the woman is the man . . . ") was almost carried. Some feminists are content to admit important psychological as well as physiological differences between men and women and consequent differences in status. For them political and legal equality with men is sufficient. Others assert that men and women are fundamentally alike in almost all forms of human activity and that given equal opportunity women can do all that men can do in art, letters, business and administration. Women have already acquired the suffrage in most of the western world and in the United States perhaps something more than legal equality with men; even socially and economically they start out at present on something like an even basis with men. But although common masculine opinion is far less certain than it was fifty years ago that there are indelible feminine traits, the doctrine of the psychological identity of the sexes is still a radical one.

Race equality is partly a doctrinal concept, partly a matter of social arrangements. In both aspects it has played an important part in the history of the nineteenth century. Gobineau, H. S. Chamberlain, Lapouge, Ammon and many

others gave doctrinal form to nineteenth century race prejudices. The content of their doctrines varied somewhat, especially with the name of the elected race-Aryan, Nordic, Caucasian, Latin—but their outlines were the same: race differences in human beings are so great as to be virtually differences between species; one race is much superior to others, especially in intellect; mixture of races invariably produces inferior offspring; Darwin has shown that the superior race is the product of evolution, that it is fittest and should prevail over other races, perhaps by their eventual extinction, certainly by their complete political subordination. That peoples were only too willing to act on these assumptions almost any bit of modern history will show. I'he position of the Negro in the United States is an excellent type problem. In practise it is still almost universally assumed that the Negro is an inferior, and the laws of the southern states make this inequality explicit. As to the two essential points in a theoretical consideration, the ability of the Negro to live the same sort of life as the white man and the results of race mixture, most contemporary anthropologists would answer that in so far as scientific methods can test race differences we can only say that the evidence is too incomplete to permit generalizations. Some, like Hertz and Finot, deny the existence of inherent race differences, especially intellectual differences. On one matter at least all are agreed: "pure" races do not exist. Especially in Europe historical processes have built up nations from extremely mixed stocks.)

A number of factors have contributed to the partial translation of theoretical doctrines of race equality into at least a limited practise of social equality. Nationality although in the last century it leaned heavily for support on race theories is ultimately based on some sort of general will or consciousness. Equality of nations is a matter of international law, and the tendency of nationalism has been to promote social equality. Nationalism in modern times grew out of the French Revolution and therefore had from the beginning an egalitarian cast. Precisely because the racial identity of the members of the nation state was so doubtful, emphasis was put on their spiritual and cultural identity. A Frenchman, for instance, should be, externally at least, as much like other Frenchmen as possible. The French Revolution was notably hostile to provincial differences in costume, dialect and habits and sought by education and administration to unify France

This sort of social equality within a given nation is closely connected with democratic leveling and with the rule of the majority. As a tendency in American life it has roused to protest and literary activity a whole school of modern writers. Their fears lest all Americans become as much alike as so many smooth coins are somewhat exaggerated. Certain social conformities are indeed required in modern America, but not so many conformities nor such unchanging ones as in a primitive tribe or a religious sect. The vastness of the scale of our conformities has blinded us to the shallowness of their reach. Education has not eliminated local differences: a New York equivalent of cockney English has arisen in the last few generations, and not even the radio will spread it to the Kansan plain. Even fashion, which has now an international scope, represents a struggle between innovation and persistence, between individualism and egalitarianism, the result of which is always variety of some kind. Finally, no social equality could be complete without economic equality, and of the latter ideal there is little trace in modern America or indeed in the modern world.

If economic equality be defined as the absolutely equal partition of all kinds of wealth among all human beings, then it has found few defenders in the history of thought. Nothing could be more erroneous than to consider, as so many critics of socialism do, that economic egalitarianism is one of the distinguishing marks of any socialist system. Socialism of all kinds does indeed aim at doing away with poverty but it does not necessarily assert that men are alike or that they need or deserve equal shares of wealth. Among the many systems commonly labeled socialist some imply equal sharing in production or distribution or in both. Some content themselves with such formulae as "From each according to his ability; to each according to his need." But Fourier and Saint-Simon both repudiate equality of compensation; and even Marxism is concerned primarily with the rational organization of production rather than with the equalization of consumer's wealth. Moreover, the dogma of a dictatorship of the proletariat suggests, at least for a prolonged period of transition, the fixation of class lines? Robespierre gave expression to the ideal of economic equality which has come nearest to common acceptance in modern times when he said that no one ought to have much more or much less than 3000 francs a year. This rough equality was to be the result of public opinion, of the natural ethics of the commu-

nity and not of organized control. This is substantially the yeomanry ideal of Jefferson and as an ideal underlay the agrarian movements -- granger, Populist, Farmer-Labor-of the last century in the United States."The industrial revolution has produced something more like economic equality than Marxian doctrine admits) The actual gap in consumer's wealth between Rockefeller and a workman is less than that between Croesus and a Lydian peasant. Only in articles having a snob or collector's value is great inequality the rule today. Moreover, on the side of capital wealth a great middle class, new at least in extent, has been built up. But poverty has not + been eliminated, and from the point of view of distribution of control or power modern economic organization is tending toward the production of ever greater inequalities.

Behind all these senses of equality there lies the fact of individual self-consciousness and the consequent universal if vague demand for equality of personal valuation. In the past at least this has been true whether man was considered as a being distinguishable in essence from other animals, as with the Christians, or as an integral part of animal life, as with the eighteenth century philosophers. This demand has worked itself out in two main currents: the rationalistic concept of the essential identity of men and the religious-romantic idealization of an essential human element common to all men.

"The rationalist asserts that men are equal in an empirical sense perfectly verifiable in this world: Common sense undoubtedly rejects this view; yet even to common sense it is obvious that the species man has less internal variation than, for instance, the species dog. The rationalist view is at bottom based upon a monistic solution of the epistemological problem of universals. It has been tremendously aided by the practical success of the concept of law or uniformity in government and in science. It probably represents a fairly permanent way of looking at things. It is at present, however, somewhat out of fashion. Economics, for instance, which long postulated in the homo oeconomicus a rationalistic abstraction, has found with the breakdown of laissez faire that this abstraction is no longer useful. The growth of experimental psychology has placed further emphasis on human variation. ·Yet even here the behaviorists have taken refuge in a position to which rationalists, faced with the evidence of experience, have always turned; namely, that differences in human beings are wholly the result of difference in environment.) Rationalist notions of human equality have probably never existed without some admixture of what we have called the religious-romantic idealization. This latter is a feeling, a given psychological fact, which it is idle to call irrational in a derogatory sense, it is at first hand allied with what the French Revolution called fraternity, just as the rationalist notion of equality is allied with another member of the triad, liberty. It is an agreeable emotion, for its realization promises peace. Probably it is never felt strongly save by uncommonly sensitive spirits. Yet there is no ground for thinking that it is not in an attenuated form a permanent element in human nature.

Neither the rationalist nor the romantic concept of equality is at present of great driving force in the western world. A rough equality before the law has been realized. Political equality has suffered from the prestige of the expert and the partial breaking down of parliamentary government. Economic equality as an ideal has failed to bite in. It has been displaced in large part by a belief in the fruits of a planned and hierarchically ordered economic scheme. In the United States the nineteenth century distrust of great corporate and individual wealth has almost disappeared. None but the intellectuals now dislike Henry Ford. In a superficial sense social equality has been attained to a degree which has alarmed men who consider individual idiosyncracies the charm of life if not the key to progress. Increasing standardization has been accompanied by decreasing egalitarianism. "Never were men so like one another," says Santayana, "and yet so divided."

A partial explanation of this paradox is to be found in the history of the idea of equality. In general the demand for equality has flared up strongly only when there was a marked contrast between the customary status of a group or groups of men and their actual status. The French Revolution is here the *locus classicus*: the middle classes were as rich and as well educated as the nobility but were in a position of definite social and legal inferiority. Their protest colored the whole of the nineteenth century. Similar situations have occurred at other points in history when equality was a motivating concept. Even the stoic-Christian ideal of equality was forged at a time when the contrast between the complexities of the inherited past of Mediterranean peoples and the simplicities of their cosmopolitan present were greatest. It is possible that the modern world is approaching some sort of social

equilibrium, possible that there are not enough of some kinds of equality to allay man's desire for ideal equality.

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See: Liberty; Justice; Individualism; Communism; Democracy; Liberalism; Utilitarianism; Cosmopolitanism; Natural Rights; Natural Law; Human Nature; Stoicism; Christianity; French Revolution; Freedom of Contract; Suffrage; Feminism; Emancipation; Race Prejudice; Social Discrimination; Status; Class; Aristocracy; Plutocracy; Expert.

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EQUALITY OF STATES. The idea that states should be considered equal in international law has influenced profoundly the theory of the law, and less significantly its practise, since the middle of the seventeenth century. Whether and to what extent mediaeval practise may have justified such an idea it is not par-

ticularly important to inquire. The theory was formulated by classical writers on the law of nations of the seventeenth and eighteenth centuries, particularly by those writers who acknowledged the unqualified supremacy of the natural law, and through them it passed into the literature and the practise of international jurisprudence.

The heritage of the classical writers from ancient and mediaeval learning included few notions more influential in the early development of the law of nations than the concepts of natural law, the state of nature and natural equality. With the disintegration of universal empire and the rise of the modern state system the application of these notions internationally was a tempting possibility. The sovereignty of the separate state was being increasingly stressed both in theory and practise. Actual relations between states were anarchic at best. The law of nations was an exceedingly primitive system. The concept of an international state of nature among equal states acknowledging no other supernational authority than nature's law was for that age a plausible rationalization of the society of nations and international law.

It is significant that Hugo Grotius (1583-1645) elaborated no such rationalization. One of the most modern of the classical writers, Grotius was too much concerned with the development of a practical system founded upon usage as well as upon reason to be greatly interested in the perfection of such concepts. Among his successors, however, there appeared a school of writers, acknowledging the intellectual inspiration of Thomas Hobbes (1588-1679) and the leadership of Samuel von Pufendorf (1632-94), which conceived of international society as a state of nature, of international law as nothing more nor less than the law of nature applied to states in international society and of states as naturally equal. This was the origin of the modern doctrine of the equality of states. Burlamaqui left an especially lucid statement of the doctrines of this school in his Principes du droit naturel (Geneva 1748, new ed. Paris 1850; tr. by Thomas Nugent, 7th ed. Philadelphia 1832) and the same doctrines were taken over by the eclectics and given wider currency through the popular treatise of Vattel, Le droit des gens, ou principes de la loi naturelle, appliqués à la conduite & aux affaires des nations & des souverains (2 vols., London 1758, 3 vols., Paris 1856; tr. by C. G. Fenwick, Classics of International Law, no. iv, 3 vols., Washington 1916).

In the nineteenth century most writers reaffirmed the equality of states. Variously described as an attribute of states, a right of states or a principle governing their relationships in international society, its juridical significance was reappraised in terms of equality of rights or equality of capacity for rights, and much effort was expended in seeking to reconcile the principle with the inequalities in fact which seemed increasingly to characterize the international society of states. The principle was increasingly justified, in keeping with the tendencies of the time, as a necessary consequence of the sovereignty or independence of states. Of the few who denied or doubted the principle in the nineteenth century only Lorimer in his Institutes of the Law of Nations (Edinburgh 1883-84) was of first rate significance. There was reliance upon the principle from time to time in the decisions of national courts, in international awards and in diplomatic negotiations, although no precedent or accumulation of precedents can be said to have fully justified the broad generalizations of the writers.

It is difficult indeed to bring broad generalizations asserting the equality of states into harmony with the facts of international life. Some states are so organized internally as to make an equality of legal capacity difficult if not impossible of attainment. Other states are united externally in loose federation, confederation or imperial union with resulting limitations upon international capacity. Still other states are so limited by geographical position, as in the case of those having no access to the sea, or are so handicapped in their international relationships by the characteristics of their civilization, as in the case of eastern states until recently subjected to the exterritorial system, that they are in no exact legal sense of equal status with other states in the international community. There have always been and probably will be for some time to come many states constrained to accept the more or less permanent protection, guaranty, neutralization or financial supervision of other states. When such relationships are established on a well defined and relatively permanent basis and are recognized by other states as a part of the international social order, they become a part of positive international law. It is unnecessary to add that they are inconsistent with the naturalist's conception of a natural society of equal states. Before the World War it was generally agreed that every state had a right of recourse to war.

Respected jurists even defined war as of the nature of an international action for the assertion or vindication of rights. In just so far as international law recognizes self-help as a lawful proceeding for vindicating rights and redressing grievances it concedes to states an inequality of legal capacity directly proportioned to the distribution of resources which make for military strength. Recent efforts so to organize the world that wars may be prevented and eventually outlawed have probably done more to establish real legal equality among states than centuries of juristic speculation could possibly accomplish.

Paradoxically enough, the principle of state equality has been a serious obstacle to effective international organization. It was formerly assumed that the principle would require equality of representation and unanimity in reaching all important decisions whenever states should organize for more effective cooperation; but respect for these assumptions would of course have made organized cooperation virtually impossible. In the seventeenth and eighteenth centuries there was no organized international cooperation, no law of international organization and consequently no occasion for distinguishing the legal from the political equality of states. In the nineteenth century the great European powers developed a primitive method of concerted political action which was denounced quite generally as a violation of the equality of states. In the latter part of the century a number of international administrative unions were created in which inequalities of representation, voting strength and financial support received a measure of recognition. Nevertheless, at the Second Hague Peace Conference in 1907 plans for organizing an international court of justice were wrecked by the insistence of the smaller and weaker states upon equality of representation. Where the nineteenth century condemned, granted reluctantly or rejected political inequality in institutions for international cooperation, the twentieth century has been constrained to accept it as an indispensable means to the more effective organization of the international community. In the League of Nations, the International Labour Organization and the Permanent Court of International Justice the political equality of states has been measurably subordinated to the end that legal equality may be more effectively conserved.

It may be concluded therefore that the equal-

ity of states, in the sense of equal protection of the law or equality before the law, is as indispensable in the international society of law as in any other legal society. Unless states are equally protected in the enjoyment of their rights and equally compelled to fulfil their obligations, whatever their condition or status, there can be no reliance upon law in international relations. Equality of capacity for rights, on the other hand, is at best an ideal in the system of international law. Among states so different in the fundamental physical bases of their existence it is unlikely that it will ever be perfectly attained. Finally, experience indicates that legal and political equality must be distinguished. Doctrines of equality which were appropriate enough in the seventeenth and eighteenth centuries defeat their own ends if applied uncritically in the more closely integrated and more effectively organized international community of the twentieth century.

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Sec: International Law; Natural Law; Sovereignty; International Organization.

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EQUILIBRIUM, ECONOMIC. See STATICS AND DYNAMICS.

EQUITY. The words equity and equitable are most commonly associated by Anglo-American lawyers with the rules and principles of law which were developed in the Court of Chancery in England and in courts with similar powers in the United States. Like so many of the verbal symbols used by lawyers, however, these words have a variety of meanings, some popular and others more technical. The most common of the non-technical meanings of equity, one in which lawyers themselves not infrequently use the word, is as a synonym for "natural justice." In this sense to say that certain conduct or the decision of a court is equitable is merely a way

of saying that to the speaker or writer it seems fair or just. Even as a technical word in the lawyer's vocabulary, moreover, equity has more than a single meaning. Often in legal discussions it stands simply for a liberal and humane interpretation and application of law in general. It is in this sense that the ἐπιείκεια and τὸ ἐπιεικές of the Greeks are to be treated as signifying equity and equitable respectively. For example, this is the sense these words have in the passage in Aristotle's Ethics (bk. v, ch. x) commonly referred to in discussions of equity. Vinogradoff in his Outlines of Historical Jurisprudence (2 vols., London 1920-22, vol. ii, p. 66) writes that the appeal to ἐπιείκεια as a part of the unwritten of great importance in Greek law. In Roman law the same general notion appears under various titles, such as aequitas, aequum et bonum, utilitas, humanitas, benignitas. Yet while aequitas in Roman law has at times this meaning, it was apparently used in a great variety of meanings. This is true even of a single writer, Cicero. Accordingly Buckland approves of Krueger's statement that the word "is of little use." Closely associated with these foregoing somewhat vague meanings of equity is that not infrequently found in English law in such phrases as "the equity of the statute." Upon examinacion it turns out that translated into plain English this means little more than that the statute in question is to be construed by the court so that its meaning will be in accord with what is believed to be, all circumstances considered, most convenient, reasonable or just.

Another meaning of equity, one made familiar to Anglo-American lawyers by the writings of Sir Henry Maine, is the one developed by him in his Ancient Law (1861) as a body of rules of law existing by the side of the original civil or "strict" law, founded on more or less distinct principles and claiming incidentally to supersede the strict law by virtue of a superior sanctity or ethical equality inherent in these principles. It is in this sense that the law developed under the Roman praetors is often called equitable. Probably the common statement that the edict of the praetor was the source of this kind of equity in the Roman law is only partially true and to some extent misleading. Apparently some of the doctrines often thought of as equitable were introduced by special acts of the supreme legislative machinery and not merely by the edict of the praetor. This was obviously law reform by legislation rather than by the devel-

opment of equity, unless indeed all reformatory legislation is to be called equitable. It should also be noted that the edict of the praetor was itself originally in a very real sense legislative in character; that is, it was issued by the practor when he assumed office in the form of apparently fixed rules which he would follow. To this extent therefore the practorian edict was a piece of express legislation by a single magistrate. On the other hand, the praetor never claimed a right to repeal directly the strict civil law rule, but merely devised means for avoiding its effects. Thus the practor did not claim that he could openly confer ownership under an informal conveyance not complying with the formal requisites of the civil law; he could, however, protect possession and thus get around those requisites. In this respect the analogy to English equity is clear, as will later appear, and it is for this reason among others that the law thus developed by the praetor is regarded as equitable. One must, however, not lose sight of the differences between this so-called equity in Roman law and English equity. In the first place, the practor professed to be guided by the set of supposedly fixed principles which he had announced in his edict, whereas the English chancellor, as will be seen, originally had a discretion to decide according to natural justice. The texts, however, show that the practor was thought of as having necessarily because of his function a special leaning toward equity in its more vague sense of natural justice. In the second place, this Roman law equity was not developed and administered by a separate tribunal, as was the case in English law. In the third place, the procedure followed in the administration of Roman law equity was never claimed to be purely in personam, as came to be the case in English law. In the fourth place, some of the most important and characteristic branches of English equity have no real counterpart in Roman law equity. This is conspicuously the case with reference to the whole law of trusts and trustees as well as the doctrine of equitable conversion.

As is well known, in the course of time the praetor gradually came more and more to carry over almost entirely the edict of his predecessor, until finally the form became fixed soon after 125 A.D., when the edict as formulated by Julian under directions from Hadrian was given statutory force by a senatus consultum. The edict thus ceased directly to be a source of new equity law. After this date the development most clearly analogous to that of English equity in the Court

of Chancery went on in Rome through the settled opinions of the jurists. In the larger part of litigated cases the actual decision of the case was by a judex in accordance with the formula fixed by the practor. As the judex did not need to be and apparently usually was not a skilled lawyer, it was inevitable that these opinions of the jurists should have great influence with the judex; indeed, to some extent they seem to have been regarded as binding upon the judices. It thus comes about that where an English or American lawyer would refer the court to a case previously decided by a court, the Roman lawyer referred to Papinian or some other great exponent of the law. Because of this the jurists in their commentaries on the praetorian edict succeeded in reading into it many novel propositions and thus became the main source from which the development of equity went on after the edict's form had become fixed. The jurists were thus responsible for perhaps the larger part of Roman equity. For example, by the strict law a contract right was not assignable. The jurists invented the idea that an assignment conferred a power of attorney upon the assignee to collect in the assignor's name and thus in effect although not in theory made the right assignable. In a similar way the jurists worked out such doctrines as subrogation, estoppel, constructive notice and the like. Another and often neglected source of Roman equity, according to Buckland, was the emperor, before whom cases might come in many ways and who rendered judgment in the form of a decretum. These decisions of the emperor, although made only after consultation with the lawyers who formed his council, were in the last analysis his own decision; at times they departed from the opinions both of the court which had (in the case of an appeal) tried the case and of the lawyers in the council.

It is common to associate the development of equity in English law exclusively with the office of the chancellor. In one sense this is correct but in another somewhat misleading, for after the development in the reign of Henry II of national courts administering law for the entire nation, the king's judges, who administered justice in his name, gave many kinds of relief which later could be obtained only in equity, that is, from the chancellor. The latter officer appears first in England in the reign of Edward the Confessor. He was the chief secretary, head of the king's chaplains and keeper of the royal seal. In the early days the office was always in

the hands of an ecclesiastic, because of the literary qualifications demanded. From the time of Edward I until Edward III the chancellor's power continued to grow; under Edward IV the Chancery became a separate jurisdiction, although not until 1474 did the chancellor make a decree on his own authority. If the actual legal developments after the Norman conquest are carefully examined, it will be found that common law and equity apparently originated as one undifferentiated system in the effort of the Anglo-Norman kings to carry out the duty ascribed to them to preserve order and to administer justice to rich and poor alike. Under the organization which developed, the individual who wished to take advantage of the king's justice had first to obtain the king's permission through the machinery provided by him. In the case of the common law actions as they were developed in the eleventh and twelfth centuries the essential characteristic was that they all began with a petition asking the king to interfere and to secure justice when it could not be obtained by the usual processes. In this way there developed the system of "original writs," issued out of Chancery, authorizing the king's court to hear the case. In the thirteenth century, as the older courts and the older system of law were gradually displaced by the newer system, the common law system came to be thought of as the normal law of the land. During all of this period, as already suggested, the king's courts were found administering not only the kind of remedies later associated with the common law but also many of those later known as equitable. To speak of common law and equity as existing at this time as separate systems would of course be to carry back into the twelfth and thirteenth centuries a distinction not then recognized. Gradually, however, a hardening process set in which limited the common law to a set of restricted forms of action covering fairly well defined types of cases. This was in large part due to the Provisions of Oxford of 1258, which forbade the chancellor to frame new writs without the consent of the king and Council. Prior to that statute great flexibility in the formation of new writs to meet new situations had existed. The limitation thus put on the powers of the chancellor was to some extent relieved by the 24th chapter of the Statute of Westminster II, which allowed the formation in the Chancery of new writs to meet cases more or less similar to those already provided for; but the hardening process had gone too far and the kinds of relief

obtainable had been narrowed too greatly for the common law to meet adequately the needs of a developing society. In most cases, for example, the relief given consisted of damages rather than specific relief. Naturally appeal was once more made to the royal prerogative and duty of administering justice. In the meantime the chancellor had become the chief law member of the Council as well as the most powerful executive officer of state next to the king. These facts and the added fact that the chancellor was usually a great ecclesiastic, learned in the canon and the moral law, brought it about that the petitions to the king or to the Council for justice in cases in which the king's regular tribunals were unable to function effectively began to be referred to the chancellor. Ultimately this became the routine procedure, so that by the middle of the fourteenth century the Chancery had come to be recognized as a separate judicial tribunal or court. One striking difference between Chancery as a court and the courts of common law lay in the mode in which cases were begun and carried on, or perhaps better in the theory which was supposed to underlie the process. To initiate a case in a common law court it was necessary to secure from the Chancery office an original writ. This writ, which ran in the name of the king, defined the type of case which the court to which it was addressed was directed to hear and decide and was thus the legal authorization from the king to his court to hear that particular kind of case and no other between the parties specified. In addition, the judgment did not ordinarily command the defendant to do anything but was simply that the plaintiff recover his damages. Failure to satisfy the judgment was therefore not contempt of court. In the case of Chancery, on the other hand, although it came to be regarded as a court, the chancellor continued to speak directly in the name of the king and the king's representative. On the presentation of the petition, or bill, as it came to be called, a writ was issued in the name of the king, under which the party complained against was directed to appear before the Court of Chancery to answer the complaint and abide by the order that might be made. This order also ran directly in the name of the king; that is, in legal theory it was the direct command of the king to his subject to do or to refrain from doing certain things. It followed that if the defendant disobeyed the order he was in contempt not of the chancellor but of the king and was dealt with accordingly.

The statement that "equity acts in personam" is based upon this form of procedure.

It is probably true that during much of the fourteenth century appeals for justice to the king through the chancellor were in many cases rendered necessary by the inability of the king's ordinary courts of common law to compel obedience from the more wealthy and powerful of the king's subjects in cases in which the complainant was relatively poor. Many of the petitions to the chancellor during this period show this as the chief ground for appealing to the extraordinary powers of the chancellor as the direct representative of the king. Later the emphasis shifted to the inadequacy of the common law remedies to meet the demands of justice in the particular case. Two features demand notice: first, the normal remedy at common law was damages rather than specific relief, although there were of course exceptions. If, for example, someone were wrongfully threatening to cut down valuable shade trees on another's land. the latter aside from any right to use physical force himself to prevent the trespass had at common law no means of preventing the cutting of the trees; all the common law court would do for him was to give him money damages after the trees had been destroyed. Naturally appeal was made to the chancellor for relief. Second, as the common law developed, the mode of trying cases involving disputed questions of fact came to be by jury. Since the jurors were as a rule uneducated men, it became obvious that certain types of issues of fact were not likely to be handled effectively by a jury. This was, for example, thought to be true in cases in which there was a controversy involving more than two sides or one in which the taking of a complicated account was necessary. Appeals to the chancellor were therefore also made in this type of situation, as there was no jury in the Court of Chancery.

Originally the king and then the chancellor had no rules and principles to guide them in reaching a decision upon petitions for justice; the appeal was to equity in the sense of natural justice; in other words, the justice was executive justice rather than justice according to law. Inevitably, however, as the petitions became more and more numerous, the chancellor began to follow more or less the precedents established by himself in prior cases which seemed to him similar and then later to examine into and follow the decisions of the chancellors who had preceded him. This development of equity from a

system of natural justice into a system of law came to a head while the office was held by Lord Chancellor Hardwicke (1738-56), Lord Thurlow (1778–92) and Lord Eldon (1801–27). The extent to which the early chancellors were influenced by the canon law in working out their doctrines cannot be said to be fully settled. Undoubtedly both canon law and Roman law were of influence. It must not be assumed that this development of a body of law which, while it did not directly repeal the common law, succeeded in getting around its effects went on without challenge from the courts of common law. From time to time protests were made against the growing judicial power of the chancellor, especially when he undertook to interfere with the enforcement of judgments obtained in common law courts, judgments which the latter courts regarded as entirely valid. The controversy came into the open in the reign of Elizabeth, when Lord Ellesmere undertook to enjoin the enforcement of a common law judgment in ejectment. Apparently because of the personal intervention of Elizabeth, Lord Ellesmere was temporarily defeated but succeeded in carrying the day in the reign of James 1 when all the judges of England summoned by the king to pass upon the question agreed that the chancellor could by injunction restrain the judgment creditor from enforcing a judgment obtained in the King's Bench by a plaintiff who in the opinion of the chancellor had been guilty of fraudulent practises. The exact manner in which the equitable relief was granted in such cases must be carefully noted. The chancellor made no pretense of having any power directly to nullify or set aside the common law judgment or to pass on its validity; he, much like the Roman praetor and the jurists, got around the common law. In English law this was accomplished by alleging that all the chancellor claimed to do was to act in personam by ordering the judgment creditor to refrain from obtaining the issue of execution on the judgment, and to threaten him in the name of the king with punishment if he disobeyed. Nominally therefore the common law judgment seemed as valid as ever; actually, of course, it became substantially of no value. Curiously enough this obviously sophistical reasoning that "equity acts only in personam," and that therefore the common law rights of the parties are left intact—for if not, equity would be acting in rem—has colored the thinking of many, if not most, Anglo-American writers on law ever since the time of Ellesmere, as the writings of Maitland, Langdell and Ames show. A more realistic view is set forth by some relatively recent writers, such as Judge Charles E. Phelps, Beale, Hohfeld, Billson, Cook and others.

Until the rise of the modern legislative body equity was the great force of legal reform in Anglo-American law. By the development of uses and trusts it profoundly modified the land law of England and America; it developed by means of the law of trusts the first married women's property law; it enabled married women to contract with reference to their separate property in equity; it was the first to enforce simple contracts—this as early as the fifteenth century; in developing the law of specific performance of contracts for the conveyance of law it effected other important changes in the law of real property; it made choses in action assignable before the common law adopted fully the Roman law device of the power of attorney; it developed much of our tort law in connection with the issuance of injunctions in labor disputes and unfair competition; it created substantially the whole of the law of mortgages with its equity of redemption and bills to foreclose that equity; it prevented the enforcement of judgments at law when it seemed inequitable to permit their enforcement; it ordered the reconveyance of land where the conveyance had obtained by fraud or was made by mistake—in fact, it wrote new chapters in practically every field of the law.

As yet adequate studies have not been made of the history of the enforcement of equity in the American colonies prior to the revolution. One of the best statements of what little is known is found in the essay upon courts of chancery in the American colonies by Solon Dyke Wilson. From this sketch it appears that at some period of its history each of the thirteen colonies had a tribunal with chancery powers in some form or other. Upon the separation from the mother country some of the states provided for the establishment of courts of chancery after the model of the High Court of Chancery in England. In others (Connecticut is an example) chancery powers were conferred upon the courts of law, the two systems, however, being kept distinct. In others (notably Massachusetts and Pennsylvania) there were no separate courts of equity or courts to which power to administer equity was expressly given. To some extent the courts of common law in this last group succeeded in adapting common law remedies, so that they gave relief which

under the English system was obtainable only in equity. Ultimately, however, in these as in the other states, jurisdiction to administer equity was expressly conferred upon the courts.

In England the judicature acts of 1873 and 1875 consolidated all the courts into a High Court of Justice. This is divided into five divisions, including one known as the Chancery Division. This, however, is a mere matter of convenient distribution of business, which can be altered by rule of court without statutory change. All divisions are to administer in the cases that come before them all rules of law—common law, equitable, or what not—applicable to the cases before them.

In some parts of America, as in New Jersey and Baltimore, Maryland, there are still separate courts of equity with separate rules of procedure; in others, as in Illinois and the counties of Maryland, one court or set of courts administers both systems of law, but the two kinds of cases are kept distinct and the procedure is different; in still others, as in Connecticut and New York, one set of courts administers both systems and there is, or at least purports to be, a single system of procedure, so-called code procedure, for all the courts. In the federal courts common law and equity are administered by the same court but the two are kept substantially distinct. So-called equitable defenses are, however, allowed by statute in common law cases. In common law cases the procedure prescribed by the state in which the court is sitting is followed; but in equity cases the procedure is prescribed by the Federal Equity Rules adopted by the Supreme Court of the United States in pursuance of a statute of Congress.

It must not be imagined, however, that in the so-called code states the distinction between common law and equity cases has entirely disappeared. The reasons for the preservation of the distinction are numerous. One is, doubtless, the traditional conservatism of the legal profession and its clinging tenaciously to habits of thought and ways of looking at things which are embedded in all the literature of the subject for centuries. For example, the recent "reform" of English property law speaks of certain titles being good "at law" and of others as taking effect "only in equity"—this over half a century after the fusion under the judicature acts. Of perhaps more importance is the fact that in many of the code states the distinction is preserved by legislative or constitutional enactment. To understand this it must be noted that his-

torically common law and equity procedure, inter alia, differed in two ways: in the mode of trying issues of fact and in the types of appellate review. At common law the issues of fact were tried by jury; the appellate review was by writ of error, which brought up only questions of law. In equity the issues of fact were tried by the court and, originally, entirely on the basis of written evidence—answers to interrogatories and depositions made under oath-and the chancery appeal was in substance tried de novo by the appellate court of the questions of fact as well as of law. The latter difference was due largely to the fact that as the evidence was written the higher court could pass on it as well as the trial court, whereas in the common law case the triers of fact, the jury, had seen the witnesses. While formally the distinction between action at law and suit in equity is abolished by the codes, in essence it is usually restored by provisions, such, for example, as that found in Connecticut, that all issues of fact which prior to the code were triable to a jury shall remain so triable and all issues of fact formerly triable to the court shall remain so triable. In addition, in some states by statute or constitutional provision the distinction as to the kind of appellate review is also retained and chancery suits are reviewed by appeal instead of by writ of error. So long as constitutions and statutory provisions retain jury trial in civil cases as at common law and court trial in chancery or equity cases, and corresponding differences in appellate review, the distinction between law and equity is not abolished. Much can be done and has been done by wise provisions encouraging waiver of jury trials; but not until these constitutional and statutory requirements referred to are done away with and something like the more flexible English system is adopted can a real fusion of law and equity take place. Even then, of course, the distinction between action for damages and specific relief will continue, but there will be no need to call one common law and the other equitable relief.

Although equity has hardened into a system of principles and rules, it must not be imagined that all power for growth has disappeared. To begin with, all systems of legal rules and principles permit of change as novel situations arise and social and economic institutions change. This capacity for growth equity shares with common law. In addition, as the legalization of equity went on, the chancellors to some extent limited the process by the use of vague terms

such as discretion; for example, it was often said that the granting of a particular remedy was "in the discretion" of the court. Vague phrases of this kind coupled with the inherent elasticity of all systems of rules and principles thus permit of a continual growth and adaptation of equity to the changing needs of society.

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See: Law; Courts; Judicial Process; Procedure, Le-GAL; APPEALS; ROMAN LAW; COMMON LAW; JUSTICE. Consult: Adams, G. B., "The Origin of English Equity" in Columbia Law Review, vol. xvi (1916) 87-98; Adams, John, Doctrine of Equity (8th ed. Philadelphia 1890); Anies, James Barr, Lectures on Legal History (Cambridge, Mass. 1913) p. 233-97; Barbour, Willard, "Some Aspects of Fifteenth-Century Chancery" in Harvard Law Review, vol. xxxi (1917-18) 834-59; Billson, W. W., Equity in Its Relations to Common Law (Boston 1917); Bispham, G. T., The Principles of Equity (9th ed. New York 1915); Buckland, W. W., Equity in Roman Law (London 1911), and A Text-book of Roman Law (Cambridge, Eng. 1921); Allen, C. K., Law in the Making (Oxford 1927); Cook, W. W., "The Place of Equity in Our Legal System" in American Bar Association, Report, vol. xxxvii (1912) 997-1009, and "The Powers of Courts of Equity" in Columbia Law Review, vol. xv (1915) 23-54, 106-41, 228-52, and "Equitable Defenses" in Yale Law Journal, vol. xxxii (1922-23) 645 -47; Hohfeld, W. N., "The Relations between Equity and Law" in his Fundamental Legal Conceptions, ed. by W. W. Cook (New Haven 1923) ch. iii; Holdsworth, W. S., A History of English Law, 9 vols. (3rd ed. London 1922-26) vols. i-ii, iv-vi, and ix; Holmes, O. W., "Early English Equity" in Law Quarterly Review, vol. i (1885) 162-74, and Wilson, S. D., "Courts of Chancery in the American Colonies" in United States Law Review, vol. xviii (1884) 226-55, and Fisher, S. G., "The Administration of Equity through Common Law Forms" in Law Quarterly Review, vol. i (1885) 445-65, all reprinted in Association of American Law Schools, Select Essays in Anglo-American Legal History, 3 vols. (Boston 1907-09) vol. ii, chs. xli, xlv-xlvi; Huston, C. A., The Enforcement of Decrees in Equity, Harvard Studies in Jurisprudence, vol. i (Cambridge, Mass. 1915); Kerly, D. M., An Historical Sketch of the Equitable Jurisdiction of the Court of Chancery (Cambridge, Eng. 1890); Langdell, C. C., A Brief Survey of Equity Jurisdiction (2nd ed. Cambridge, Mass. 1908), and A Summary of Equity Pleading (2nd ed. Cambridge, Mass. 1883); Lawrence, F. F., A Treatise on the Substantive Law of Equity Jurisprudence, 2 vols. (Albany 1929); Maitland, F. W., Collected Papers, 3 vols. (Cambridge, Eng. 1911), and Equity, ed. by A. H. Chaytor and W. J. Whittaker (Cambridge, Eng. 1909); Medley, D. J., "Administration of Justice" in his A Student's Manual of English Constitutional History (6th ed. Oxford 1925) ch. vii; Phelps, C. E., Falstaff and Equity (Boston 1901), and Juridical Equity Abridged (Baltimore 1894); Pomeroy, J. N., A Treatise on Equity Jurisprudence, 6 vols. (4th ed. San Francisco 1918-19); Spence, George, The Equitable Jurisdiction of the Court of Chancery, 2 vols. (London 1846-49), and "The History of the Court of Chancery" in Asso-

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ERASMUS, DESIDERIUS (1466 or 1467-1536), Dutch humanist. Erasmus was born at Rotterdam from an illegitimate alliance of a priest, and was educated in the schools of the Brethren of the Common Life. At the age of about twenty-two he took the vows as an Augustinian canon; but after some years he left the cloister to enter upon the life of an author, and was one of the first to succeed in carning a living by his literary labors. He was afterwards dispensed from monastic vows. After many rather restless years spent alternately in Paris, England. Italy and at Louvain he finally settled at Basel, where he died. During the latter part of his life the interest of intellectual Europe centered in him in a degree seldom equaled before or after him. His success would have been impossible without the young art of printing, of which he was one of the first to reap the full possibilities.

Erasmus' chief importance lies in the fact that he marks more clearly than anyone else the transition from the Middle Ages to modern times. He despised and denounced all that seemed obsolete, cumbrous, unreasonable or ridiculous in the civilization of his age, pointing with the same deep earnestness to the purity and simplicity of early Christianity and to the clearness and moral freedom of classical antiquity. He was neither a philosophical nor a political thinker, his noble pacifism remains declamatory, while his economic theories do not rise above the naïve. Even a theologian in the strict sense he was not, in spite of his enormous activity in the field of translating, editing and commenting upon the Bible and the fathers. His aversion to absolute dogmatic rigor left him standing halfway between the contending religious parties, but just for that reason his influence continued to affect both. He erected a noble ideal of social and personal purity, sanity and simplicity, resting on a faith in nature and in man and to be aspired at through education, learning and tolerance. Writing exclusively in Latin he was able to reach through his published works and through his innumerable letters the whole of cultivated Europe. If his most permanent influence was to be exercised by two works which he himself regarded lightly, the Praise of Folly and the Colloquies, it is not only because they

were the most popular but also because after all they contain what was deepest and wisest in Erasmus' mind.

J. Huizinga

Works: An edition of Erasmus' works was published by Jean Le Clerc, 10 vols. (Leyden 1703-06). The best English translation of Moriae encomium is that by John Wilson, as edited with introduction by Mrs. P. S. Allen (Oxford 1913); for a standard translation of the Colloquia familiaria see that by N. Bailey, which has been edited by E. Johnson as The Colloquies of Desiderius Erasmus concerning Men, Manners and Things, 3 vols. (London 1900). His letters (until 1528) have been edited, with prefaces, by P. S. and H. M. Allen, 7 vols. (Oxford 1906-28).

Consult: Huizinga, J., Erasmus (Haarlem 1924), tr. by F. Hopman (New York 1924); Smith, P., Erasmus, a Study of His Life, Ideals and Place in History (New York 1923); Thomson, J. A. K., "Desiderius Erasmus" in Social and Political Ideas of Some Great Thinkers of the Renaissance and Reformation, ed. by F. J. C. Hearnshaw (London 1925) ch. vi; Allen, P. S., The Age of Erasmus (Oxford 1914); Seebohm, F., The Oxford Reformers (3rd ed. London 1887); Murray, R. H., Erasmus and Luther (London 1920); Mestwerdt, P., Die Anfange des Erasmus (Leipsic 1917); Dermenghem, Emile, Thomas Morus et les utopistes de la Renaissance (Paris 1927); Born, L. K., "Erasmus on Political Ethics" in Political Science Quarterly, vol. xhii (1928) 520-43.

ERNEST I, DUKE OF SAXE-GOTHA AND ALTEN-BURG (Ernest the Pious) (1601-75), German ruler and educational reformer. To repair the ravages of the Thirty Years' War Duke Ernest, acting on the maxim princeps otiosus, deo exosus, chose the reform of education as the best means. He was inspired by the principles of religious piety rather than of rationalist enlightenment and was above all interested in improving the condition of the lower classes. In this task he was assisted by Andreas Reyher, whom he appointed as rector of the Gotha Gymnasium in 1640. After a general survey of the educational and religious conditions of the duchy, in which Ernest participated personally, Reyher with the collaboration of the duke issued a report in 1642 which in later editions was entitled the Schulmethodus. This report served as an educational ordinance for the state and outlined in detail a program of elementary education. School attendance was made compulsory but not free from the age of five; heavy penalties were imposed on negligent parents; the provision of schools and their supervision was regulated; the curriculum was prescribed with a strong emphasis on useful knowledge and nature study in addition to the usual three R's and religious instruction; methods of instruction

emphasized observation and activity by the pupils, following the principles of Ratke, with which Ernest was familiar. A number of model schoolhouses were built and the status of teachers was improved by the establishment of a minimum salary scale and of a fund for the care of their widows and children. Teachers were urged to continue their studies while in service, and the establishment of institutions for their training was contemplated. To promote the efficiency of the system a series of textbooks and readers was prepared by Reyher. In 1656 a plan was proposed for adult education. The work of Ernest the Pious proved of great influence on the subsequent contributions to public education in Germany of August Hermann Francke, whose father was in the service of the duke.

I. L. KANDEL

Consult: Beck, A., Ernst der Fromme (Weimar 1865); Gelbke, J. H., Herzog Ernst der Erste, genannt der Fromme, 3 vols. (1810); Böhne, W., Die pädagogischen Bestrebungen Ernsts des Frommen von Gotha (Gotha 1888); Geschichte der Erziehung, ed. by K. A. Schmid, 5 vols. (Stuttgart 1884-1902) vol. iv, pt. i, p. 1-74.

ERSKINE, BARON, THOMAS ERSKINE (1750–1823), English lawyer. Erskine ranks as the greatest advocate in the history of the English bar. A Whig and sympathetic to democratic aspirations, a man of honesty and courage, he contributed more than any man of his troubled times to the undermining of the law of constructive treason and criminal libel. In company with Burke, Fox and Pitt he served to fix English constitutional liberties in their present forms.

Of noble birth but poor, Erskine's service, first in the royal navy and then the army, was conventional, but he showed independence in preferring a happy marriage with a woman of no fortune. It was Lord Mansfield who influenced Erskine's decision to enter the law. He achieved instant acclaim by his successful defense of Captain Baillie, who, charged with attributing corruption to Lord Sandwich in the latter's conduct of the Greenwich naval hospital, had retained the young advocate because of his early naval experience.

Among the more important of Erskine's forensic battles may be mentioned his defense of Lord George Gordon in 1781 on a charge of treason growing out of the anti-Catholic riots of 1780; his defense in 1783-84 of the dean of St. Asaph, charged with seditious libel, a case that led directly to Fox's Libel Act of 1792, laying down Erskine's principle that it was for the jury, not

the judge, to decide when a publication was libelous; his defense in 1789 of the publisher John Stockdale for publishing a pamphlet against the impeachment of Warren Hastings; and his defense in 1792 of Thomas Paine. The triumph of Erskine's career was perhaps in the series of state trials in 1794 in which he secured acquittal after acquittal.

The last years of Erskine's life were as pathetic and futile as his early years had been brilliant and useful. Curiously, his decline began with his elevation to the chancellorship for the brief period of the ill fated ministry of All the Talents. Unfitted for the intricacies of equity practise, his adoption of the incongruous motto "Trial by Jury" for his heraldic shield caused general ridicule. After leaving the woolsack he spent his time as an idler and man about town. He suffered pecuniary disasters and contracted an unhappy second marriage. His last flare of glory was his speech in the House of Lords in defense of Queen Caroline.

WILLIAM SEAGLE

Consult: Brougham, Henry, "Memoir" in Speeches of the Hon. Thomas Erskine When at the Bar, ed. by J. Ridgway, 4 vols. (London 1847) vol. i; Townsend, W. C., The Lives of Twelve Eminent Judges of the Last and of the Present Century, 2 vols. (London 1846) vol. i, p. 398-474, and vol. ii, p. 1-144; Campbell, J. C., Lives of the Lord Chancellors, 10 vols. (5th ed. London 1868) vol. viii, p. 222-396, and vol. ix, p. 1-108; Duméril, Henri, Lord Erskine, étude sur le barreau anglais à la fin du XVIIIe siècle (Paris 1883).

ERSLEV, KRISTIAN (1852-1930), Danish historian. Erslev's methodical mind, logical thinking and practical talents made him the leader of modern research work and scientific teaching of history in Denmark. He was trained in the school of Waitz, Droysen and Nitzsch, and as professor of history at the University of Copenhagen from 1883 to 1916 he introduced and organized regular courses of historical training according to modern German methods. In 1877 he organized the Selskabet til Udgivelse af Kilder til Dansk Historie (Society for the publication of sources of Danish history) and laid down the plans for the methodical publication of the sources of Danish history. His textbooks on the history of the Middle Ages and of the sixteenth century were models of scholarly presentation of the problems involved, in many cases anticipating later researches; they are still in use in all Scandinavian universities. As administrator from 1909 to 1926 of Denmark's greatest scientific foundation, the Carlsbergfondet, he

was the prime force for the comprehensive consolidation of all kinds of research activity in his country. His own research work was concerned in particular with the history of Denmark from the thirteenth to the sixteenth century, and by his searching analysis of the sources he succeeded in creating a completely new conception of important social and political problems of this period, such as the economic character of the specific Danish feudalism as founded by the Waldemarian dynasty and the influence of the Reformation upon the rise of the royal power. His studies in the history of King Eric led him into the problems evoked by the perpetual conflicts about the Schleswig-Holstein question, and he published a series of researches into the constitutional and dynastic transactions regarding the duchies in the seventeenth and eightcenth centuries, by which he arrived at conclusions contradictory to the official Danish assertions of preceding times. His unprejudiced criticism, free from all narrow nationalism, had a salutary effect upon the general way of thinking in Denmark and helped to prepare the Danish nation for the political self-restraint evinced by the solution of the Schleswig question in 1920.

HALVDAN KOHT

Important works: Konge og lensmand i det sextende aarhundrede (King and vassal in the sixteenth century) (Copenhagen 1879); Danmarks historie under Dronning Margrethe og Erik of Pommeru (History of Denmark under Queen Margaret and King Eric), 2 vols. (Copenhagen 1882–1901); Valdemareines storhedstid (The Waldemarian epoch) (Copenhagen 1898); Historik teknik (Historical technique) (Copenhagen 1911, 2nd ed 1926); Vort slægtleds abejde i dansk historie (Our generation's work in Danish history) (Copenhagen 1922).

Consult: Friis, A., and others, in Tilskueren (1923) 17-52.

ERZBERGER, MATTHIAS (1875-1921), German politician. After teaching in an elementary school, editing the Catholic *Deutsches* Volksblatt in Stuttgart and organizing a Catholic news agency and Catholic labor unions Erzberger became at the age of twenty-eight a member of the Reichstag. Despite the opposition of the more conservative Centrist leaders he soon won great influence in the Center party. During the World War he devoted himself to spreading German propaganda in Austria, Spain, Switzerland, Holland, the Balkans and at the Vatican by writings and travel. Although originally unopposed to far reaching war aims, in 1916 he attacked unrestricted submarine warfare and, because of early knowledge of the Czernin

memorandum, called into question Austria's power of resistance. He supported the resolution of July 19, 1917, which while emphasizing "the invincibility of the German people" called for "a peace of understanding and of lasting reconciliation." On the basis of this resolution he succeeded in persuading a majority of the Left to unite with the Centrists in a policy favoring responsible government, democratic electoral reform in Prussia, the transformation of Alsace-Lorraine into a full fledged member of the German federation, the restoration of Belgium and entrance into a league of nations. In the cabinet of Prince Max of Baden, Erzberger held the office of secretary of state. When relying upon Wilson's Fourteen Points the government called for armistice negotiations, Erzberger was appointed chief of the delegation which concluded the Armistice on November 11, 1918. Later in the National Assembly at Weimar he fought for the acceptance of the Versailles Treaty against the vote of the peace delegation.

As minister of finance from 1919 to 1920 he reorganized the German financial system along its present lines. A federal fiscal administration was created and the federal right of taxation broadened. Federal subsidies were given to states and communes; a heavy tax was placed on war profits; an income tax was introduced; indirect taxes were increased; and a non-recurrent levy (Notopfer) was laid on capital. The extent and indeterminateness of the reparations claims, however, defeated the plan of removing the danger of the floating debt through non-recurrent taxes. The progressive fall in currency values and the high rates made it extremely difficult to realize the tax program, especially since many large tax obligations were evaded. The nationalists opened a strong campaign of opposition to Erzberger, building on opposition to his tax program, and he was finally murdered by nationalist fanatics.

The fierce antagonism he aroused can be explained by the disappointment of many who relied on his view of the peace and his promises for the future, by the fact that he represented the south German ideal of a greater Germany as opposed to the Bismarckian tradition and by his financial policy, which was tinged with socialist ideas. His great persuasive power was due in part to his manner of presenting the visions of his imagination as though they were objective reality.

E. H. JOHANNES POPITZ

Important works: Zentrumspolitik im Reichstage, 12

vols. (Coblenz and Berlin 1904–14); Die Rüstungsausgaben des deutschen Reichs (Stuttgart 1914); Der Völkerbund, der Weg zum Weltfrieden (Berlin 1918), tr. by B. Miall as The League of Nations (London 1919); Reden zur Neuordnung des deutschen Finanzwesens (Berlin 1919); Erlebnisse im Weltkrieg (Stuttgart 1920).

Consult: Helfferich, K., Fort mit Erzberger! (Berlin 1919); Bauer, E., Erzberger (2nd ed. Munich 1925); O. de L., "Matthias Erzberger" in Contemporary Review, vol. exx (1921) 453-61; Baden, Max von, Erinnerungen und Dokumente (Stuttgart 1927), tr. by W. M. Calder and C. W. II. Sutton as The Memoirs of Prince Max of Baden, 2 vols. (London 1928); Price, M. Philips, Germany in Transition (London 1923).

ESCHEAT, in English common law, was the right of a lord to the lands of his tenant who died intestate and without lawful heirs. The failure of heirs might result from the felony of the tenant as well as from the actual absence of kin (except in Kent, where by the custom of gavelkind there was no escheat for felony), but escheat for felony was postponed to the crown's right of wasting the tenement for a year and a day. In Bracton's day escheat might also follow outlawry, and perhaps this is still possible. The right belonged to all lords as well as to the crown and attached to all forms of tenure, its basis being the return of the tenement to the donor or his heirs upon the extinction de facto or de jure of the donee's line. The right is therefore a part of the continuing lordship over the tenant's lands. The confusing attempts of Glanvill and Bracton to describe escheat as the lord "inheriting" from his tenant soon failed as the maxim became established that one cannot be both lord and heir. Since escheat was an incident of tenure it applied only to land and it must be distinguished from the forfeiture of chattels to the crown for felony and the crown's right to chattels as bona vacantia. The only occasion causing forfeiture of lands to the crown was treason. When the estate of a tenant in chief escheated to the crown, his undertenants thereby became tenants in chief and so liable to the more onerous incidents of that position; partial relief in such cases was afforded by Magna Carta, which provided that they were to hold of the crown ut de escaeta instead of ut de corona. The charter also affirmed the right of mesne lords to take escheats from their tenants convicted of felony—a right which the crown had frequently infringed. All through the Middle Ages escheats were a valuable source of revenue to the crown. Nineteenth century legislation extended escheat to incor-

poreal hereditaments and equitable estates; but with the restriction of corruption of blood in 1814 to treason, petty treason and murder and its final abolition in 1870 escheat for felony ceased. As a result of the statute Quia emptores it has become increasingly difficult to prove the existence of a mesne lordship; and so escheat in modern times has almost always been to the crown, but occasional modern examples of escheat to a mesne lord are to be found. Escheat, however, both to the crown and to mesne lords was abolished in 1925, and instead the crown became entitled to take real property as bona vacantia (Administration of Estates Act, 1925, sects. 45 and 46); escheat to the crown as duke of Lancaster and to the prince of Wales as duke of Cornwall is similarly transformed and preserved.

The existence of escheat in America depends on the difficult question whether tenure still exists in certain of the states; this is now merely academic, for legislation and some state constitutions secure the rights of the state to lands as well as chattels, without always making it clear whether the theory is that the state takes them as bona vacantia or as paramount lord. At the present day the word escheat is also used for forfeitures, such as where a corporation holds land contrary to the provisions of its charter as well as when an educational corporation is dissolved. Where disabilities are imposed upon aliens, some states exact the escheat of their land if they fail to become citizens within a set period. Escheat is also loosely applied to the state's rights to unclaimed bank balances, savings accounts and so forth. Escheats go to the county where the property lies in Illinois and to the town in Rhode Island; otherwise to the state. Several states devote the proceeds to their school funds.

On the continent the history has been more complicated. Roman law in its early days allowed the first comer to occupy property for which there was no heir and by lapse of time to become the lawful heir of the decedent. Under Augustus the Lex julia caducaria attributed bona vacantia to the state, and consequently the usucapio pro herede was gradually restricted and practically abolished under Hadrian. In early Germanic custom escheats went to the commune as representing the ancient kindred group. With the advent of the feudal age the strictly feudal escheat of benefices was combined with survivals of the notion of the fiscus, and both were regarded, especially in France,

as royal rights similar to droit d'aubaine, droit de bâtardise and the like. Even feudal escheat was later restricted on these grounds in France to lords having haute justice. Elsewhere rights to receive escheats often came by grant or usurpation to local jurisdictions, corporations and the like. The University of Vienna, for example, had the right to receive escheats from its professors and doctors. In some cases the church had claims—hence the maxim Quod non tollit Christus, tollit fiscus.

At the present day the right of the state (or sometimes political subdivisions of it) is based upon code or statute: the state usually takes the estate subject to the decedent's debts. A variety of different theories have been propounded as a basis of this right. Some hold that the state is actually an heir—the German civil code lays down this theory-but more often the codes are non-committal. Others see in the right an attribute of sovereignty; a third view regards the state as merely exercising a usucapio; still another holds that the decedent's estate discharges his debt toward the great society in case he has no smaller group, as a family, to which he owes duties. The proceeds of escheats generally go into the treasuries of the states concerned but occasionally, as in parts of Germany, they are appropriated to charitable purposes. Although the present tendency to restrict inheritance to close relatives of the decedent would increase the opportunities for escheat, the wide powers of testation have in fact nullified them to a large extent. The present significance of escheat lies in the problem of succession and is connected with the question of inheritance taxation. The theory of the state as heir was recently pushed to its logical extreme in a French proposal (finally defeated) to make the state "a child in every family" so that it would take a share along with the natural heirs.

THEODORE F. T. PLUCKNETT

See: FEUDALISM; LAND TENURE; INHERITANCE.

Consult: Pollock, F., and Maitland, F. W., History of English Law, 2 vols. (2nd ed. Cambridge, Eng. 1911); Holdsworth, W. S., and Vickers, C. W., Law of Succession (Oxford 1899); Williams, J., Law of Real Property (24th ed. by R. A. Eastwood, London 1926); Williams, T. C., "The Abolition of Escheat" in Law Journal, vol. lxix (1930) 369-70, 385-86; Tiffany, H. T., Real Property, 3 vols. (2nd ed. Chicago 1920); Hemmeon, M. de W., Burgage Tenure in Mediaeval England (Cambridge, Mass. 1914); Huebner, R., History of Germanic Private Law (Boston 1917); Schröder, R., Lehrbuch der deutschen Rechtsgeschichte (6th ed. Berlin 1922); Tomaschek, J. A., Das Heim-

fallsrecht (Vienna 1882); Rambourg, E., La déshérence (Paris 1922); Daillant, M., De la déshérence (Chalonsur-Saône 1921); Petiteau, F., L'état héritier (Besançon 1929); Kähler, K., Das Heimfallsrecht . . . nach lübischem Rechte und BGB (Rostock 1902); Windscheid, B., Lehrbuch des Pandektenrechts, 3 vols. (8th ed. Frankfort 1900-01); Pacifici-Mazzoni, E., Istituzioni di diritto civile italiano, 7 vols. (5th ed. Florence 1913-22).

ESMEIN, ADHÉMAR (1848–1913), French jurist. Esmein was one of the greatest, if not the greatest representative of the history of law in France. Like Savigny or Mommsen he knew how to blend the historical with the juridical spirit in due harmony, but if he had had to show any preference he would no doubt have leaned toward the juridical. Primarily Esmein was a jurist whom a current common to many scholars of his generation in France transported toward the past. Hence his method differed considerably from that of the ordinary historian: it was above all reconstructive.

Esmein, the historian of an institution, was prompted to start from the perfected institution and to follow the current of time back in order to determine the origin of its characteristic features. That constrained him to make a choice, to neglect whatever is not juridically important —a method involving a certain danger, that of lapsing into the arbitrary and the subjective, and hence capable of being used only by a mind such as Esmein's, at once very free and very iudicious. As in the case of Taine, whose lectures he had attended and who was not without influence upon his mind, superficial critics ventured to reproach him with being "systematic." Esmein, however, did no violence to the facts in grouping them around a small number of clear ideas which themselves sprang from facts.

This method, which is indeed that of the history of law and which Esmein, a truly encyclopaedic mind, was the first in France to handle with such mastery, he applied to the whole domain of the law. In Roman law he left an open trail in his Mélanges d'histoire, de droit, et de critique, droit romain (Paris 1886); its articles on the law of the family and of property are especially noteworthy. His three manuals, the fruit of his lectures in the Paris faculty, embrace the history of French law considered especially from the standpoint of public law: Cours élémentaire d'histoire du droit français (Paris 1892; 15th ed. by R. Génestal, Paris 1925), Précis élémentaire d'histoire du droit français de 1789 à 1814 (Paris 1908) and Eléments de droit constitutionnel français et comparé (Paris 1896; 7th ed. by

H. Nézard, Paris 1921). In the history of private law he wrote among other things Le mariage en droit canonique (2 vols., Paris 1891; 2nd ed. by R. Génestal, vol. i-, Paris 1929-) and a valuable Étude sur les contrats dans le très ancien droit français (Paris 1883). Finally, in the history of criminal law he left an important Histoire de la procédure criminelle en France (Paris 1882; tr. by John Simpson as A History of Continental Criminal Procedure, Continental Legal History series, vol. v, Boston 1913).

HENRI LÉVY-BRUHL

Consult: Fournier, Paul, "Esmein, historien du droit" in Revue internationale de l'enseignement, vol. lxx (1916) 81-91; Weiss, André, "Notice sur la vie et les travaux de M. A. Esmein" in Institut de France, Académie des Sciences Morales et Politiques, Séances et travaux . . . compte rendu, n.s., vol. lxxxvii (1917) 437-80.

ESPINAS, ALFRED (1844–1922), French sociologist. Espinas studied at the École Normale Supérieure in Paris and became an associate in philosophy in 1871. From 1880 to 1894 he taught with distinction at the University of Bordeaux, where Émile Durkheim was one of his colleagues. Later he was called to the Sorbonne and in 1905 was elected to succeed Gabriel Tarde at the Institut de France.

Espinas' abilities as a scientific observer and theoretician had become evident upon the appearance of his doctoral thesis and most notable work, Des sociétés animales (Paris 1877, 2nd ed. 1878). It reflects the intellectual temper of the period following the defeat of 1871: fear of social utopias; distrust of individualism and of socialism as well, because the latter seeks to establish individual equality; a search for "scientific" laws governing societies. This study of the symbioses, domestic societies and colonies of animals was intended to show that society is not a bundle of abstract relations or a structure of contractual arrangements but an organized body, a living entity subject to such natural laws as those of cooperation, division of labor, delegation of functions and the like. Later in an important article, "Être ou ne pas être, ou du postulat de la sociologie" (in Revue philosophique, vol. li, 1901, p. 449-80), Espinas maintained that his peculiar synthesis of organicism and evolutionism offers the only possible basis for a true science of society. At the same time he pointed out that the family is the link between nature and society. Although far removed from the individualistic interpsychologie of Tarde, he did recognize the psychic element in all social

bonds. Nor did he overlook factors peculiar to human societies; in fact, he was one of the first to insist on the cultural importance of tools as the embodiments of human volitions and he described the influence of technology on all cultural spheres, including philosophic thought.

Other important works: Histoire des doctrines économiques (Paris 1891); Les origines de la technologie (Paris 1897); La philosophie sociale du XVIIIe siècle et la révolution (Paris 1898); Études sur l'Instoire de la philosophie de l'action. Descartes et la morale, 2 vols. (Paris 1925). Consult: Davy, Georges, "L'oeuvre d'Espinas" in Revue philosophique, vol. xcvi (1923) 214-70; Lalande, André, "La vie et l'oeuvre d'Alfred Espinas" in Revue internationale de sociologie, vol. xxxiii (1925) 113-44.

ESPIONAGE is the practise of obtaining information about an actual or potential enemy clandestinely for possible use against that enemy. It was used in the earliest tribal aggressions as a form of advance scouting of a more venturesome and hazardous sort. Espionage played an important part in military strategy and organization in ancient conflict, especially in Asia. In western Europe the age of chivalry brought espionage into temporary disrepute. For the first time in history spies were condemned to death because of their spying rather than because they were suspected enemies capable of bearing arms. The mediaeval church relied upon spies and operated a very efficient secret service for five centuries. According to some authorities the confessional was originally but a part of the vast and subtly coordinated system for gathering intelligence. The spy system of the Mongols during the twelfth and thirteenth centuries excelled all other systems of military espionage before 1870. Accurate information, covering topography, defenses of cities and fortified places, size and equipment of armies and even the morale of civil populations, was gathered weeks and months in advance of attack. Mogul emperors of India, such as Akbar, employed as many as four thousand spies who, disguised as scavengers, entered every house twice a day. The secret police of imperial Rome, the Okhrana of the czars and other bureaus of political police in modern Europe seem ineffectual in comparison with Akbar's espionage system.

The terms secret service and espionage system loosely describe the groups and cohorts of spies operating for kings and conquerors in ancient or mediaeval times, but the systematic organization of spies or military secret agents

is of comparatively recent origin. Frederick the Great has been credited with the innovation of organized espionage, but Maurice de Saxe, in his posthumously published Rêveries ou mémoires sur l'art de la guerre (The Hague 1756; tr. by William Fawcett, London 1757), shows the same original conception of espionage as an integral part of military science which was afterward to distinguish the plans and campaigns of Frederick. Wilhelm Stieber, who served for two decades as Bismarck's chief of espionage and police minister, claimed to have more than thirty thousand spies in the invasion zones of France on August 6, 1870, the day of MacMahon's defeat at Worth. Upon Stieber's death in 1882 the practise of spying began to experience an obviously faulty elaboration at the hands of his European imitators and became bewilderingly intricate. When the World War came in 1914 this complicated mechanism was quickly exposed as a clumsy burden, and both sides soon found the Stieber method out of date. Counterespionage, which is the defensive operation of spying upon spies, emerged with a well developed police technique that blocked and baffled the offensive. As a result months before the end of the war in 1918 neither the agents of the Allies nor of the Germans and Austrians were doing any significant amount of spying.

Spies became counterspies after the peace treaties had been signed and the place of espionage in international relations became very delicately defined. All governments repudiate the individual spy if he is detected but insist on the necessity for espionage; they fear spies and fear even more not to keep some of them constantly employed. No government desires to indicate aggressive inclinations and so it is found much more convenient to discover that large appropriations must still be voted privately and disbursed secretly in order to make certain that neighboring states are not turning bellicose. This urbane defensive may continue indefinitely, with the spy eclipsed by or merging with the military policeman.

The spy in time of war endeavors to win the confidence of the enemy, for he wishes to report not only what he sees but what he has been told in confidence. He seeks information concerning the distribution of troops, new weapons under secret construction, sources of munitions and other supplies, the state of army and civilian morale, losses sustained in recent engagements, naval concentrations and the gen-

eral political situation. New fortifications, weapons or poison gases invite espionage in time of peace; and the diplomatic or consular officials, who have been called accredited spies, are expected to gain information concerning any such new defense or military or naval threat without embarrassing their superiors or home governments. When hostilities break out the diplomats are compelled to operate clandestinely from neutral countries, and the eventual embarrassment of such an undertaking usually transfers espionage duties to special secret service agents, who attempt to direct a network of spies more or less strategically located. A few daring and exceptionally gifted army or navy officers may themselves serve as spies. Such highly prized agents are usually collectors of the information that resident spies are gathering. Amateur spies are often effective, especially if recruited in regions oppressed by an invader, as is illustrated by the work of Belle Boyd in the American Civil War for the Confederacy and of Alice Dubois (Louise de Bettignies), who organized and directed a private and wholly amateur secret service in Belgium and the occupied departments of France during the early months of the World War. Professional civilian spies are generally adventurers of a disreputable sort, and while a few of them active in the World War were found to be able, devoted and loyal, the great majority proved incompetent to a degree that would have been ludicrous if it had not cost many of them their lives. Wholesale professional informing agencies offering for sale to government representatives plans of fortifications, naval bases or mobilization arrangements have been known to flourish briefly. Espionage specialists try to be exacting on the score of reliability. Even an ardent patriot may blunder or be deceived and therefore all reports from spies are checked and rechecked against one another and by the staff in a variety of ways. Doubtless bureaucratic skepticism during the war cost more than one reliable agent a phenomenal success. But if everything reported by spics, informers and hysterical civilians had been recklessly acted upon, massacre and chaos would have resulted.

Actual combatants seem little disturbed by spy scares except in the midst of retreat following a military disaster. But the civilian mania for denouncing suspected spies is dreaded by all espionage and counterespionage branches. The professional spy takes advantage of public hysteria at the outbreak of hostilities, craftily

locating himself while the mad harrying of innocent persons distracts the counterspies who might be seeking him. Several officials were mistaken for spies and shot and killed by zealous non-combatants in Germany during August, 1914.

Every European belligerent was believed to have entered the war with a highly trained espionage system already in good working order. yet not a single major action was strategically influenced by any one of the combatant spy services. Germany in particular, because of Stieber's former excellences, was thought to be ready for a second exhibition of sly mastery and thorough preparation, but many instances of German secret service defeat, neglect or failure might be cited. British counterespionage officers arrested a barber named Ernst who had been the go-between of German agents in Great Britain the very day war was declared, thereby blinding the German staff so far as England was concerned. Similarly at the beginning of the Verdun offensive German counterspying forces wiped out an overextended chain of French spies after detecting a single agent attached to it.

Patriotism or the desire for more rapid promotion is the incentive for many spies having a regular military position. Those who accept dangerous assignments for other than patriotic reasons are prompted usually by love of adventure or by avarice or perhaps by dire need induced by wartime economic changes. The remuneration of spies in all but exceptional instances is in no way adequate to the risks they incur.

Within a limited range women and children are effective espionage agents, but the much dramatized sex element in espionage has been exaggerated. Elderly generals and others possessing secrets worth gaining may be susceptible enough, but almost without exception the women sent against them have proved hopelessly unreliable. A number of women spies in the World War changed sides, sold out to the enemy, turned double spy, professing to serve both sides, or abandoned the enterprise for a trivial reason.

Spies obtain information easily; difficulty and grave danger set in when they attempt to communicate what they have learned. The technique of counterespionage is a police technique borrowed from secret service in other fields, from political espionage and crime investigation. Censorship scrutinizes the post and tele-

graph, seaports are guarded and false passports, necessary to the mobile spy, are watched for. Camps, cantonments and munitions plants are guarded and control areas are established at base ports, along vital communication lines and within a certain distance of the battle line. Counterspying in time of peace may be largely a fortuitous matter, but in time of war the counterspies manage a hundred forms of vigilance and surveillance.

Penalties for spying are relatively mild in peace time except in those countries of central Europe where international tension never abates. In war the spy may suffer the death penalty or a long term of harsh imprisonment, the latter often being commuted when peace returns. Spies are executed not because espionage is an outlaw undertaking but in order to discourage spying on the part of able officers or operatives whose lives the enemy government will be reluctant to imperil. Spies when captured are subject to an abrupt court martial, yet in both England and the United States many espionage cases were prosecuted in the civil courts. With a single exception there were no executions in the United States.

Most regulations to destroy espionage work hardship on persons having no connection with military secret service. In all countries during the World War the internment of enemy aliens, a measure intended to bag potential spies, did the greatest amount of harm to frail, elderly or invalid non-combatants and restricted few if any spies. The espionage antidotes and laws restricting aliens have been a club in the hands of irresponsible officials everywhere. Alarmed and excited patriotic groups joined political police bureaus in the oppression of radicals and other minorities, using wartime legislation long after the war and subsequent demobilization had terminated. In all European countries counterespionage has pursued suspected spies in the same intense manner as during the World War. Minorities stranded by the Versailles and other treaties, such as the Jugoslavs left subject to Italy, have been consistently oppressed by secret police agencies (see Politi-CAL POLICE) using the convenient pretext of espionage. Radical organizations in the United States, as elsewhere, have been dealt with much more thoroughly than were any agents of imperial Germany during the war. It is worthy of notice that the Espionage Act of 1917 is still in force in the United States.

Espionage, which has the ironic effect of

linking governments to the methods and practises of the criminal underworld, is not exclusively a government enterprise. Industrial espionage and commercial espionage also exist. Employers who use industrial espionage hire private detective agencies, which place spies in industrial plants to keep watch upon the men, penetrate unions to disrupt them and prevent unionization of shops, to get evidence leading to the discharge of agitators and malcontents and to break strikes. Commercial espionage, a manifestation of unfair competition, is used by business concerns in order to obtain the patents and markets of competitors. It is not new but was practised centuries ago when rival guilds sought to carry off each other's secret processes. Diplomatic and consular officials often engage in commercial as well as military espionage in times of peace. War offers vast opportunities for commercial espionage. With the assistance of the alien property custodian of the United States during the World War the patents of German subjects were impounded, secret chemical formulae revealed and customers' lists freely examined. The British have claimed that their spies had obtained all the formulae of German dyes by 1915, even before the new poison gases for cloud attacks and shells were being reported by other espionage agents assigned to the protection of the military forces.

RICHARD WILMER ROWAN

See: SECRET SERVICE; POLITICAL POLICE; DETECTIVE AGENCIES, PRIVATE; MILITARY ORGANIZATION; WARFARE.

Consult: Lanoir, Paul and Suzanne, Espions, espionnage, 2 vols. (Paris 1916-17); Denkwürdigkeiten des geheimen Regierungsrathes Dr. Stieber: Aus seinen hinterlassenen Papieren, ed. by Leopold Auerbach (Berlin 1883); Rowan, R. W., Spy and Counter-Spy: the Development of Modern Espionage (New York 1928); Mennevée, Roger, L'espionnage international en temps de paix, 2 vols. (Paris 1929); Tuohy, F., The Secret Corps (London 1923); Aston, G. G., Secret Service (London 1930); Howard, S. C., and Dunn, R., The Labor Spy (New York 1924); Kohlrausch, E., "Industriespionage" in Zeitschrift für die gesamte Strafrechtswissenschaft, vol. i (1930) 30-72.

ESQUIROL, JEAN-ÉTIENNE DOMI-NIQUE (1772-1840), French psychiatrist and public health administrator. After studying medicine at Toulouse Esquirol became a public health officer in the army, serving at Narbonne. He finished his studies at Montpellier, the chief intellectual center of the south, and in the year VII of the republic went to Paris in search of a

livelihood. His meeting with Pinel at the Salpêtrière determined his career. He became an assistant at the hospital, publishing as his inaugural thesis Des passions considérées comme causes, symptômes et moyens curatifs de l'aliénation mentale (Paris 1805). In 1811 he became first assistant to Pinel and finally was entrusted with complete control of the entire institution—the large public almshouse hospital with its psychopathic wards. Here, like Pinel, he did formative work toward establishing more humane and systematic methods of treating psychopathic patients. After inaugurating the first public teaching clinics on mental disorders in 1817 he left the Salpêtrière in 1826 to become chief physician at the royal sanitarium at Charenton, then the outstanding semipublic mental institution in France. He was an active organizer and administrator; largely through his efforts Pinel's reforms were introduced into the provinces. He took great interest in formulating legal measures for the care of the mentally abnormal, notably the first uniform legislation of 1838.

Esquirol's ideas concerning mental disorders followed closely those of his master, Pinel, but displayed a more direct psychological interest. The emotions were for him the most important of the active causes of the psychoses. Fear, worry, unhappy family life, religious controversy, conflict with the folkways, reversal of fortune—all these were of primary significance. Heredity played a predisposing role. At a time when psychiatry was just recovering from an orgy of classification and when crude analysis presented hundreds of forms of mental disease, Esquirol's classification was on the side of simplicity. All of the psychoses were grouped by him into five classes—lypemania (melancholia with delusions), mania, monomania, dementia, idiocy. His chief contribution here was the analysis of monomania, now abandoned in psychiatry but still retained in law, as delusional thinking centering about a supposedly single idea or isolated group of ideas. His studies on hallucinations, which he distinguished clearly from illusions, are still classic.

SMITH ELY JELLIFFE

Important works: Aliénation mentale (Paris 1832), tr. by William Liddell as Observations on the Illusions of the Insane (London 1833); Des maladies mentales considérées sous les rapports médical, hygiénique et médicolegal, 2 vols. (Paris 1838), tr. by E. K. Hunt, 1 vol. (Philadelphia 1845).

Consult: Semelaigne, René, Les pionniers de la psychiatrie française avant et après Pinel (Paris 1930), and Les grands aliénistes français (Paris 1894) p. 119-212.

ESTATES GENERAL. The French representative bodies which came to be known as états généraux trace back through various intermediate stages to the plenary assemblies of early Capetian days. In times of emergency the king, prompted either by a genuine desire for advice or, as was more common, by the hope of ingratiating himself with his subjects by pretending to take them into his counsels, summoned as he saw fit representatives to deliberate with him on problems of state. At first such invitations were limited in the main to the nobility and the clergy; but beginning with the twelfth century and to a much greater degree in the thirteenth this royal favor was extended to the other classes as well, which at about the same period in England and in Spain were beginning to make their influence felt in parliamentary deliberations.

The size and general procedure of the early French assemblies long remained unfixed, varying according to the wishes of the king. The three orders, or, as they were soon called, estates, tended, however, to become separate entities, each of which might be summoned independently of the others. When the emergency was primarily financial, as was the case several times under Louis IX, the invitation might be issued to the third estate alone. But when broader national or church issues were involved, as during the periods immediately preceding the crusade of Egypt in 1248 and that of Aragon in 1284, the king, as an overture to public opinion, usually summoned the three estates together.

Under Philip IV the assembly, which hitherto had been merely a device for consultation in abnormal circumstances, began to acquire the status of a formal institution. During his protracted struggle with Pope Boniface VIII the king was unusually solicitous of the opinions of his subjects. On a number of occasions, beginning with the impressive assembly at Notre Dame in 1302 and recurring at unprecedentedly short intervals, Philip had recourse to consultations with the representatives of the three orders "upon certain affairs of the highest concern to king and realm." As a general rule, of course, whatever the type of problem, the role of the assemblies consisted almost entirely in sanctioning some royal act already executed. But even this ex post facto concurrence, however much of a formality and however restricted, was tending to become incorporated in the traditions of royal administrations.

Within a few years an even more important transformation began to take place in the character of the assembly. Hitherto the personnel had been determined from above—by the king or usually by one of the royal officials in the bailliages, or sénéchaussées, which constituted the administrative units of mediaeval France. In 1317, however, Philip v by an edict authorizing the principal cities throughout the kingdom to select their own representatives to the forthcoming assembly introduced the elective principle, which was to become more and more the accepted method of determining the membership of the Estates General. This new element—the concept, however embryonic, of a representative system founded upon actual constituents—seems to have resulted very shortly in a change of attitude on the part of the king as well as of the representatives themselves. The latter seemed disposed, and sometimes were even prompted in that direction by the king, to assume the new and startlingly aggressive role of making articulate the wishes of the nation. The king, with an eye on the depleted treasury, listened patiently and was at times even moved to accede to these wishes.

This tendency toward active participation in government was greatly accelerated by the rapid decline in prestige of the French monarchy during the Hundred Years' War. From 1356 to 1360 King John was a prisoner, while the political and military situation was becoming increasingly grave. Under the resolute leadership of Etienne Marcel the Estates General acquired for a brief interlude prerogatives which entirely transformed its character. Taxes were to be levied only with the consent of the representatives of the people; disbursements were subject to their supervision; assemblies were to be held annually; a thoroughgoing reform of the monarchy was demanded. The Estates General of 1358, attended by only the clergy and the third estate, was outspoken in its revolutionary threats, but with the death of Marcel the movement quickly collapsed.

The firm hand of Charles v while tending to reduce the assembly to its more normal role was unsuccessful in exterminating the spirit which had been aroused and which was to persist well into the next century. Throughout this period the estates were frequently although irregularly summoned to vote emergency subsidies. Although the sovereign power continued to reside with the king, the representative body never ceased even during extended periods of

inactivity to serve as a potential threat, always on the alert to detect a weakening of the central authority, whether due to political or financial factors. On occasion, as in 1413, the members of the Estates General, indulging in unsparing criticism of governmental policy, were strong enough, thanks to the king's need of money, to secure temporarily at least removal of the higher administrative officers of the crown as well as the enactment of an ordinance (Ordonnance cabochienne) prescribing reforms.

But whatever potential legislative ability the members of the various Estates General may have harbored was more than counteracted by their ineptitude for cooperation in a sustained course of action. Even the enterprising third estate tended to dissipate its energies in querulous intransigency and volatile formulation of grievances. More and more inclined to chafe at the personal inconveniences involved in attending a protracted central assembly, the estates were by no means ill disposed toward the device of one Estates General for the northern and another for the southern section of France and observed with similar equanimity the inauguration of a practise whereby the representatives of each province met separately in an "estate provincial."

The strong centralized authoritarianism of Charles VII and of Louis XI, who seems to have convened an Estates General only once, greatly curtailed the activities of the representative institution. During the minority of Charles VIII the none too secure regents resorted to the now time honored device for conciliating public opinion. But the nearly three hundred representatives who in 1484 assembled in Tours and engaged in two months' vain discussion as to the reform of the realm provided but a brief interlude of activity For eight years later Charles assumed active direction of affairs and thereafter neither he nor his successor, Louis XII, was dependent for his authority or his finances upon a representative assembly, and the very widely separated convocations were but formalities. As a substitute for the Estates General, of which he was suspicious, Francis 1 relied upon assemblies of notables composed of the most tractable representatives of the nobility, the clergy and the courts, supplemented by a very carefully chosen group of similarly disposed commoners from the bonnes villes.

But during the critical years of the religious wars the rulers, under pressure of financial distress and widespread religious schism, were

again forced to resort to the older device. In spite of interminable discussions little was accomplished. The natural antagonism of interests between an impoverished ruler and an importunate assembly was heightened by bitter religious animosity. In 1589 the presumptuous insistence of the deputies that all decisions concurred in by the three estates should have the force of law discouraged further deliberation. The Estates General of 1593, at which a mere handful of deputies engaged in futile discussion concerning the best means of effecting a religious peace, was generally regarded as symptomatic of an obsolescent institution, while the discordant bickerings between the three estates in the confusion following the assassination of Henry IV was almost universally conceded as final proof of their impotence.

Yet the tradition persisted that the Estates General might in times of crisis still be summoned as a last resort. During the minority of Louis XIV when the country was disturbed by the activities of the Fronde a move was launched in 1649 to summon the three orders to an assembly at Rouen. This was unsuccessful, however, and during the long period of absolutism which was inaugurated shortly afterward there was no disposition on the part of the king to revive an apparently obsolete institution. But with the death of Louis XIV the idea of using these representative assemblies to counteract royal despotism was resurrected. In the confused period of the regency this revived interest centered in the Club de l'Entresol; the count of Boulainvilliers addressed a memorial to the regent urging the immediate convocation of an assembly and wrote his famous Lettres historiques sur les parlements ou états généraux. Although the actual execution of these proposals was forestalled by the attitude of the tribunals known as parlements—which vaunted themselves as the true representatives of the nation since the function of the Estates General was limited to "very humble supplication"political theorists continued to point out the usefulness of the Estates General as a device for guarding against arbitrary taxation.

The coup d'état of Maupeou in 1771 suddenly removed these discussions from the realm of theory. The historically grounded defense of the Estates General by Marie de Lézardière, the abbé Mably and many others focused attention on a revival of the institution, and the government of Louis xvi came soon to regard such a course as inevitable. In 1786, when the

financial situation and become desperate, the minister of finance, Calonne, attempted to continue in power by recourse to an assembly of notables. But the notables themselves took the position that under the circumstances they were no adequate substitute for the larger body; and the courts of justice, taking the same attitude, proclaimed that further taxation was impossible without the concurrence of the representatives of the people. Public opinion was becoming increasingly articulate and insistent in its demands for a convocation of the Estates General, and finally on July 5, 1788, an order from the royal council officially acceded to its request. To the popular agitation for a representative body had been joined a demand for an apportionment of representation which would double the personnel of the third estate, making it equal in numbers to the clergy and nobility combined. Although such a distribution was vigorously opposed by the two less democratic orders and by the parlements, the intensity of public opinion, which was gradually becoming organized, was powerful enough to force the innovation upon the government.

In the elections held according to bailliages, the deputies of the clergy and the nobility were chosen by direct, universal suffrage and those of the third estate with only very minor suffrage restrictions. Preliminary local assemblies of each of the three orders were held in order to prepare cahiers de doléances, in which were summarized the grievances and demands of the electors in the bailliage. Although the significance of these cahiers is vitiated somewhat by the fact that the government had prepared stereotyped models to be circulated among the third estate assemblies in the towns and especially in the local rural units—which, owing to the original manipulation by the government of the franchise requirements were to send a disproportionate number of deputies to the central assembly—they constitute, taken as a whole, a fairly accurate reflection of popular opinion throughout France. The elections were held without governmental interference, and the twelve hundred elected deputies arriving in Versailles, each with his *cahier*, were to an unprecedented degree national representatives, qualified and determined to consider questions of national welfare. On the initial question of procedure the deputies of the third estate, who soon proved themselves the dynamic force in the assembly, vigorously opposed the assumption of clergy and nobility that the three orders

were to deliberate in separate sessions. On June 10 under the leadership of Sieyès-a deputy already known by virtue of his provocative brochure, Qu'est-ce-que le tiers état?—the third estate formally invited the other two orders to participate in a joint session and resolved that in case of refusal the deliberations of the single body should be considered as binding. A week later, supplemented by a few deputies of the clergy, the third estate proclaimed itself the "national assembly" and in the face of continued official interference dramatically pledged itself "never to disband . . . until the constitution of the kingdom has been firmly established on a solid foundation." When on June 23 a royal declaration nullified this decision and decreed separate sessions of the orders, the deputies of the third estate, supported by 150 of the more democratic bishops and curates who had joined them the previous day, openly defied the representative of the king and voted itself a sovereign assembly, which could be disbanded only on its own initiative. The defiance was effective. On the following day practically the entire remainder of the clergy met with the third estate, and the next day many of the nobles capitulated. Two days later on the twenty-seventh the king countermanded his earlier decree and recommended that the three orders deliberate as a single body. The National Assembly had become a reality.

LOUIS HALPHEN

See: LEGISLATIVE ASSEMBLIES, section on France; Monarchy; French Revolution.

Consult: Picot, Georges, Histoire des états généraux, 5 vols. (2nd ed. Paris 1888), which stops at the 17th century, and Documents relatifs aux états généraux et assemblées réunis sous Philippe le Bel (Paris 1901); Thomas, Antoine, "Les états généraux sous Charles VII" in Revue historique, vol. xl (1889) 55-88; Dognon, P., Les institutions politiques et administratives du pays de Languedoc du XIIIe siècle aux guerres de religion (Toulouse 1895), and Quo modo tres status linguae occitanae, ineunte XV saeculo, inter se convenire assueverint (Toulouse 1896); Masselin, Jean, Journal des états généraux tenus à Tours en 1484, ed. by A. Bernier (Paris 1836); Charleville, E., Les états généraux de 1576. Le fonctionnement d'une tenue d'états (Paris 1901); Procès verbaux des états généraux de 1503, ed. by A. Bernard (Paris 1842); Brette, A., Documents relatifs à la convocation des états généraux de 1789, 3 vols. (Paris 1894-1904).

ESTOURNELLES DE CONSTANT, BAR-ON D', PAUL HENRI BENJAMIN (1852-1924), French politician and diplomatist. He was for a while in the colonial service in Algiers, where he put forward proposals for softening the technique of colonial administration in order to perpetuate European conquest of backward peoples. After serving in diplomatic posts and rising to be minister in London he entered politics, was elected deputy for the Sarthe in 1895 and served as senator for several terms.

D'Estournelles de Constant attempted to devise institutions to help maintain international peace. He objected to being called a pacifist, reserving the right to fight when he considered fighting necessary or justified. He took no part in the work of the pre-war peace societies and attached little importance to the routine of peace congresses. He favored exceptional manifestations as more likely to produce a decisive influence at a given critical moment. His successful visit to the United States in 1902 to induce President Roosevelt to bring a dispute with Mexico before the arbitral court at The Hague (until that time unused) was such a manifestation. He was a delegate to the peace conferences at The Hague in 1800 and 1907 and was awarded the Nobel Peace Prize in 1909. Between 1904 and 1909 he organized a series of interparliamentary visits among the parliaments of Great Britain, France, the Scandinavian countries and Russia. He introduced into Europe from the United States the organization known as International Conciliation. In 1911 he was made the first director of the European Center of the Carnegie Endowment for International Peace. At the outbreak of the war he entered actively into patriotic work. Despite minor variations from the usual his attitude and activities may in general be characterized as typically those of a liberal reformer in international affairs.

TH. RUYSSEN

Consult: Carnegie Endowment for International Peace, Division of Intercourse and Education, À la mémoire de . . . d'Estournelles de Constant, 1852-1924 (Paris 1924), containing bibliography.

ETHICAL CULTURE MOVEMENT. The term ethical movement is now generally restricted to those organizations which aim to promote appreciation and understanding of the sense of duty, of moral law and of infinite human worth. Positivism, utilitarianism and idealism were ethical movements in a sense and during the latter part of the nineteenth century a distinguished group of philosophers in England formed the London and Cambridge ethical societies, which conducted scholarly lectures and promoted philanthropic reforms. The earliest as well as the most significant, however

of all such movements originated in the Society for Ethical Culture which was founded in New York in 1876 by Felix Adler. This society was composed of both Jews and Gentiles who wished to consecrate themselves and their children to a religious moral life, both in theory and in practise, independent of all creedal and theological dogmatism.

Felix Adler was the son of a rabbi and was reared in Reform Judaism. His studies in Kantian philosophy and historical criticism which led him to abandon the limitations of Jewish theology served, however, to reenforce his religious faith in moral law. To this faith he added a keen interest in social reform motivated by his concern for individuality and the intrinsic holiness of man. He was also influenced by his studies in Christian ethics and by the writings of Emerson.

The intellectual life of the movement has been deeply influenced by the ethical philosophy of Adler, but no single philosophy, creed or doctrine is prescribed. Members may or may not have other religious beliefs and affiliations. The underlying idea of the movement is that morality can and should be maintained and cultivated in its own terms, free from external sanctions or incidental motives. Therefore the aim of ethical culture is "to assert the supreme importance of the ethical factor in all the relations of life—personal, social, national, and international, apart from any theological or metaphysical considerations" (Society for Ethical Culture of New York, *Directory*, New York 1920, p. 18).

The unifying force in the movement is the consecration and participation of the members in practical endeavors to solve such moral problems as are involved in family and sex relations, in the relations between vocations and classes, in the elevation of labor and alleviation of poverty, in "the moral poverty of the . . . wellto-do classes" and above all in education. These problems are discussed from the ethical point of view, but the emphasis is placed less on the theoretical discussions than on the application of ethical ideals to specific needs. Although the adherent of ethical culture realizes that moral reform implies economic and political reform, his chief concern is with the moral aspect, the aim being to clarify and apply those ethical principles which may serve to guide the necessary material reorganization of society.

The societies also carry on distinctively religious activities. They hold Sunday services at which addresses are delivered, and the leaders

officiate at marriages and funerals. On the whole, the societies have developed few ceremonial forms, although in England Stanton Coit has adapted older liturgical materials to the services in his Ethical Church.

Chief among the philanthropic activities of the ethical culture movement are its educational institutions. It took an early lead in promoting free kindergartens, child study associations and adult education. Its efforts to enhance the meaning of vocations by emphasizing the moral ideas and issues embodied in them have been fruitful both as educational programs and as principles for group organization. The Ethical Culture School in New York City, which includes a high school and a kindergarten, is one of the most distinguished and educationally successful schools in the country.

The ethical culture societies have initiated or actively promoted such movements as tenement house reform, abolition of child labor, visiting nurse associations, settlement houses (for example, the Hudson Guild and Madison House in New York) and legal aid bureaus. In Germany they have promoted public libraries, recreation facilities and numerous charitable enterprises. The founding of the Secular Education League in England in 1907, the Universal Race Congress in 1911 and the International Congresses on Moral Education also deserve mention. The movement originally sponsored the publication of the Ethical Record (1888-90), which was succeeded by the International Journal of Ethics (1890).

Affiliated societies have been organized by such leaders as William M. Salter in Chicago in 1883, by S. Burns Weston in Philadelphia in 1885, by Walter L. Sheldon in St. Louis in 1886 and by Leslie W. Sprague in Brooklyn in 1906. In England, beginning in 1886, societies were organized by Stanton Coit, Percival Chubb, Horace J. Bridges, George E. O'Dell, Harry Snell and others. The movement spread to Germany chiefly through the influence of the sociologist Georg von Gizycki and later to Austria, Switzerland, France, Italy and even Japan. Among the other influential leaders might be added the names of John L. Elliott, Henry J. Golding, Alfred W. Martin, David S. Muzzey, Henry Neumann and in Europe Wilhelm Boerner and Rudolph Penzig. In 1887 the American societies were federated into the American Ethical Union, and in 1896 an International Union of Ethical Societies was organized. The chief strength and organic unity of the

movement is still to be found in the American societies. In 1930 the six American societies had 3500 members, about half of whom were in New York and Brooklyn.

HERBERT W. SCHNEIDER

See: RATIONALISM; SECULARISM; MORALS; ETHICS. Consult: Adler, Felix, Creed and Deed (New York 1877), The Religion of Duty (New York 1905), and An Ethical Philosophy of Life (New York 1918); Aspects of Ethical Religion, ed. by H. J. Bridges (New York 1926); The Fiftieth Anniversary of the Ethical Movement, 1876–1926 (New York 1926); Neumann, Henry, Education for Moral Growth (New York 1923); Salter, W. M., Ethical Religion (2nd ed. Boston 1890); Sheldon, W. L., An Ethical Movement (New York 1896).

ETHICS. Although morality and ethics are both related to custom, there is a fairly well observed division of significance between them. Conduct social in fact may be described as moral when it is maintained or even observed as a fact. But as conduct rises from fact to ideal it becomes ethical. In a word, ethics is the organization or criticism of conduct in terms of notions like good, right or welfare. The ethical differentia is the construction or reconstruction of conduct in the light of those rational elements which pass for ideals.

Ethics must be distinguished, on the other side, from theology. Once the element of the ideal is invoked, conduct may lose its tang and concreteness by being seen too much under the aspect of eternity. Conduct affiliated too intimately with ideals grows mystical and loses its social significance. That is, conduct may cease to be ethical from overidealization as well as from underidealization. Indeed, ethics may best be distinguished from theology by regarding its commerce with ideals as a piecemeal give and take rather than as initial surrender and subsequent devotion. Ethics is the secular and critical manner of taking account of the rationalizing process in conduct. Its temper is nonmystical, and its orientation is social rather than theological. Not that religious influence has not tried to furnish a theological foundation for ethics or, more frequently still, tried to provide sanctions to budge conduct toward moral perfection. Rather, in spite of efforts and claims, the history of this relation since Socrates has been the story of the gradual moralization not only of religious machinery but of the gods themselves. Ingersoll's waggish remark, "An honest god is the noblest work of man," has now been documented into seriousness.

Throughout western speculation ethics has

bulked large in the philosophical enterprise as a whole. Since Socrates indicated mankind as the proper concern of "lovers of wisdom," speculation as a guide to conduct has been prominent. While Socrates was unproudly aware of the centrality for philosophy of the ethical impulse, the growing prestige of disinterested thought has not infrequently obscured from his successors the role played in their thinking by ethical motives. Important as ethics has been in the systems of most great philosophers, it is fair to say that it is critical retrospect that has usually enlarged the ethical segment of such systems. While Plato consciously took the good as the kingly center of his system of ideas he seems not to have conceived it (although his critics have been continually quick to do so) as a rationalized projection of what he found satisfactory and could recommend in the social life of Athens, when that life was perfected by excellencies borrowed from Sparta. Even the Platonic metaphysic is moral: the idea of the good is the source not only, as the Republic has it, of light but of being also. Aristotle thought to reunite the ideal and the real into a functional unity. But since by nature man is a social animal this unification never strays far from moral paths. Since, however, morality as the factually social is blind, ethics is centrally established in the form of the taste of enlightened and cultured persons. The good is the goal, and it is what cultural connoisseurs declare it to be. If in the metaphysical end God gets more detached from the stirring life of men than was Plato's form of the good, God still preoccupies Himself with what from an inside view is ethical: namely, with His own, let it be hoped also man's, good. Indeed, the very metaphysical detachment of God seems to spring from the fact that nothing save His own intellectual activity is worthy of divine preoccupation.

The historical eventuation of classical Greek philosophy into the frankly practical Weltanschauung of stoicism and Epicurcanism is itself an oblique acknowledgment of the inner dominance of the ethical aspect. As long as the social texture of the Grecian world held together, the principles of conduct were sufficiently habitual to be intellectualized as aesthetic independents without disturbing the moral course of life. When morality is only habit, ethics easily grows aesthetic. But once the stream of conduct itself was disturbed and men were loosed from ancient familial, political and vocational moorings

by the shifting of trade or the movement of armies, the ideal element had to be consciously related again to conduct to prevent such unmoored elements from drifting. Epicureanism and stoicism provided a way of life for those who but for them would have had no cues for conduct other than merely the hated cues of alien constraint.

When this vast unsettlement in the Mediterranean basin reached peoples seasoned by long adversity into chronic habits of unrestrained idealism, Christianity was born. The Christian doctrine differed from Greek philosophy chiefly in its unshakable affirmation that goodness and power are united into one--a beatific unification of which the poor were to be the chief beneficiaries. Such a faith represents the final limit of the idealizing process. It is easy, indeed inevitable, for the human animal to confront the "worse-in-fact" with the "better-in-prospect," and as long as there is a discernible continuity of means between the two we have normally the ethical field- conduct related to if not determined by ideals. But when the worse becomes the worst and the better the best, when the gap between the ideal and the real yawns into a gulf so impassable that natural means must be supplanted by divine cataclysm, then supernatural religion displaces ethics as aguide to life. But supernatural Christianity may best be conceived as merely the unrestraint of a process which under control we have described as the ethical impulse. What was added to Greek idealism to make Christianity possible was a certain personal warmth and goodness guaranteed rather than ignored by power: the ethical differentia enshrined supernaturally and got at mystically. Christian philosophy has ever sought progressively more rational methods of making available and effective the assertion of such an ethical faith.

Save for idealism, the one system that has proudly carried on the classical tradition, modern philosophy beginning with Descartes has not been paramountly ethical. The idealistic tradition has claimed more than its share of great names in modern times—Leibnitz, Kant, Fichte, Hegel, Green, Bosanquet, Bradley, Royce, Croce—and all of them have been ethically-religiously motivated. But the other movement—represented most prominently by English empiricism—arising with science and traveling with it pari passu has concerned itself in the first instance with the problem of knowledge. When John Locke was importuned by

friends to write an ethics that would match the acumen of his famous essay he replied after many sympathetic postponements that as long as the golden rule was available it was not of primary importance to write a speculative treatise upon ethics. This early modern tendency of the empirical philosophy to regard ethics as purely a practical matter and to conceive practise as wholesomely determined by already available principles, largely religious, marked the predilection of most English philosophy until the rise of the utilitarian movement.

Utilitarianism was only speciously an exception to this attitude; for while it was paramountly ethical in emphasis it did not seek speculatively to constitute the principles in terms of which the moral life was to be maintained. Rather it took natural goods—utility, pleasure—as being the final goods and concerned itself with the engineering problem of how to distribute them more justly. In this it was but typical of the tendency of the social sciences in imitation of the natural sciences to break away from the earlier ethico-religious outlook. Giving primary attention thus to means rather than to ends utilitarianism condemned ethics to the service of what may well have been not so much critical standards as outmoded values.

The most persistent question to which political philosophy has attempted an answer is that of the basis of authority. The rise of the state through contract or otherwise, the nature and transfer of sovereignty, the boundaries of fruitful control, the spread of political participation —these and other such questions in the history of political theory are but diverse ways of stating the essentially ethical motif that lies at the heart of politics, the problem, as T. H. Green has it, of "the principles of political obligation." As this ground has, in L. T. Hobhouse's terms, shifted from "kinship" through external "authority" to the broadened internal base of, "citizenship," the ethical element of politics has evolved from customary morality to a loyalty rationally conceived and freely chosen. The democratic doctrines of government by consent, of freedom of contract and of speech and of a common good that in nature is universal mark the unabashed florescence of ethics in politics.

In no conflict, however bitterly contested, has ethical conviction ever been the monopoly of either side. Indeed, the more severe the conflict of interest, the more desperate the need

the more certain are the issues at stake, whether economic or otherwise, to be conceived as ethical. Since ethics operates with opposed notions of good and bad, right and wrong, it is in the nature of ethical judgments to condemn the antithesis of what they approve. But to condemn does not forthwith abolish: one's enemy remains in spite of disapproval, unless he can be physically killed off; and the forces of opposition to ethical judgments were early discovered to reach further than such summary physical power. Nature herself took sides, and spirits teemed to succor or to subvert. The appeal to magical and then to religious sanctions for moral support was a way of maintaining morale in the absence of physical potency. If the gods—with their postulated reserves of power-stood with one, one's disapprovals would be at the last effectively approved. Historically, however, there has been strategy as well as power in the religious sanctioning of moral ideals. We have seen already how the idealizing process tends to match insuperable difficulties with affirmational excess. The discrepancy between sexual desire and sexual satisfaction, for example, begot in the Middle Ages an ideal of purity that stopped not short of the demand for complete continence. But not only was God's fairest creature everywhere an enemy of this ideal, as the church fathers pathetically acknowledged, but one's worst enemies here are of his own household. Then must the religious sanction for this moral ideal be tempered with mercy. Apply the rigorous ideal to only a few, being merciful when they fall; and grant to the many the rewards of virtue for a life admittedly second best. Religious institutions have not only in this fashion sanctioned moral ideals which otherwise would have been suspended impotently in mid-air but have also mediated with mercy the rigor of ideal demands. God knows man's weakness as well as approves his strength, and the failure of natural virtue will not be allowed to thwart supernatural grace. How far this humane mediation reaches may be seen by contrasting Christian ethics with Kantian ethics. Although Kant built upon Christian presuppositions he sought a "religion within the boundary of pure reason." The morality that emerged from such confinement —obedience to universal law purely for the sake of the law—exacted a perfection that Kant himself admitted could perhaps not be found. It exacted, in short, the impossible with no leniency to render the impossible tolerable. The

casuistry of scholastic ethics, on the other side, only dimly obscured with subtle proliferations such divine mercy as rendered perfectionistic ethics possible by making it tolerable.

The truth, however, that ideals outrun physical facts—outrun them if uncontrolled to such marvelous excess as demands both religious sanctions and the divine softening of themdoes not mean that ideals do not rationalize physical forces, i.e. both arise from and justify them. Religion has always taken sides on what it regarded as crucial issues, giving promise, moreover, of substantial succor to those who would stand fast with the angels. Through sufficient disillusion with such promises either in themselves or in the temporal latitude they allow for fulfilment men may, however, come to limit the idealizing process in the name of practicability. With such limitation "utopian" ethics gives way to "scientific" ethics. This shift really became sincere in western culture only with the work of Karl Marx. As Marx saw it, the early democratic ethic was utopian. It did not even systematically renounce divine aid; in more minds than merely Rousseau's and Godwin's it looked forward hazily and happily to an impossible perfectibility of human nature. Besides, the democratic ethic did not clearly discern the natural history of ideals themselves and so did not see that the conflict of moral ideals is, in a world of limited goods and unlimited wants, little but the struggle for concrete advantage deflected to a realm of temporarily postponed response. The positive illusion that arises from this latter impercipience is clearly manifest in democratic writing-not more in the ad hoc appeal of the American Declaration of Independence than in the economic doctrine of Adam Smith-in the form of the immature conviction that if all men were but equally honest every issue could be harmoniously adjusted. Great credit therefore belongs to Karl Marx not only for seeing but equally for saying what a natural history of ideals implies.

It generally passes for ethical advance to have subordinated the conceptions of right and duty to the notion of good. It is largely taken for a deepening of insight to see further that the idea of good is integrally tied up with the fact of goods. But it is less frequently seen that right and duty imply that goodness is dynamic and that, being so, it stands in need of a creative technology. It was the most noticeable social function of a "duty" ethics whether Christian

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or Kantian to facilitate the maintenance of the economic and institutional status quo. It was the most noticeable function of the democratic ethic, emphasizing good as meaning the right to have and to hold goods, to win through revolution, if impossible through discussion, the goods in question for the status quo. But just as early science fitted its new instruments and transforming functions into old and static conceptions of the old world, so the scientific ethic adapted itself to a fixed notion of good. The utilitarian ethic-taken as the most acceptable formulation of the modern democratic movement-saw basically no distinction between natural and moral good; they both alike were pleasure. And since pleasure is afforded man by nature, Bentham, for instance, saw no way to enforce a moral distribution of this natural good-"each one to count for one and no one for more than one"-save an appeal to sanctions that were almost as external in their operation as had been those of authoritarian ethics. And although Mill believed that a difference of quality in pleasure marks the line between natural and moral good, both qualities were, for want of any clear formulation he had of moral methodology, equally given to man. Moreover, the self-conscious scientific ethic of Marx is bellicose in its assumption that moral good is identical with natural good—all the more so because goods from which "good" borrows its meaning are defined by the materialistic interpretation of history. Although value itself not only derives from labor but is created by labor, goodness is pitched up automatically in the evolutionary process, to be distributed violently through revolutionary means rather than by being itself created through cooperative participation of human intelligence.

The basic point in common between authoritarian and democratic ethics is thus the assumption that moral goodness is identical with natural goodness and that natural goodness is limited so that distribution of it can as a matter of fact (as democracy in crucial instances) or as a matter of right (as Marxianism in general and communism in particular) come about only through violence. Now violence is on any showing not easily identified as itself a case of goodness. And so the pass to which contemporary ethics comes is that of seeing morality arise (although it is generally hoped that it will function independently of such genesis) only as a specific by-product of wholesale immorality. Can a classless society—assuming it to be the

desideratum—arise from the dead ashes of one class burned at the stake by another?

But to revert to the initial characterization of ethics as rationalism bent in the direction of conduct, it may be said that the renunciation of the traditional meaning of reasonable, which identified it with precedent, in favor of the democratic meaning, which identified it with the desirable, seems in the analysis thus far to introduce the necessity of seeking the desirable through means themselves more undesirable than custom, convention, institutionalism, could ever be. The crucial problem of contemporary ethics—as communism and capitalism stand facing each other, steadfast each in its own convictions—is whether goodness can be ethically arrived at. In the light of the analogy with economic goods-which have been found to differ from natural goods by the potency of human initiative and ingenuity to make from the one an unlimited quantity of the otherthis problem would seem to turn on the question as to whether moral goodness does not differ from natural goodness in the same way, i.e. by the mediation of human ingenuity and initiative. The analogy is strengthened by the modern assimilation of "good" to goods.

The newest contender for ethical honors pragmatic ethics—seeks systematically to develop this contention. Its critics have sought either to reduce it back to institutional acquiescence or to foist upon its spirit of revolt responsibility for the violence of Fascism and Bolshevism, but John Dewey, its chief expounder, has insisted that it is a res media between institutional conservatism and revolutionary radicalism. The point at which it is claimed that the pragmatic emphasis represents an ethical advance is the creative role of intelligence with reference to moral good. To hold that there is a moral good which comes to be only through judgment is negatively to brand as totally inadequate both the traditional duty ethics and the hedonistic doctrine of the good: the former because it provides intelligence from without with standards so superior as to reduce reason to the slavish role of mere acknowledgment and application; the latter because it provides non-reflective elements of natural experience. If the natural good—as identified by mere liking, want, desire and the like-is the only good, then there is no moral good; and ethics is pure rationalization of caprice or power. If, however, there is in addition a moral good, then it must be either derived from the outside

or created through the incidence of intelligence upon the natural good. In the former case duty again functions through nondescript conscience or the command of some superior power operating through sovereignty either human or divine.

If the pragmatist be logically right in holding intelligence as judgment to function only in problematic situations and if a problematic situation be conceived by him as a juncture of conduct in which there are present no goods sufficiently unambiguous to motivate action, then to make up one's mind as to what to do is to instigate action that would not have been but for the thinking. Now if we add that for man, an animal primarily more motor than rational, all values are activities (although for purposes of simplification the emphasis may be put upon feelings that accompany or satisfactions that complete activities), then we arrive through specific and definite thinking at goods that in no sense were prior to, but that literally are created by, intelligence in its normal exercise. If the only values that ethics can discover to man are either the natural, animal kind or the supernatural, religious kind, then must not man remain forever either a gluttonous brute offending the deity that flickers through his aspirations or a fallen angel struggling with his brute nature through the heroic failure of successive renunciations? But if there happens naturally to man as the legacy of fortunate variations in the long struggle for survival a genuine alternative both to groveling and to renunciation, he may, if he can but summon faith in the creative efficacy of his own efforts, persuade others to share or improve his vision of a better way of life than that out of which the vision arises. If this be possible, activities may result more generous than competition or acquisition; and they may be accompanied by feelings more pleasurable for self and less costiy in pain for others. Professional ethics feebly exemplified the principle which if put courageously to work might, it is claimed, rehabilitate ethical theory by making it vital in moral practise. Instead of the ethical laissez faire of de gustibus non est disputandum there is proposed by pragmatic ethics the doctrine that natural goods are but candidates for ethical honorshonors to be awarded only upon critical proof that the natural goods will stand the wear of time through public scrutiny. Only in this way, say the pragmatists, can the social sciences claim the honor that is rightly theirs, the honor of

vitalizing knowledge by practise and of informing practise with insight. This doctrine may be but the latest ethical distress signal—a signal given by morality at the contemporary cross-roads—or it may be a genuine creative synthesis of authoritarian and naturalistic traditions in ethics. But at any rate there is a growing fear that, unless some effective synthesis does emerge, the impending conflict between the mutually desperate convictions of bourgeoisic and proletarian moralities may abolish all ethics in a wholesale crucifixion of the human race.

T. V. SMITH

See: Morals; Philosophy; Theology; Conduct; Duty; Authority; Stoicism; Epicurfanism; Christianity; Confucianism; Rationalism; Idealism; Utilitarianism; Pragmatism.

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ETHICS, PROFESSIONAL. See Professional Ethics.

ETHNIC COMMUNITIES are groups bound together by common ties of race, nationality or culture, living together within an alien civilization but remaining culturally distinct. They may occupy a position of self-sufficient isolation or they may have extensive dealings with the surrounding population while retaining a separate identity. In its strict meaning the word ethnic denotes race; but when applied to communities in the above sense it is loosely used, in the absence of any other comprehensive term, to cover the more general concept of culture. Purely religious communities, such as the Mormons or the Shakers, or economic communities, like the New Harmony or Brook Farm groups, do not fall under the term although they are in many respects similar to the groups here discussed. Groups possessing a single point of cultural divergence or functionally distinct, like monastic or university units, share with ethnic communities the quality of being in other communities without being of them, but they lack many features of those communities which are bound together by a traditional culture complex.

Such communities vary according to their origin, their cohesive factors, the attitudes of the outer community, and the nature of the civilization of which they are a part. They tried to survive by reason of self-consciousness produced by divergence and through the tenacity of their social institutions. In major group migrations ethnic communities may be created because the exodus of one people to make way for another is rarely complete. Very frequently the remnant of the old does not lose its identity, and although it becomes merged with the oncoming multitudes it retains its ancient customs, its language and its group consciousness intact. Eastern Europe is full of such communities surviving from the waves of Teutonic and Slavic migration in the early centuries of the Christian era. Efforts to rectify boundaries at the close of the World War were impeded, especially in Transylvania, by the presence of just such self-conscious communities, owing their origin to population movements more than a thousand years before. Still older communities are to be found in the Near and Middle East, where centuries of population movement have left their traces in a tangled mass of unamalgamated units living in close juxtaposition to one another. The Turkish Republic has found these communities a major obstacle to the development of its national character and has endeavored by exchange of populations to rid itself of elements which the old empire had been unable to assimilate.

Communities originating from migration movements survive chiefly through their own cohesion and their resistance to assimilation. Where communities are created through military conquest they are more apt to be forced into existence by the command of the dominant group, as when conquering invaders expropriate a subjected land and set aside an area to which the native population is segregated. In the United States, Indian reservations were created in this way and were so completely endowed with a community character that until recent years American law dealt with them only as tribes, not as individuals. Native quarters are familiar features of cities where an alien has taken forcible possession. Such communities tend to hold a definitely lower social status than those arising from migration, as they are conquered groups and not simply minorities. Where a people has been sent into captivity as a group, as the Jews in Babylon, or have been individually enslaved, as the Negroes in America, ethnic communities may develop in quite different ways. The Jews in Babylon drew closer their tribal bonds, defined more consciously their culture pattern, recorded their history, laws and customs and emerged from captivity with their traditional culture strengthened. The American Negroes, however, isolated and without leadership, drawn from different tribes which did not even speak the same language and bound together only by a common color and status, have built out of the culture of their captors a new culture, indigenously American but distinctively Negro.

Administrative and trading groups in foreign, usually "backward," countries may be considered ethnic communities. With a personnel which is largely transient and a status equal if not definitely superior to that of the general community, they deliberately and as a matter of political policy set themselves apart in order to maintain their prestige and conserve their

culture. The largest and most famous of such communities are to be found in the Far East, where the English quarter of an Indian city is as distinct as a Chinatown in America. In most modern European colonies this policy is aided by racial distinctiveness, but in the absence of marked dissimilarity it becomes necessary to resort to force. The famous Statute of Kilkenny forbidding the English of the Pale to intermarry with the Irish whom they were administering was prompted by fear that the governing body would be absorbed into the country and political control be lost. The color legislation of the Union of South Africa, distinguishing the whites, the colored and the natives, is a similar effort on a larger scale to keep the governing group from being undermined by the encroachments of a growing mixed element. Trading colonies, although not backed by the same political force, have been similarly imposed upon the area in which they are located and remain separate because of superiority, not simply because of difference. The "factories" of the East India companies in India, the outposts of progress along the jungle rivers of Africa and the imposing settlement of Shanghai with its European laws, its English speech and its complete separateness from the corresponding native town, all represent a more powerful material culture and are indirectly allied to more powerful political states.

Military groups accompanying administrative units or invading an alien territory have sometimes settled permanently or have been left behind when the main army has been withdrawn. Herodotus ascribes the origin of certain Egyptian communities which he found in Asia Minor to the passage of Egyptian armies through the land. Such remnants are more apt to form communities when women have accompanied the army as camp followers. When soldiers take wives from the native population ethnic communities are likely to result only if their conquest has been made permanent and they have been in a position to form a separate caste for themselves and their half breed children. In the areas of the New World colonized by Spain and Portugal the mestizo population has occupied a status and lived a community life separate from that of the native Indians, but in time this mestizo element has imparted its culture to the whole country and its distinctiveness as a group has mainly disappeared.

The shifting of boundaries between modern nationalist states inevitably creates communities

culturally allied to their former and distinct from their new nationalities, as in Alsace-Lorraine and the southern Tyrol. Such communities have a distinctly different status from any of the separatist groups described above. Because they claim identity with a still independent national group they receive external support and look forward hopefully to the time when the turn of the political wheel may carry them to the other side of the frontier. Efforts to Germanize Alsace after 1870 could hardly hope for success while the statue of Strasbourg in Paris stood draped in black.

Communities of fugitives or of voluntary emigrants are familiar types today. Of the two a body of involuntary exiles is more apt to make a positive effort to retain its cultural identity. Among the more potent reasons why Jewish communities have remained distinct from their environment in eastern Europe and elsewhere is the fact that they have been communities of fugitives, not of voluntary emigrants; and their presence in any land has usually been due to the desire to escape from a worse situation elsewhere. Certain of the settlers in the American colonies, notably the German sects, and some of the groups going more recently to the interior of South America have set out with the intent of maintaining their own community life in the land of their adoption, but usually when emigrant communities retain their distinguishing features it is more by accident than by design. Such groups entering a wilderness may count on isolation to permit the survival of their own culture, but where the isolation of the wilderness has given way to the contacts of an industrial civilization the tendency of the alien to seek the reassurance and guidance of his own kind is responsible for community development. Such immigrant ghettos have been accepted in Canada as more or less permanent and have been encouraged by permission to use the language of the group in the schools, but in the United States these "little Italies" and "little Polands" have been denounced as evidences of the failure of the process of assimilation called for by national policies. By the act of immigration the immigrant voluntarily accepts the country to which he goes and he is expected to become an integral part of it. The persistence of ethnic communities under these circumstances is due in part to the degree of divergence between the dominant and the minority culture, in part to the size of the group and the nature of the bonds which hold it together but primarily to the reception which the group receives, the status which it is accorded and the barriers which are raised against its members by the larger community. The survival of immigrant groups as ethnic communities may be very generally attributed to the attitudes of the country which they have entered.

The chief basis for cohesiveness is race. Physical difference which cannot be changed or concealed sets one group apart from another and marks any man who seeks to leave his community and become part of the surrounding culture. The Chinese who seeks to leave his Chinatown is under a severe handicap not experienced by the Italian who emerges from little Italy. Differences in color are conspicuous and count for more than those involving head form, which may interest the anthropologist. The importance of race varies not only with the degree of racial divergence but with the strength of race prejudice in the dominant group, a fact clearly displayed in the contrast between Anglo-Saxon and Spanish or Portuguese colonies. Race becomes more potent as a differentiating factor when reenforced by differences of culture or status. The American Negro is confined to certain occupations and excluded from full participation in American life partly because he started as a slave; his former servile status has strengthened the color line, forcing him to stay within his ethnic group.

Where no marked racial differences exist, cultural difference forms the basic cohesive bond and appearance merely supports cultural barriers. The cultural unit may be a tribal one, as in certain groups in the Near East, or it may derive from local tradition, as in the Tyrol and Alsace. Elsewhere a submerged national group such as the Poles, Slovaks or Czechs preserves its national culture. Most commonly, however, the cultural differences are those that obtain between the culture of the home state of the culture community and that of the new state, differences involving language, tradition, common interest in the land of origin, common pride and common customs. In the case of European quarters of eastern cities the culture represented is compositely occidental rather than the peculiar heritage of a single national group.

Supplementary to race and nationality the strongest reenforcing factors are language and religion, both of which are apt to be essential parts of the national culture complex. The development of national languages, coterminous, for the most part, with national states, has made

language a symbol of nationality as well as the vehicle of tradition. The retention of the traditional tongue is often the principal aim of those who seek to prevent an ethnic group from losing its identity, while the loss of that language is taken as a measure of amalgamation. It was largely through the preservation of the Polish language that the Poles retained their common identity for a hundred and fifty years under Russian, Austrian and German domination. In attempting to mold the Tyrol into an undifferentiated province of the Italian state the principal drive has been against the use of the German language and has been carried to the point of changing the place names to their Italian. form or an Italian substitute.

Religion, although less outwardly distinguishing than either race or language, is a peculiarly cementing force because of its institutional character and its possibilities for intellectual leadership. Its sustaining force is outstandingly displayed in the case of the Jews, where race, nationality and religion so combine that one scarcely knows whether to classify the Jewish group as religious, national or racial. Under adverse conditions in many lands the lewish religion has been kept alive by pride of race, while the race has in turn been kept distinct by its common religious bond and religious leadership. Other groups show the same experience in a modified form. To the Armenians their church has been for centuries the symbol of their nationality. German Mennonites, Dunkers and other sectaries in the United States have remained distinctly German communities, while neighboring German farmers have lost their separate identity. Among the French of Canada the Catholic church has undoubtedly been the strongest factor in preserving their cultural community intact, while among recent immigrant groups in the United States it has played a similar role. Polish churches and parochial schools form the central institutions of many Polish communities in America. Even among the Irish, where no language factor has operated to keep the group apart, the identification of Irish with Catholic and the teaching of Irish history in parochial schools have helped strongly to prevent loss of identity and to keep the Irish after several generations a partially if not wholly distinct culture group.

Other elements of cohesion and differentiation support those already described, although none have the separative force of race, nationality, language or religion. Differences of economic organization are occasionally important, most notably in the case of the gypsies, who have maintained their tribal organization, no-madic character and primitive economy in the midst of a sharply contrasting industrial civilization. More frequently it is difference of economic status rather than of organization which maintains the barrier between groups and prevents amalgamation. Those who wish to keep the American Negroes a distinct group recognize that the latter's economic status aids this purpose and oppose economic and professional advance on the part of the Negroes, knowing that it will weaken the barriers raised against them.

Certain institutions characteristic of particular groups reenforce other factors. The Sokols —gymnastic societies characteristic of certain Slavic groups—German Turnvereine and singing societies, Finnish cooperatives, all add a distinguishing quality to the life of the group. Distinctive customs—special ways of celebrating holidays, of arranging marriages or of conducting funerals-play their part. Distinctive food, as with the Jews, although seemingly of slight importance, aids considerably by marking those whose diet does not correspond with the prevailing one and by developing the business of supplying particular foods. To all these must be added the oral and written tradition of the group. Tradition is a very strong factor in communities that have remained in a fixed place to which traditions are attached—principally those communities created by conquest or political transfer. It is very much weaker in immigrant communities, where the traditions are often ill adapted to the new environment, where they do not have the place association which might otherwise keep them alive and where there is often no literate group necessary to perpetuate them.

Given these lines of cohesiveness as a basis for survival, the fate of ethnic communities depends further upon the leadership they generate, their isolation or contact, the attitude of the majority group and the economic and political texture of the society of which the community is a part. A major difference with regard to the pressure that has been exercised from the outside exists between ethnic communities of ancient or mediacval times and those situated within modern nationalistic states. During the Middle Ages, when political and economic life was organized locally, the survival of ethnic entities was a matter of course. Trading communities of English in the Netherlands or the

German Hanse in London were set up by definite agreement. The Venetians demanded in return for assistance to the crusaders the right to establish trading posts within the cities of the East where their measures, laws and tongue should prevail. Throughout the western world the isolation of economic life and the particularism of political organization permitted the survival of self-contained, diverse units. With the beginnings of nationalist sentiment in the West the situation changed. Minority groups could retain or assert their self-determinant identity only against the drive of the dominant majorities for a uniform culture and single loyalty. Many of the present states of central Europe -not only the Czechs and the Slovaks but Poles, Ukrainians, Letts, Lithuanians, Croats, Slovenes and the various other succession states of the Hapsburg and Romanov empires—have grown out of the efforts to preserve a culture which was evolved in mediaeval isolation, was infused with modern nationalism and was granted political autonomy when the principle of national self-determination was applied to favored minority groups at the close of the World War.

These communities survived as potential states mainly through the conscious effort of their leaders to prevent loss of identity and in response to the repressive efforts of the dominant group. Their newspapers had been suppressed, their languages outlawed, their schools disbanded and their societies disrupted; but their priests and teachers had handed down for generations the history of their heroic past. Their leaders—a Kosciusko or a Kossuth—had raised the standard of rebellion and burned deep into the hearts of the people the brand of loyalty and the scars of defeat. In the isolation of the mountains, in the secrecy of homes or in the sacred precincts of the church the work of maintaining tradition has gone on and distinctive dress, speech, religious practises and customs have all been called into play to reenforce it. The Ukrainians, for instance, although adherents of the Roman Catholic church, have conducted their ritual in an archaic form of the Ukrainian speech lest by adopting the Latin form they become indistinct from their more powerful neighbors, the Poles. Although there is no adequate measure of the success of efforts to suppress such communities -and the process is still going on with respect to the new minorities created by the Versailles settlement-they have failed ultimately to accomplish their ends. A Polish priest, predicting

the rapid disappearance of Polish communities in America, summed up the reaction of his own people and of many others in the statement: "For a hundred and fifty years the Germans tried to force us to be Germans, so we are still Poles. The Americans do not care; we shall soon be Americans."

Ethnic communities produced by immigration are subjected to similar types of pressure as soon as they become large enough to awaken a sense of fear—not fear lest they rise in active political revolt but lest they deflect the development of a nation from its traditional channels and cause power and control to pass from the dominant to the submerged groups. In their relations to the indigenous Indian population the countries of the New World have encountered problems similar to those of the ancient migration founded communities of Europe, but with respect to later immigrant groups radically different relationships have arisen. In Canada the presence of an established French population which antedated the English induced a policy of tolerance toward other groups, their cultural autonomy being in a measure acknowledged through permission to retain their language for some official and educational purposes. In the United States, on the other hand, the system of public education with its almost universal use of English established the principle that the nation was to be unilingual and unicultural at base. The successful operation of this principle was taken for granted. It remained for the events of the World War to bring out the fact that the nation was not of one culture and one language and that neither Jacksonian democracy with its assertion of the similarity and equality of all nor the later theory of the melting pot had worked effectively. While the public schools were teaching in English, private schools, particularly certain parochial groups both Protestant and Catholic, were carrying on instruction in various foreign tongues; and both industrial centers and rural regions contained communities culturally distinct from their American surroundings and conscious of their separate identity.

These communities had developed and survived in part through the constant additions to their ranks from the stream of newly arrived immigrants and in part through the fact that the American people did not carry into practise their national theory of equality. Branding the members of these communities as "wops," "hunkies" or "kikes" they exerted social pressure to force them back into their ghettos, where they might

seek their place among their own kind. Of low economic status, without an intelligentsia (except in the case of the Jews), leaderless and with a tendency to lose successful members, since the price of success is often the severing of group ties, these immigrant communities hung on in most American cities, ignored by many and condemned by others as un-American. They have all developed certain characteristic features. In every case mutual benefit societies have been formed to assist members at times of sickness or death and incidentally to serve as social gathering places. In practically every case food stores and restaurants purveying the type of food familiar at home have served as centers where gossip is exchanged, news shared and the stereotypes of thought and action reenforced and preserved. In most communities a church follows the first signs of prosperity when the group is able to support a priest, for to many an immigrant his religion is the only experience which he can carry unchanged from his old home to his new. Whether or not a school follows the establishment of the church depends largely upon leadership, for the demand for education is far from universal among immigrants, who are often illiterate. The development of schools is most apt to be stimulated by religious authorities seeking either to preserve the religious affiliation of a group exposed to alien ways or to enable a particular church with its leaders to survive. Thus in certain communities Polish priests seeking to retain their parish membership among the second generation of immigrants have established parochial schools presided over by Polish nuns where the Polish language, history and traditions are taught. When not supported by religious leaders such schools are usually the work of organization officials who see in the younger generation the only way to maintain organizations which originally grew up to protect newcomers. Where a community is sufficiently large and literate, a press in the native tongue brings in the news of the old country, the gossip of the community itself and an interpretation of the affairs of the nation at large. Professional men of the group perform their services; traditional forms of entertainment develop; and the community becomes so complete that its members practically never leave it except to move from one such community to another, never think in other terms, never read American news, meet other people or in any way make contact with the outer community. Such isolation as this exists most conspicuously

in more or less separate industrial communities but is almost as characteristic of blocks in the ghettos of large cities. Although it can hardly remain so complete for more than one generation in a city, a new generation does not see the end of the old isolation.

It is characteristic of these American communities that they should be always on the move, each new wave of immigration or migration forcing an old community out of its old home and into a new one. The essential culture features, however, persist without reference to geographical location. It is also characteristic of these immigrant groups that they are more selfconscious in their areas of second settlement than in their original unit. It is only when they leave the ghetto that they know that they have been in it. If the area of second settlement has become completely developed as an ethnic community before they enter it, it may remain for a third or fourth move to make them realize that they have been part of a separatist entity in the midst of a larger whole.

These communities consist of a solid, group conscious nucleus, surrounded by a fringe which is gradually being worn away by intermarriage, education, participation in such activities as sports and by economic change. They are torn within themselves by conflicts between the generations, for the first generation of native born children, subjected to external influences, differs sharply in ways and attitudes from its parents. The internal factors holding the communities together are weakened wherever immigration has been reduced, and the attitude of the outer group bulks larger as a perpetuating force.

The World War had a very distinct effect upon the ethnic groups in America. It revealed to the American people that these communities not only had continued to exist but were of such proportions as to threaten the continued dominance of the old group. It called attention to the role that these communities may play as centers for propaganda by enemy or radical groups and showed them as bases for European operations by elements interested in political change in the old country. In consequence, it stimulated an active program of Americanization which developed into the campaign to assert Nordic superiority and resulted in the passage of the quota immigration law based on the assumption that certain ethnic groups can be assimilated into the American body politic more easily than others. At the same time the emphasis on self-determination and the birth of the many post-war na-

tions that grew out of the ethnic communities within the Hapsburg, Hohenzollern, Romanov and Ottoman dominions gave the nationals of those countries greater self-confidence. While removing from these groups the necessity of keeping alive the national sentiment for which they had been responsible when their nations were only countries of the mind, it gave backing and standing to members of these rejuvenated nations abroad. In response to talk of Nordic superiority leaders within immigrant communities have arisen to demand recognition for their groups, not merely for the exceptional individual. Such leaders are insisting that the amalgamation of ethnic groups into the American community must be by incorporation, not by suppression, and must proceed on the basis of respect for differences of inherited tradition and culture.

While America was becoming conscious of her ethnic groups, the nations of Europe proceeded on the assumption that ethnic communities are to remain characteristic of European life. The principle was recognized in the formation of the Minorities Commission of the League of Nations and in the treaty clauses requiring the defeated states to recognize their minority groups, although the victorious powers imposed no such obligations upon themselves. Soviet Russia has fostered cultural autonomy within the Soviet Union, encouraging Tartars, Cossacks, Jews or Armenians to develop their group consciousness and their cultural institutions upon their inherited soil or in newly created communities on land set apart for them by the government. Acceptance of the communist economic system is the only conformity required.

Meanwhile, the force of economic pressure is constantly at work, breaking down isolation, producing physical mobility, causing contacts between members of different groups and rewarding those who are successful at the economic game, with scant regard for the group from which they come. The same factors which are wearing down cultural differences between nations are at work to eliminate ethnic communities within states. Although a standardized, international language makes slight headway and although international bitterness keeps alive national self-consciousness between and within states, the diffusion of a standardized material culture, elimination of distance and the common language of business are all at work to make the ethnic community a relic of a separatist age. Its greatest opponent is the unconscious pressure of an integrated economic society and a leveling material civilization.

CAROLINE F. WARE

See: ALIEN; MIGRATION; EMIGRATION; IMMIGRATION; GHETTO; LAND SETTLEMENT; COMMUNISTIC SETTLEMENTS; MINORITIES, NATIONAL; RACE PREJUDICE; SOCIAL DISCRIMINATION; ASSIMILATION, SOCIAL; AMERICANIZATION; FOREIGN LANGUAGE PRESS.

Consult: Wirth, Louis, The Ghetto (Chicago 1928); Park, R. E., and Miller, H. A., Old World Traits Transplanted (New York 1921); Thomas, W. I., and Znaniecki, F., The Polish Peasant in Europe and America, 2 vols. (2nd ed. New York 1927); Les aspirations autonomistes en Europe, Bibliothèque générale des sciences sociales, vol. xlvi (Paris 1913); Seton-Watson, R. W., The Rise of Nationality in the Balkans (London 1917); Cabot, J. M., The Racial Conflict in Transylvania (Boston 1926); Iorga, Nicolas, Histoire des roumains de Transylvanie et de Hongrie, 2 vols. (Bucharest 1915-16); Mears, E. G., Modern Turkey (New York 1924); Herre, Paul, Die Südtiroler Frage (Munich 1927); Teutsch, Friedrich, Die Siebenburger Sachsen in den letzten 50 Jahren, 1868-1919 (Hermannstadt 1926); Leblond, Marius, La Pologne vivante (4th ed. Paris 1911); Wessel, B. B., An Ethnic Survey of Woonsocket, Rhode Island (Chicago 1931); Buell, R. L., The Native Problem in Africa, 2 vols. (New York 1928).

ETHNOCENTRISM was first developed as a definite sociological concept by W. G. Sumner, who defines the term as that "view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it" (Folkways, p. 12-15). Emotionally it finds expression in a sympathetic awareness and approval of one's fellows and their ways (the "syngenism" of Gumplowicz, the "we-feeling" of Cooley, the "consciousness of kind" of Giddings) and, per contra, in a feeling of fear, suspicion and contempt toward outsiders and their ways. Many writers have viewed ethnocentrism as the manifestation of a herd instinct, since there seems to inhere in it a quality of primary certitude which betrays its essentially irrational and primitive character and since an analogous form of group egotism prevails widely among those animals which live in societies (for the case of chimpanzees see Köhler, W., The Mentality of Apes, 2nd ed. New York 1927, p. 289-91). Whatever its possible innate basis, however, ethnocentrism emerges in human society as a cultural factor of considerable significance.

Each human group in its struggle for existence, security and survival in its peculiar natural and social environment arrives at certain habitual modes of behavior or folkways shown by experience to be reasonably adequate in satisfy-

ing those needs. And since departure from these ways usually results in pain or disaster they come to constitute a "prosperity policy" for the group. The folkways are further regarded as natural and right and any deviation from them as unnatural and wrong. When they receive the added sanctions of law and religion, deviation on the part of the group member becomes in addition criminal and wicked. Members of other groups, who follow other codes, are naturally looked upon as perverse, immoral, savage or heathen. Any difference, especially in culture, is rationalized as an evidence of the superiority of the "in group" and the inferiority of the "out group." Opprobrious and invidious epithets, such as "raw-eaters," "uncircumcised," "idolators," "the great unwashed," arise on the basis of such cultural differences. Tribal names imply ethnocentric sentiments in an astonishing proportion of cases. A people usually calls itself either by a flattering name or by a term signifying simply "men," "men of men," "first men" or "people." Aliens, on the other hand, are regarded as something less than men; they are styled "barbarians" or are known by some derogatory term corresponding to such modern American ethnic tags as "bohunk," "chink," "dago," "frog," "greaser," "nigger," "sheeny" and "wop."

But ethnocentrism is by no means confined to tribes and nations. It manifests itself in social groups of all kinds—families, sibs, phratries, local communities, classes, castes, sects, races, etc.—and assumes such diverse and developed forms as nationalism, patriotism and chauvinism, family pride, class consciousness, sectionalism, religious intolerance and race prejudice. Always the "we group" and its code are exalted, while "others groups" and their ways are viewed with suspicion, hostility and contempt. A religious group, for example, distinguishes its own members as the "faithful," the "true believers," the "chosen people," from the "infidel," the "heathen" and the "gentile."

The "in group" is also a peace group. Its members maintain law, order, government and industry among themselves. Rights develop originally in the "we group" and are extended only partially, if at all, to outsiders. Acts like murder and theft which are crimes or sins within the group are frequently regarded as permissible or even meritorious when committed against non-members—an attitude sometimes referred to as ethical dualism. The alien is usually granted at best only restricted rights of resi-

dence, occupation, property, franchise, legal redress, marriage and worship.

By focusing attention on cultural differences ethnocentrism strengthens and intensifies the folkways of a people. It is a factor securing loyalty to code. It promotes group cohesion and thus possesses survival value. An army or a football team, for example, fights hardest if it hates its enemy. Ethnocentrism also helps to maintain discipline and morale. Thus it is always accentuated when groups come into conflict. Dormant racial antipathies flare up in a race riot. Party loyalty is stressed at election time. Patriotism runs amuck in war, class antagonisms in strikes and revolutions and religious intolerance in sectarian struggles. In times of stress, in short, ethnocentrism is deliberately evoked by all the machinery of propaganda—an implicit recognition of its power.

Ethnocentrism fluctuates with the degree of contact and cultural divergence. It is enhanced where two groups come into contact in large numbers, especially if they enter into economic competition. Thus antisemitism flourishes in those countries where Jews are most numerous; it became prominent in the United States only with the large influx of Jewish immigrants from eastern Europe after 1880. Prejudice against Negroes is slighter in Europe than in America because contact with them is rarer. 'I'he "yellow peril" is feared chiefly in those regions where orientals are comparatively numerous and enter into economic competition with the whites. Ethnocentrism thrives on differences, not only those of race but also those of culture, and tends to be strongest where these are most pronounced. Witness here the traditional antagonism between animal herders and tillers of the soil and between city and country dwellers.

Ethnocentrism receives a strong support in the marked tendency of people to think in terms of groups rather than of individuals. It is far easier to label an individual with a class designation, such as Jew, capitalist or atheist, and thus to pigeonhole him once and for all than it is to arrive at a reasoned estimate of a complex personality, an estimate, moreover, which is necessarily tentative and subject to change with increasing acquaintance.

Phenomena such as lynching, exaggerated nationalism and the class struggle show that ethnocentric sentiments are probably as prevalent today as ever. There are nevertheless certain forces which seem to be operating to mitigate them. The international peace movement

and the eight hundred odd state and local committees affiliated with the Commission on Interracial Cooperation in the southern United States are outstanding examples of conscious efforts to assuage ethnic consciousness. More impersonal and unpremeditated forces like trade and economic contacts not involving competition make for peace and better understanding and work in the same direction. Travel develops tolerance of the outsider and his beliefs and practises. Improved techniques of communication stimulate diffusion and lessen cultural differences. Anything in fact that promotes understanding, toleration, catholicity and cosmopolitanism diminishes the force of ethnocentrism. Educacation may well play a prominent role in this connection, and no branch of education seems better fitted to promote intergroup understanding than the social sciences, which seek specifically to comprehend and explain cultural diversities.

George P. Murdock

Sec: ALIEN; CITIZENSHII; SOCIAL ORGANIZATION; GROUP; NATIONALISM; PATRIOTISM; RACE PREJUDICE; INTOLERANCE; SOCIAL DISCRIMINATION; COMMUNICATION; COSMOPOLITANISM.

Consult: Sumner, W. G., Folkways (Boston 1907); Keller, A. G., Societal Evolution (New York 1915); Sumner, W. G., and Kellet, A. G., The Science of Society, 4 vols. (New Haven 1927-28); Lippert, Julius, Kulturgeschichte der Menschheit in ihrem organischen Aufbau, 2 vols. (Stuttgart 1886-87); Gumplowicz, Ludwig, Der Rassenkampf (Innsbruck 1883) p. 240-53; Giddings, F. H., Studies in the Theory of Human Society (New York 1922); Cooley, C. H., Social Organization (New York 1909); Trotter, William, Instincts of the Herd in Peace and War (2nd ed. London 1919); Davie, M. R., The Evolution of War, Yale Publications in Economics, Social Science and Government, vol. i (New Haven 1929) p. 234-36.

ETHNOLOGY. See Anthropology; Race.

ÉTIENNE, EUGÈNE (1844-1921), French politician and colonial administrator. Étienne, a follower of Gambetta in the Chamber of Deputies, became interested in the colonies first as a deputy of Oran, Algeria, and then as a reporter on the Algerian and colonial budgets. He followed his master, Ferry, in urging a coherent colonial theory on France and in his two memorable terms of office as undersecretary of state for the colonies (1887-88, 1889-92) oriented and fixed the principles of French colonial policy. Despite an alarmed majority in the Chamber and a recalcitrant public opinion he outlined an empire scheme in Africa. In a famous speech of

May, 1890, he contended that France had in Africa not a series of trading posts but an empire. He reduced Ferry's generalizations to a concrete program and was far ahead of his time in fixing the aim of France as dominion from the Congo to the Mediterranean, from the Chad to the sea. Moreover, he argued, all colonization in a world influenced by "that economic movement which has come out of America" must be guided solely by economic aims. Traders must be pushed to the front and industrialists must realize that it was to their interest to break down the prevailing anticolonialism of Clemenceau. These ideas Étienne carried out during his administration, which was the first period of independent and concerted direction the French had allowed their colonial rulers. During this period he gave practical expression to Ferry's theory that colonies were distinctly subordinate to the mother country in every way. He demonstrated this by his famous tariff law of 1892, the aim of which was to make the colonies simply contributory to the well-being of France, especially of its manufactures. The colonies were to provide raw materials and take manufactured goods in return; but no consideration was paid to them as entities having lives of their own. As part of this general policy of subordination Etienne was also responsible for the colonization of the Congo by large companies and for sending de Lanessan to Indo-China. In short, Etienne built up the organization of the empire, formed the colonial party in parliament and changed public opinion as to the value of colonial ventures.

STEPHEN H. ROBERTS

Works: "Un programme de politique coloniale" in Questions diplomatiques et coloniales, vol. xi (1901) 65-82; Les compagnies de colonisation (Paris 1893). His crucial speeches will be found in Journal officiel . . . Chambre des députés, May 11, 1890, p. 748-50, Dec. 2, 1891, p. 2378-85, and Journal officiel . . . Sénat, Dec. 18, 1891, p. 1217-30.

Consult: Eugène Étienne, son oeuvre coloniale, algérienne, et politique, ed. by J. Haussmann and others, 2 vols. (Paris 1907); article in L'Afrique française, vol. xvii (1907) 403-04; Roberts, S. H., French Colonial Policy, 1870-1925, 2 vols. (London 1929) vol. i.

ETIQUETTE is the body of forms of conventional decorum into which one's behavior is cast. In the western world etiquette is inculcated at such an early age that it becomes automatic and is therefore often mistaken for a reflex expression of emotions. Thus, standing to show respect is thought to be instinctive until peoples are found who show respect by sitting. Reflex mani-

festations of emotion, such as smiling, are invariable. Variable expressions of the same feeling are determined by conventions, most of which can be traced to ritual. Since ritual centers around divinity, so does etiquette. In the East especially, the forms observed toward great men and gods are generally identical.

Etiquette often consists in practises arising from the belief that the superior equals a god. The king of Tahiti was a sky god; therefore his houses were called the clouds of heaven; the rainbow was the name of the canoe in which he voyaged. This is no doubt the origin of much court language. The archaic Indian and modern Polynesian custom of sitting in the presence of a great man applies the principle that a mere man cannot be above heaven, as represented by the king. The god is addressed through the king; hence such forms as "he" or "the god" are employed for "you." The use of the third person in conventional address is still a common survival on the continent of Europe, although its original meaning has been lost.

Many observances are based on difference in rank. The priests, governors and chieftains are considered divine; but the king's divinity includes theirs so they do not use the signs of divinity in his presence. People who commonly use chairs therefore stand in presence of the superior, because the chair was originally a throne reserved for the head of the ceremonial. The same rule explains the removal of the hat. In India all who take part in worship must wear their insignia; and as the court is considered a temple, dignitaries must wear their hats at court. The European army has adopted this principle in the wearing of the hat in the presence of superiors. In the ancient world a guest is accompanied by a god; in India he is "compounded of all the gods" and is accordingly granted precedence and honors although he may be of a rank inferior to his host.

Etiquette sometimes requires the avoidance of any word or act which may cause evil supernaturally, such as averting the gaze from people at their food, so as not to bring the evil eye to bear on it; not pointing the finger for fear of blasting; not using words of ill omen. In other cases the original idea seems to have been to avert evil from one's own self, as when a man covers his yawn with his hand to prevent life from escaping. Indecency, although not wholly a matter of convention, is variously defined in different cultures and the practises relating to its avoidance are diverse. Convention, for ex-

ample, determined that a Fijian might go naked before circumcision but not afterward. Etiquette sometimes prescribes obscenities on certain occasions and between certain invididuals as, for instance, between cross cousins.

The meaning of etiquette is weakened when it spreads to all classes. Prayers for the success, health and prosperity of the chief, such as "conquer," "live a thousand years," "health," "peace," dwindle from rites with the definite purpose of insuring prosperity to empty but pleasing forms. "Good morning" is no longer thought to promote welfare but is meant to be an expression of good will; being obligatory it ceases even to be a certain index of feelings. Nevertheless, it fulfils a useful function. Among peoples who have no greetings one misses the opportunity of expressing one's feelings by intonation or facial expression. Any form of words might serve this purpose but set forms are necessary, for one's ingenuity would be taxed if one had to vary the form continually. Attempts are sometimes made to introduce new forms, such as the recent use of the greeting "cheerio," but these innovations rarely last and the classic forms survive them.

Etiquette also fosters feelings, for feelings require external stimuli for their development. Words of thanks, although obligatory and not necessarily inspired by feeling, remind the speaker of his indebtedness to others. The power of etiquette to develop sentiments is seen in the army, where constant honors to the higher ranks breed in the old soldiers not only a feeling of respect but a pride in that respect. Etiquette also acts as a check on impetuous behavior by developing self-control.

Propitiation, which was one of the chief objects of the ritual of which etiquette is the survival, has left an impress on its present form, which is mainly directed toward evoking favorable emotions in others. Observances originated to react on nature are continued for the sake of their effects on others: for instance, a yawn is covered because the inside of the mouth is not pleasant to view; pointing is avoided because it is too personal; the use of the second person singular is thought to be too direct. Not only do old forms receive new meanings through rationalization, but new ones are created by analogy: thus the indelicacy of opening one's mouth widely is extended to eating.

Etiquette has developed from ceremonial to tact. In the early forms etiquette often disregards the comfort of the recipient; later it tends to be subordinated to it. Thus it is Fijian etiquette for kinsmen to visit the sick and for the owner of the house to entertain them even till late in the night, at the expense of the patient's rest. Visits to the sick in modern societies are subordinated to medical considerations. The greater elasticity and subtlety of the etiquette of the western world disguises it and gives an erroneous impression that less exists than among many savages.

Etiquette always involves respect for the person to whom it is addressed. A breach of etiquette is therefore resented as a slight. This consequence may be avoided if the person who commits it excuses himself—that is, gives a sufficient reason for his act, making it clear that no insult was intended. The basis of respect is obscured in the forms of etiquette known as professional; e.g. medical etiquette. This is really a code of honor; but the profession as a whole takes cognizance of its infringements, since they reflect discredit on the profession.

In all cultures those who are constantly in attendance on rulers are most adept at etiquette. The feeling of mastery over the art gives a sense of superiority and a tendency to cultivate etiquette for the sake of that feeling. The purpose in cultivating the technique is apt to be forgotten, and the forms of etiquette are so overelaborated that instead of smoothing action they impede it. Etiquette then requires so much time to cultivate that it becomes inconsistent with hard work. People addicted to it in excess succumb to a ruder people more direct in its aims, as in the case of the French Revolution. At the end of the eighteenth century the increase of population in Europe and the development of machinery accelerated the tempo of life and made it necessary to simplify behavior in order to save time. Commerce adapted itself more quickly than government, which, having grown out of the court, is more conservative and clings to cumbrous forms of etiquette such as "I have the honor to be " Old forms hold out longest in international relations, where small breaches of etiquette may be resented as national insults.

A. M. Hocart

See: RITUAL; CUSTOM; TRADITION; CONVENTIONS, SOCIAL; CEREMONY; SOCIAL ORGANIZATION; TABU; MORALS; TASTE; GENTLEMAN; HONOR; ROYAL COURT; CLASS.

Consult: The Boke of Curtasye, an English Poem of the Fourteenth Century, ed. by J. O. Halliwele (London 1841); Cook, H. C., Littleman's Book of Courtesy (New

York 1920); The Ordinances of Manu, tr. from Sanskrit by A. C. Burnell (London 1884) bk. ii; Hocart, A. M., Kingship (London 1927), and "Are Savages Custom-Bound?" in Man, vol. xxvi (1929) 220-21, and "The Divinity of the Guest" in Ceylon Journal of Science, Sect. G., Archaeology, Ethnology, vol. i (1924-28) 125-31; Anon., Court Etiquette (London 1849); Lowie, R. H., Are We Civilized? (New York 1929) ch. vi, and p. 161-66. See also correspondence in Man, vol. xxxi (1931).

EUCKEN, RUDOLF CHRISTOPH (1846-1926), German philosopher. Eucken was reared in East Friesland in an atmosphere of liberal Protestantism. He studied at Göttingen and at Berlin under Trendelenburg and taught philosophy at Basel and Jena. In 1908 he received the Nobel Prize for literature.

Eucken accepted the idealistic argument against materialistic naturalism, positivism and mechanism but sought to replace the prevailing intellectualistic idealism based on the logical structure of science by an "activistic idealism" founded on a comprehensive and historical consideration of culture at large. In human culture not only intellectual categories but forms of a higher, autonomous personal life supervene upon natural processes and constitute what Eucken called the life of the spirit (Geistesleben).

In social practise Eucken was opposed on the one hand to reliance on external mechanisms, such as political bureaucracy or socialistic economic organization, and on the other to the appeals of intellectualistic idealism to abstract moral principles and ideas like humanity. Although he valued nations and social classes, when not denatured, as larger complexes of personal life, he considered the achievement of the personal life itself, filled with spiritual content, as all important and significant. In numerous writings he sought to interpret the spiritual content of historic movements and to point out the necessity of utilizing science to overcome and permeate nature with such values of personal life as came to the fore in Christianity. Hereby he became the leading non-clerical, philosophical protagonist of liberal Protestantism and gained a wide hearing in England, Scandinavia and America as well as in Germany.

The philosophical sociology of Max Scheler, who was Eucken's most eminent pupil, the cultural psychology of Spranger and Spengler's history of culture illustrate an increasing tendency of German philosophy and social science to treat intellectual history as part of a wider cultural history and to explain the forms of

man's life less in terms of transcendental ideas than in terms of ultimate forms of activity (*Lebensformen*). Eucken himself did not develop this new cultural analysis but popularized related ideas in preaching the need of cultural renewal by activism.

HORACE L. FRIESS

Chief works: Geschichte und Kritik der Grundbegriffe der Gegenwart (Leipsic 1878, 6th ed. Berlin 1920), rev. tr. from 4th German ed. by M. Booth as Main Currents of Modern Thought (London 1912); Die Einheit des Geisteslebens (Leipsic 1888); Die Lebensanschauungen der grossen Denker (Leipsic 1890, 18th ed. Berlin 1922), tr. by W. S. Hough and W. R. B. Gibson as The Problem of Human Life (rev. ed. New York 1914); Grundlinien einer neuen Lebensanschauung (Leipsic 1907), tr. by A. G. Widgery as Life's Basis and Life's Ideal (2nd rev. ed. London 1912); Lebenserinnerungen (Leipsic 1920, 2nd ed. 1922), tr. by Joseph McCabe as Rudolf Eucken (London 1921).

Consult: Gibson, W. R. B., Rudolf Eucken's Philosophy of Life (2nd ed. London 1907); Siebert, Otto, Rudolf Euckens Welt- und Lebensanschauung (3rd ed. Langensalza 1921); Überweg, F., Grundriss der Geschichte der Philosophie, 5 vols. (11th and 12th eds. Berlin 1923–28) vol. iv, p. 559–62, 720–21, with full bibliographies.

EUGENICS deals with the science and practise of improving hereditary characteristics in man. The term was coined by Galton in 1883. It was at first designed to include improvements of stock in all organisms, but its application has become restricted to man.

The idea of the possible improvement of human stocks arose from the observation that men differ greatly in their abilities and qualities and that there is a tendency for particular characteristics to recur in descendants; hence it was inferred that superior offspring could be obtained by breeding from the best stock, as is the practise in cattle raising. This idea was expressed as early as the sixth century B.C. by the Greek poet Theognis. The earliest eugenic practises were directed toward improvement of the next generation through the destruction of infants that were sickly or deformed—a custom which has had wide distribution.

The ancient Spartans, a dominant race intermixed with a numerous subject population, practised a system of eugenic measures with the object of maintaining their dominance. They destroyed infants that were not promising, limited emigration of members of the dominant race, encouraged marriage among them, imposed penalties for celibacy, rewarded the production of offspring and at intervals killed off large numbers of the subject population. In

addition they imposed a severe regimen of life that doubtless had selective effect.

Plato at different times proposed diverse eugenic programs designed for an ideal state. He proposed that defective children and children from inferior parents should not be reared and chronic invalids and victims of selfindulgence should be denied medical aid. Moral degenerates were to be put to death; parental alcoholism was condemned as dangerous to offspring. Temporary unions of the best individuals were to be encouraged for the production of superior offspring. Since they had no knowledge of the segregation and recombination of genes, Plato and other writers of the ancient world attributed inferior children of superior parents to the ages of the parents and therefore advocated rules concerning the ages beyond which parents should not have offspring and proposed regulations regarding compatibility of ages at marriage. The eugenic measures were directed largely toward insuring physical superiority supposedly accompanied by mental superiority. In the early centuries of the Christian era and in mediaeval times interest in eugenics as in many other matters of science almost disappeared. In the early part of the seventeenth century the philosopher and monk Campanella (1568-1639) revived eugenic doctrines apparently based on those of Plato.

The modern eugenic movement is an outgrowth of scientific studies of heredity and variation. The prime mover was Francis Galton (1822-1911), whose works form the foundation for modern eugenics. Galton made genealogical studies which led him to the conclusion that talent and degeneracy are inherited, and he devised mathematical methods for measuring the degree of intensity of inheritance, on the basis of which he urged the importance of eugenic measures. His work was carried further by his associate and successor Karl Pearson. Galton and Pearson attempted to devise methods for predicting the average characteristics of later generations that are derived from selected parents of given type, in order to lay a foundation for the sound application of eugenic selection in man. By many investigations and publications they aroused interest in the subject in Great Britain. In 1904 Galton established at the University of London a research fellowship in eugenics, which developed into the Francis Galton Laboratory of National Eugenics, guided since 1907 by Pearson. This organization publishes memoirs, a lecture series and a

research journal called Annals of Eugenics. The Eugenics Education Society was founded in 1908; Galton, its honorary president, was later succeeded by Leonard Darwin, the son of Charles Darwin. It publishes a quarterly journal, the Eugenics Review, the best known of the journals devoted to eugenics, and has been active in examining proposed legislation with relation to possible eugenic consequences. Local branches of the society have been founded in many parts of the British Empire.

The pioneer in eugenics in the United States was Alexander Graham Bell. The present active eugenic movement was first organized by C. B. Davenport, largely under the influence of the English movement. Davenport founded in 1910 in connection with the Department of Genetics of the Carnegie Institution the Eugenics Record Office at Cold Spring Harbor, Long Island, New York, which collects and stores family histories and other data and publishes bulletins, reports and memoirs. In connection with it the Eugenics Research Association was founded, which publishes the Eugenical News. The American Eugenics Society, incorporated in 1926, has been active particularly in relation to the restriction and regulation of immigration to the United States. It publishes bulletins, pamphlets and since 1928 a monthly journal first called Eugenics but since March, 1931, published under the name People. Many universities and other educational institutions participate in the eugenic movement, which has spread widely in the United States, and some states have branches of the American Eugenics Society. The Race Betterment Foundation of Battle Creek, Michigan, which has held conferences in 1914, 1915 and 1928, the first and third of which published volumes of proceedings; the Human Betterment Foundation and the Institute of Family Relations, both of California; the Eugenics Education Society of Chicago; and the Galton Society of New York are also devoted to the promotion of eugenics.

There are active eugenic movements in Germany, France, Sweden, Italy, Czechoslovakia and the Soviet Union. An International Federation of Eugenic Organizations, whose official organ is also the *Eugenical News*, has held nine annual meetings. Two International Congresses of Eugenics have been held and their proceedings have been published. A third congress is to be held in New York City in 1932.

Eugenics assumes that certain types of individuals are socially more desirable than others,

and it proposes to improve future generations by increasing the proportion of individuals of desirable types through decreasing the rate of propagation of the inferior individuals (negative eugenics) and increasing that of the superior individuals (positive eugenics). Only for negative eugenics are the proposals definite and concrete. Certain types of seriously defective individuals are known to owe their origin to defective genes that are passed from parent to offspring. Such are some cases of feeblemindedness, a few types of insanity, various deformities and certain diseased conditions, such as haemophilia and Huntington's chorea. Eugenists propose that propagation of individuals showing such defects shall be stopped, by means of segregation of the affected individuals or their sterilization, either through legal enactments or through voluntary action resulting from education as to the serious consequences of their propagation. A large number of the states have laws for the segregation or sterilization of defectives. In some of the states the laws have become a dead letter or have had little effect. In California an effective sterilization law has been in operation for many years, under which more than five thousand cases have been operated upon.

Prevention of the propagation of congenital defectives reduces the number of defectives in the next generation. The effect is greatest when the cases are due to defects of a single pair of genes and particularly when the defect is dominant, so that all the individuals that carry the defective genes are themselves defective. Completely preventing the propagation of such dominant defectives would result in their entire disappearance in the next generation, except when such defects are produced anew by mutation—an extremely rare occurrence. The more important heritable defects, however, including feeblemindedness, are not dominant but recessive. Two types of individuals bear the defective genes: the defective individuals, who have two defective genes in a single pair, and a much larger group of "carriers"—normal persons who bear a single defective gene with a normal companion gene in the same pair. The larger proportion of the defective individuals in the next generation comes from normal carriers, whose number is not affected by preventing the propagation of the defective individuals. This measure therefore cannot completely eliminate the defectives. It is estimated that the prevention of the propagation of all feebleminded in the United States would reduce the number in the

next generation only by about 11 percent if carriers are widely distributed in the population or up to 30 or 40 percent if the carriers are concentrated in small groups. In later generations preventing the propagation of the feebleminded would have little further effect save to keep the number down to that already reached. Negative eugenic measures would be made more effective by the discovery of a method of detecting the normal carriers of defective genes; but this cannot now be done.

Medical examinations before marriage are sometimes required by laws directed mainly against the occurrence of venereal diseases in either of the parties, since this often results in imperfect children. The general enactment and thorough enforcement of such laws would undoubtedly save much misery, although most benefits derived therefrom would be classifiable as medical rather than as eugenic. There is some evidence that alcohol and certain lead compounds act injuriously on genes causing production of defective offspring, so that active measures against these "racial poisons" have at times been included in eugenic programs. The evidence on these matters is, however, not certain.

In addition to concrete measures of negative eugenics other proposals of less definite character are made. The rate of reproduction, it is pointed out, is higher in the groups that have been less successful in life and in those of less intellectual tastes and achievements. Thus "society is being recruited at the bottom," and under the assumption that success is positively correlated with biological ability it is held that gradual general deterioration of the race must result. To remedy this it is proposed that measures should be taken to increase the propagation of the successful and the intellectual classes and to decrease that of the classes that are less successful or less intellectual. Methods suggested are: that habitual criminals be not allowed to propagate; that the ban on dissemination of birth control information be removed, so that such knowledge may become available to the less efficient or intelligent groups; that the economic status of the intellectual groups be raised, so that they can afford larger families. Further, by education and by the general dissemination of eugenic knowledge both the "inferior" and "superior" groups would be brought to appreciate the situation and by voluntary action they would play their appropriate parts in remedying it. A large share of the activity of eugenic organizations is devoted to educational work that shall tend toward this end.

There have been exaggerated hopes as to the efficacy of eugenic procedures. The rapid disappearance of criminality and other delinquencies and the solution of many of the major problems of society have been predicted. Such hopes of immediate results are based on an inadequate conception of the methods of hereditary transmission and of the role of environmental influence in human life. In producing offspring the parental combinations of genes are broken up and a new combination made for the child by taking in a somewhat random way half the genes from each parent. As the number of genes is large, the number of possible combinations is very great. In consequence each child receives a combination of genes different from any other (save in the rare cases of identical twins) and different from either parental combination. Each child therefore differs in his inborn characteristics from the parents and from the other children of the family. Thus parents of a given type may produce offspring of very different types. This presents a serious difficulty for eugenic selection, making its results uncertain and slow. There is, however, a degree of correlation in the characteristics of parents and offspring, for if a large number of parents of any type is selected, their offspring on the average approach more nearly to this selected type than do the offspring of parents not so selected. Thus, by selecting on a large scale parents having a desired type of characteristics, increasing their rate of propagation and decreasing that of other types, the later generations may be caused to approach, however gradually, the type for which selection is practised. The process of causing a change of this character is, however, very slow. Even if it were possible to select rigidly, to mate together only individuals having in a high degree the selected characteristics and to inbreed offspring of the selected type (following the procedures employed with cattle), many generations would be required for the production of marked and uniform results. When all that is practicable is to make a slight difference in the rate of propagation of the two classes, progress toward the proposed goal is extremely slow.

Furthermore, most of the qualities on which the social value of individuals depends are deeply affected by diversities of environment; by diversities in physical and economic conditions, in education, traditions, state of civilization and the like. In so far as differences between an

"inferior" and a "superior" group are due to such diversities in nurture, increasing the propagation of one group and decreasing that of the other has no eugenic effect. Some of the propagandists of eugenics have overestimated the proportion of diversities that are due to differences in genes, some going so far as to assume that practically all differences among individuals are due to gene differences and so are affected by selective breeding. From this it is a short step to the conclusion that the only possible method of improving social conditions is through eugenics. Some critics of eugenics have been equally extreme in holding that all differences between individuals that are important for society are the result of differences in nurture, that diversity of genetic constitution plays no role and that therefore selective breeding can have no effect. The study of genetics shows, however, that all kinds of characteristics of organisms without exception are deeply affected by the genes: differences in genes may produce diversities in any and every respect. This is demonstrated for man by the studies of the genetically duplicate individuals known as identical twins as compared with other individuals and particularly with other types of twins. The work of Müller, Newman, Lange and others on twins has demonstrated that all kinds of human characteristics—physical, physiological, mental, moral, social—are deeply influenced by the genes received by the individual at the beginning of life. The distinctive characteristics of any large group selected for certain qualities are due partly to their distinctive gene combinations and partly to the conditions under which they have developed. Because of the presence of the genetic factors there will be a correlation between the inborn characteristics of the parents and those of the offspring. Thus rigid selection practised on a large scale for any type of characteristics will cause later generations slowly to approximate this type.

In fixing upon certain types of individuals as undesirable and others as desirable there is little difficulty when only extreme cases are considered. Feebleminded, insane, deformed or other markedly defective individuals are clearly less desirable than normal ones, and there is little dissent from the view that the propagation of such groups is not to be encouraged if the defects are congenital. Beyond this the common assumptions of eugenists are that vigor and health are more desirable than weakness and proneness to disease and that higher degrees of

efficiency, adaptability and intelligence are more desirable than lower degrees. It is mainly in deciding concretely what individuals fall within the preferred groups that question and dissension arise. Success under the present economic system may be considered an indication of superior efficiency; yet some hold that this is not evidence of greater fitness under other systems that may prevail in the future and that therefore selection based on this system would not be eugenic in effect. National and racial prejudices have entered largely into eugenic propaganda. One of the commonest objectives has been the maintenance of the purity or the dominance of a certain racial or national group—the group selected for preference being that to which the selectors belong. This factor has entered largely into the eugenic agitation for restriction of immigration. Both racial arrogance and the desire to justify present social systems find a congenial field in eugenic propaganda.

In spite of difficulties and aberrations the better considered aims of eugenics, as presented, for example, in Leonard Darwin's What is Eugenics?, may be held as desirable and their realization to some degree not out of the range of possibility. In ridding society of certain classes of scriously defective individuals negative eugenic measures in the present state of knowledge can do more than can be done in any other way, and there is reason to believe that with an increase in knowledge they may become much more discriminating and effective.

H. S. JENNINGS

See: HEREDITY; POPULATION; MENTAL DISEASE; PUBLIC HEALTH; CRIMINOLOGY; ENVIRONMENTALISM. Consult: FOR EXPOSITIONS OF EUGENICS: Holmes, S. J., A Bibliography of Eugenics (Berkeley 1924); Roper, A. C., Ancient Eugenics (Oxford 1913); Schuster, Edgar, Eugenics (Baltimore 1912); Galton, Francis, Essays on Eugenics (London 1909); Darwin, Leonard, What is Eugenics? (2nd ed. London 1929), and The Need for Eugenic Reform (London 1926); Jennings, H. S., The Biological Basis of Human Nature (New York 1930), and Prometheus (New York 1925); Guyer, M. F., Being Well-Born (2nd ed. Indianapolis 1927); Holmes, S. J., Studies in Evolution and Eugenics (New York 1923); Gates, R. R., Heredity in Man (London 1929); Popenoe, P., and Johnson, R. H., Applied Eugenics (New York 1918); Gosnewy, E. S., and Popenoe, P., Sterilization for Human Betterment (New York 1929); Laughlin, H. H., Eugenical Sterilization in the United States (Chicago 1922), and Eugenical Sterilization: 1926 (New Haven 1926).

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N. H. 1928); Boas, Franz, Anthropology and Modern Life (New York 1928) ch. v; Lowie, R. H., Are We Civilized? (New York 1929) p. 281-87; Hobhouse, L. T., Social Evolution and Political Theory (New York 1911) ch. iii; Wallis, W. D., Introduction to Sociology (New York 1927) ch. xi; Klinberg, Otto, "Culture and Personality" in Survey Graphic, vol. lxvi (1930) 44-45, 67, 70; Thompson, W. S., "Eugenics as Viewed by a Sociologist" in American Sociological Society, Publications, vol. xviii (1923) 60-72.

EUHEMEROS, Greek philosopher of the third century B.C. Euhemeros was the author of a philosophic mythological romance known as 'Iepà άναγραφή (Sacred history), of which but fragments are extant. In it the folk deities are referred to rationalistically as famous kings of old who have been deified on account of their deeds. Euhemeros pretends that he came upon this epic tale, composed by Zeus and Hermes themselves, in one of his distant voyages, on an island called Panchaea in the Indian Ocean. The local color for the portrayal of life on Panchaea is borrowed from romances of travel and adventure, accounts of the lands of fabulous tales and magic and from his studies of political utopias; throughout the narrative everything that is too fantastic and improbable is struck out in order to insure the credibility of the tale. State socialistic practises of oriental and Hellenistic kingdoms are included. Socialist conditions are taken for granted. Private property does not exist as regards the greater part of the land; the herds are the collective property of the state; peasants and herdsmen deliver up their products, which are distributed to the consumers by the priests, who seem to be the ruling class. The social organism is tripartite, as in Plato's Republic and in the Abderite Hekataios' portrayal of ancient Egyptian conditions. It is possible that Euhemeros' system is a mixture of these two, which would account for the strange social classification: priests and handicraftsmen, peasants, soldiers and herdsmen. The collectivism is of a moderate form, which accords with the tendency to eliminate the seemingly impossible. House and garden remain in private hands; monogamy and the family prevail. Incentive for private economic initiative is afforded by the awarding of premiums to the best producers. The priests receive double rations. The trades are not organized along cooperative lines but remain as individual occupations. The discussion of the questions of ownership of movable property and of industrial production is obscure; for this either Euhemeros himself or the fragmentary condition in which his work has been preserved may be responsible.

Euhemeros had no interest in practical social reform.

FRIEDRICH OERTEL

Consult: Jacoby, F., Die Fragmente der griechischen Historiker, 2 vols. (Berlin 1923-30) vol. i, p. 300-03; "Euemeros" in Paulys Real-Encyclopädie der classischen Altertumsveissenschaft, ed. by Georg Wissova and Wilhelm Kroll, vol. vi (new ed. Stuttgart 1909) cols. 952-72; Salin, Edgar, Platon und die griechische Utopie (Munich 1921) p. 220-34; Pöhlmann, R. von, Geschichte der sozialen Frage und des Sozialismus in der antiken Welt, 2 vols. (3rd ed. by Friedrich Oertel, Munich 1925) vol. ii, p. 293-305.

EURIPIDES (480-406 B.C., neither date quite certain), last of the three great tragic poets of Athens. He was well born, and as his plays reveal him a master of rhetoric and argumentation he might have aspired to political honors, the grand object of ambition in the city-states of antiquity. To say that he preferred to be a poet is not the complete explanation it would be in modern times; it was, for instance, on the strength of his poetry that Sophocles, the elder rival of Euripides, was made a general. Nor was the cause lack of interest in public affairs—so much is plain to every reader of the tragedies. The explanation probably lies for the most part in the temperament of Euripides. He was a man of studious and retiring disposition—an unpopular type in democratic Athens-who had at the same time radical views on many subjects and a powerfully exciting genius for giving them dramatic expression. It is not men of that kind who fill the high offices of state.

His early years were cast in the exultant period when Athens was extending and consolidating that culture out of which has grown (with whatever modifications) the civilization of Europe and America. Its watchword was liberty (ἐλευθερία), defined as the reign of law, in opposition to anarchy on the one hand and tyranny on the other. In the political field this immense effort produced two things, perhaps incompatible: an empire and a democratic idealism. It may be that Euripides never much liked the empire, but he undoubtedly shared the idealism. (It comes out markedly in the Heraclidae and the Supplices.) But gradually disillusion came; it touches nearly all the later dramas. The spirit of Athenian public life under the terrible strain of the long Peloponnesian War (431-405 B.C.) suffered a change which was deeply repugnant to the poet, who hated injustice more than anything else in the world. All the familiar phenomena of the war spirit revealed themselves. Nobody now believed in liberty, except for himself. To this democracy had come; and on this new thing the old man turned his back and went off to die in Macedonia. It was not he, it was his country or her rulers who had become reactionary.

It is nearly always the influences upon his youth which best explain a poet. Euripides had grown up in an age thrilled by the first great achievements of science. It was felt that there was a reason for everything and that the reason would soon be discovered. With this confident rationalism ran a strong current of moral indignation against a great deal of popular religion. In particular the traditional mythology came in for criticism. On Euripides these influences worked powerfully. His sympathy with the scientific thinkers was marked enough to get him called, like them, a "sophist"; while his treatment of the myths, which provided Greek tragedy with its subjects, disturbed more conservative or conventional minds. At the same time he was above all a poet and he could not forget the beauty of stories which perhaps he could not believe. Neither could he believe that reason explained everything in this mysterious world (see especially the *Bacchae*).

Another illuminating approach to the man and his views is in an understanding of the direction of his sympathies. He is never maudlin, he is sometimes grim; but it is possible that he occasionally tilts the balance a little too far in favor of the misunderstood and the oppressed. He loves to take a character—often a woman, a Phaedra or Medea-whom tradition has condemned and tries to understand the motives by probing obscure thought or feeling. With understanding comes sympathy, and with sympathy indignation against the triumphant "heroes," especially the conquering sort, who are likely in this poet's plays to turn out rather poor creatures after all. In this way Euripides made a kind of revaluation of ancient moral values, with the result that no poet has been more hated or more admired.

It was not his business to make practical proposals. What he did was to create or at least to precipitate feeling upon certain subjects. One of these was slavery. It was much in the thoughts of Euripides; he even wrote a whole play, the *Alexander*, on this question so vital to ancient society. If it be asked what he actually did for the slave, the answer is that he treated him as an individual with a personality, not as a chattel or even as the member of a class. It is the denial

of personality that is the fundamental wrong done to the slave, but the slaves in Euripides are studied in the same way as the free. It may be—it is not certain—that Plato would have abolished slavery; but Plato never shows any interest in slaves. When later Greek philosophers condemn slavery, as most of them do, it is not Plato they quote but Euripides.

Again, the position of women in Athens was anomalous. They were not regarded as in any way the equals of men; they were excluded from all the respectable professions and denied education. Nothing in Euripides struck his contemporaries so much as his attitude toward women. He seems to have been regarded in some quarters as a woman hater. Nowadays there is more danger of his being regarded as a feminist. The truth is that he was neither. He merely tried to understand women exactly as he tried to understand men. He does not idealize them; he pays them the higher compliment of taking them as he finds them. He has in consequence many hard and disillusionizing things to say about women-and it is often women who are made to say them--which no doubt hurt the feelings of those, including even Pericles, who held the view that women should be nicely spoken of but kept in their places. But Euripides utterly rejects this attitude. There is no doubt that he was indignant at the way women as a whole were treated by men; in one or two plays (notably the *Medea*) something like a sex war is proclaimed. At the same time he has a strong sense of their difference from men. The women in Euripides often puzzle the men, although the men do not seem to puzzle the women. What he did for them was to give them a chance to be themselves, whether good or bad, and not what men wanted them to be. There was now a woman question.

Euripides is a poet and there is consequently no use in looking to him for a systematic social or political philosophy. He is merely, it might be said, a protesting voice. But that voice was so eloquent and in the main so just that it more than any other single force created a new conscience among thinking men about such abuses as slavery, the oppression of women and the "rights" of conquest. No ancient poet except Homer is so much quoted by succeeding writers as Euripides; what he said was, in the modern phrase, "unforgettable." In that lies his sufficient importance.

J. A. K. Thomson

Consult: Delcourt, Marie, La vie d'Euripide (Paris

1930); Murray, Gilbert, Introduction to his Euripides (6th ed. London 1915) p. xix-lxviii, and Euripides and His Age (London 1913); Appleton, R. B., Euripides the Idealist (London 1927); Masqueray, P., Euripide et ses idées (Paris 1908); Wilamowitz-Moellendorff, U. von, Introduction to his edition of Euripides' Herakles, 2 vols. (Berlin 1889) vol. i; Schwartz, E., "Thukydides und Euripides" in his Charakterköpfe aus der antiken Literatur, 2 vols. (3rd ed. Leipsic 1911-12) vol. i, p. 24-46; Neserius, P. G., "The Social Idealism of Euripides" in South Atlantic Quarterly, vol. xxvii (1928) 247-63.

EUROPEANIZATION. The term Europeanization is intended to express the effects on Asiatic, American and African cultures and civilizations of permeation by the peculiar social system set up in modern Europe as a consequence of the classical Renaissance, the Protestant Reformation and the industrial revolution. Europeanization may be expressed politically by imposing the idea of democracy, in the sense of parliamentary and party government, or of sovereignty, in the sense of suppression or subordination of all governmental organs to the sovereign state, or of nationality, by creating a semireligious solidarity in support of that sovereignty. It may be expressed economically by imposing ideas of individualistic capitalism, competition and control on communities enjoying more elaborate and equitable, but less productive and progressive, collectivist or communal civilizations; or industrially by substituting the factory and the foundry for the hand loom and home craft. It may be expressed in terms of education by convincing other continents of the advisability of acquiring attainments in European science to their material or even moral advantage, or by exposing the discipline of tribal tradition and training to dissipation by the gospel of the missionary, the goods of the trader and the good intentions of the administrator.

The effect of Europeanization on Asia has been, is being and will be very different in its course and in its consequences from its effects on the Americas and on Africa. Moreover its past and its possibilities in Asia are at the moment of much greater importance to the world than in the other continents. Whereas the tribal and communal cultures and civilizations of Africa are already dominated and will at last be destroyed by the impact of European individualism and industrialism, and whereas those of North and South America are similarly doomed by the impact of Anglo-Saxon colonization and by the permeation of Latin commercialization, in Asia, on the contrary, there has always been

a reciprocating ebb and flow between the individualism and industrialism, the commercialism and capitalism, of Christian civilization on the one hand and on the other the collectivism and communism, the militarism and mysticism of Islam or of Buddha. And while the alternatives presented to the American Indians and to the African Negroes or Arabs or Berbers have been Europeanization or extermination, these alternatives do not face the Asiatics.

The first Europeanization of Asia appears to have been effected by the Aryan stock in an easterly drift into Persia and India that began in the stone age and continued until the civilizations of Egypt, Babylonia, Persia and Greece reported it in reliable records. This Europeanization can also be discerned in early political treatises like the prophecies of the Old Testament and in the data provided by archaeological research. The excavations at Ur in Mesopotamia and at Sarun in India suggest that it was the invasion of an ancient and artistic culture by conquerors with a less complex, more competitive, culture. The last waves of this early Europeanization in the conquest of Egypt, Babylon and northern India were the invasions by the Aryan Persians under Cyrus (549-529 B.C.) and that by the Aryan Greeks and Macedonians under Alexander two centuries later. Even at this early date, before modern society and modern science had given European civilization its present practical characteristics, the fundamental and philosophic differences between the two continental cultures were clearly marked. The essentials of modern Europeanization may be found in the scientific Greek culture with its self-contained city-states in continuous conflict with one another and with its religion of individualism and nationalism, just as the elements of the Asiatic civilizations and social systems of last century may be found in the Asiatic empires of that age. It is not a mere coincidence that the philosophies and politics first imposed on the Asiatic empires in the present period of Europeanization are inspired by the ideas of Plato and Aristotle and by the institutions of Attic and Aegean civilizations.

The end of this epoch of Europeanization came with the wars between the Eurasian empires of Darius and Xerxes under Aryan leadership and the European city-states of the Aryan Greeks. Not for the last time did the eastward tide of Europeanization divide between Eurasian and European movements, and after some fluctuations the European recede in a westward

ebb. The conquests of Alexander the Great (336-323 B.C.), which extended a Hellenic empire to the frontiers of the empire of Darius and established the ideal of a world state, were a last European offensive that could not be consolidated. The Roman Empire in Asia, from 189 B.C. to 330 A.D., was never more than an offensive defensive, while its successors, the Greco-Byzantine Empire from 330 to 1204, the Latin Empire from 1204 to 1261 and the Greek Empire from 1261 to 1453, fought with forlorn hope against Asiatic ascendancy. The experiments in Europeanization of this epoch indicate by their very want of vitality a decline in the dominance of Europe. The feudal states set up in eastern Europe and western Asia as a result of the Latin conquest and the crusades were even more ephemeral than the Hellenistic states set up as a result of the conquests of Alexander. The tide was turning in favor of Asia.

As this article deals with Europeanization and as the Asiatification of Europe was a mere matter of conquest involving little colonization, only the main lines of the latter need be noted. Owing to the defense of the central bridge between Europe and Asia by the Byzantine Empire at Constantinople, which had become the citadel of science and civilization, the westward flow of the Asiatic hosts was diverted southward through north Africa into Spain and so into France and northward through Russia into the Balkans and as far as the Baltic. The later Mongolian nomad offensive was the least important, although it has left the most lasting influence—an influence largely responsible for the recent reannexation of this region to Asia. On the other hand, the Asiatification of north Africa and the Iberian Peninsula by the Semitic races under the impulse of Islam and the impetus of Arab conquest constitutes the main current of the history of civilization in the early Middle Ages. It reached its highest point in northern France, when it was stopped at Tours in 732 by Charles Martel and the Franks. By the time Constantinople fell in 1453 both these flanking offensives were in retreat; the later central advance of Asia from Constantinople into Europe was finally checked at Vienna in 1683 by Sobieski and the Poles. Thereupon the tide turned in favor of Europe, and there began the epoch of Europeanization which extended through the eighteenth and nineteenth centuries and into the twentieth century and which so established itself in history and politics as to be generally accepted as a permanent aspect of world progress,

This it most certainly has not been. One reason why the Asiatic Arabs, Turks and Kurds overran Europe is because their society was more civilized than that of Europe outside its two culture centers, the Eastern Empire on the Bosporus and the Western Empire in northern Italy and southern Germany. Asia had a larger legacy of the learning of the Greeks, Egyptians and Babylonians. It had an efficient and equitable organization compared to which the western feudal system was crude and cruel. It had a religious solidarity and social relationship in Islam with far less of schism and civil strife than had the state churches. Even as late as the reign of Elizabeth a commission was sent from England to study the system and success of Ottoman justice. The introduction in war of light cavalry, heavy artillery and brass bands is due to Turkish warfare, just as Alexander borrowed from Asia his Macedonian phalanx.

The last advance of Europe into Asia was facilitated by the degeneration of the ruling class of the Ottoman Empire, which became a mere corrupt clique in Constantinople and lost its representative relationship first to the peoples— Turks, Greeks, Slavs, Arabs and Armenians —next to certain regions and then to the Islamic and Christian religions. The "eastern question," which was the political phase of the problem of Europeanization, consisted in the conflict of the modern European scientific ideas and social institutions with the mediaeval Islamic state, which through the Ottoman Empire at Constantinople defended the ancient cultures, customs and codes of Asia much as the Byzantine Empire there had defended the ancient civilization of Europe against Asiatic innovation. Just as the divisions of Asia had delayed the fall of the Byzantine Empire, so the division of Europe between competitive national empires delayed the fall of the Ottoman Empire of the caliph sultan. All projects for partitioning the Ottoman Empire failed, from the one attempted in the eighteenth century by Catherine II and Pitt, when only the Russians and the British were involved, and that of the nineteenth century initiated by the czar Nicholas 1, down to that attempted after the World War by the French, British and Italians. All such Europeanizations by conquest were hampered by the competitive imperialism of the Great Powers and were eventually checked by the nationalism of the constituent races. The successive efforts by each of the empires to establish and exploit the Ottoman Empire had as little success. The

French during the Napoleonic era became the patrons, professors and protectors of the Porte. The English under Stratford Canning tried to reconstruct the empire with their panacea of parliamentary party government and provincial autonomies. Later the Germans took on the task until the World War. All failed. The Islamic state in eastern Europe and western Asia was impenetrable to Europeanization by imperialism, mainly because it had already been permeated by European nationalism. The European empires were not prepared to further a partition of the empire among its constituent races as sovereign states, although at first this policy had been favored by the imperial patrons of those races, principally by Russia. The Ottoman Empire during the latter part of the last century was accordingly artificially maintained by European diplomacy to check the extension into Asia of Europeanization by nationalism.

Meantime imperialistic Europeanization was proceeding apace by two movements encircling Asia, one to the north, the other to the south. The Russian Empire, consisting of Asiatic communities Europeanized forcibly by Peter the Great, was extended eastward to the Pacific. It then advanced southward along a transcontinental front behind the dorsal ridge of Asia and over it, across the Caucasus into Central Asia and Persia and across the Altai and their related highlands into Mongolia, Manchuria and the Vladivostok region. Meanwhile the maritime empires of the British and French in the eightcenth century, following the lead and taking the place of the Portuguese in the sixteenth, and the Dutch in the seventeenth, effected settlements at all likely bases for commerce or colonization. In the course of the nineteenth century the British pushed their front forward into contact with that of the Russians in Persia, Afghanistan and central Asia, while China lay as a meaty bone of contention between the British in India, Hongkong and the treaty ports; the French in Cochin China; the Germans in Shantung; the Eurasian empires of Russia and Japan; and the Euramerican empire of the United States in the Pacific.

The sudden and sensational Europeanization of the Japanese, the most easterly and exclusive of the Asiatic races, was the carliest and most effective evidence that a country which would resist Europeanization prosecuted by imperialism that was a menace to popular liberties would rush into it when presented as nationalism. The Japanese, exposed in their islands to the pene-

tration of Europeanization not only directly and despotically from Europe but also indirectly and democratically through the United States, with an alien Asiatic culture and civilization borrowed from China, took over European civilization with ease and expedition. Within a generation Japan was not only a Europeanized nation but was competing with the European empires for expansion into Chinese Asia, seeking not merely commercial openings but the colonial outlets which were vital to its overflowing, underfed population. This westward expansion of the Japanese inevitably entailed a collision with the eastward expansion of the Russians, a conflict in which the British supported the islanders against their Russian rival, whose advance southward in Persia and central Asia menaced the pax britannica in India.

The defeat of an Asiatic China by a Europeanized and expansionist Japan in the Sino-Japanese war of 1894 satisfied all progressive Asiatics as to the practical advantages of European armaments. The disastrous defeat of the Russian imperial colossus, a Eurasian power, European in its capitalistic dominance but Asiatic in its corrupt decadence, by the new Japanese nation, European in its scientific efficiency although Asiatic in its collectivist energies, gave an impulse toward social and national Europeanization throughout Asia. Even before the World War this movement strained to the utmost the diplomatic dykes by which the powers were striving to dam back nationalism from overflow into Asia. For Asia had by the beginning of the twentieth century realized that the only defense against an imperialistic Europeanization which would exploit Asiatic peoples in the interest of European plutocracy was a nationalistic Europeanization that would establish each Asiatic people on an equality of military, monetary and mental advantage. The results of this voluntary Europeanization, whether national or social, may be distinguished under the term Eurasian.

The realization that each potential Asiatic people must stand on its own feet if it was to present a front against Europe was the death sentence of such Asiatic international systems as that of the Islamic state and the Ottoman Empire. In the previous century each subject race of the Ottoman Empire in Europe that had had any regional or regimental qualification as a nation had successfully, with or without assistance, seceded as a separate nation; Hungary, Serbia, Greece, Rumania and Bulgaria had been

Europeanized nationalistically. There remained only the Turks in Macedonia and Asia Minor, who until the revolution of 1908 had renounced for themselves any nationalistic reconstruction in the manner of Europe in order to maintain the international imperial institutions of the Islamic state. These institutions consisted chiefly of the caliphate, which insured the solidarity of all Moslems; the Christian communities, which by assuring a modicum of religious and racial autonomy to the minorities might have associated them in the imperial system; and the Capitulations, which even under the Byzantine Empire secured the support of foreign commerce, colonies and capital by more than sufficient extraterritorial establishments. But neither the two-thousand-year old international structure for the common interests of the two continents nor the thirteen-hundred-year old Islamic state for the liberty, equality and fraternity of all Moslems could be maintained against the momentum of nationalistic Europeanization—mined as the Islamic state had already been by the mercantilism and the militarism of imperialistic Europeanization. This soon became evident to the Young Turks through the complete failure of their effort to revitalize the empire with a machinery of central parliamentary party government. This effort to Europeanize an Asiatic empire was defeated by the east European empires which at once foreclosed their mortgages on border provinces-Austria in Bosnia-Herzogovina and Italy in Tripoli—while the new east European nations coalesced in the Balkan War of 1912 in order to partition the Ottoman Empire in Europe among themselves. But for their falling out over the spoils in the second Balkan War, the Turks would have been driven across the straits; as it was they retained only a precarious hold in Thrace.

The Ottoman Empire went down in the crash of the Great War along with the Austrian, Russian and German empires. The British, French and Italians, after efforts to create a joint imperial control of western Asia and a restored Greek Empire, finally evacuated Constantinople and Asia Minor and allowed long delayed developments to take their course. Nationalism swept through Asia Minor eastward, breaking up the Islamic state. There ensued a radical revolution of the institutions, ideals and intimate habits of the inhabitants of Asia Minor, compared to which the French Revolution was merely a change of rulers and the Russian revolution only a change of regime. At the same time

the transference of populations set in motion by wars of extermination and sanctioned by the Treaty of Lausanne converted at untold cost this western corner of the Asiatic continent from a hotchpotch of races and religions into a homogeneous Turkish homeland. The Kurds, the only remaining minority, were repressed after more than one uprising; and there emerged within ten years a new Turkish nation as completely Europeanized in its conditions of life as its neighbors the Bulgars. Superficially Europe had annexed Asia Minor, but substantially Asia had driven Europe from Asia Minor with its own weapons.

In the meantime nationalist Europeanization had swept eastward into Persia and Afghanistan, where it has had much the same effect, although in the latter and to a less extent in the former there have been more or less successful reactions that have mitigated its severity. In Turkey under Mustafa Kemal Europeanization proceeds under a pressure that outpaces even Peter the Great's Europeanization of Russia; Persia under King Riza Pahlavi has a more moderate momentum; while in Afghanistan the revolution has been suspended by the failure in 1929 of the revolutionary and pro-Russian king Amanullah and his replacement by a pro-British reformer, King Nadir. After the failure of the Afghan invasion in 1919 the nationalist movement in India forced to a livelier functioning the antiquated machinery by which the British are slowly elaborating autonomous federal institutions for their immense dependency. To the north the new Soviet government granted autonomy to its subject races. In China a general movement of nationalism almost swept that quarter of the world into a Europeanized unification.

The forces making for the Europeanization of the East have been separated into two conflicting camps. One is the old imperialistic camp, in which the American, British and other mercantile maritime powers continue their efforts to educate Asiatic peoples in their individualistic philosophies and their industrial systems, to exploit them in the interest of their capital, commerce and colonies and to extend to native nationalists or socialists only such self-determination as the imperialists may determine. The other camp is that controlled by the Russians, who endeavor to educate the peoples of Asia in the philosophy of communism and to emancipate them from all other domination, in the confidence that conformity with the creed and constitutions of communism will be sufficient in

itself to secure their solidarity with a Soviet world system. As a result of their bold experiments and bitter experiences with their own soviets the Russians are convinced that not only in industrial but also, although to a lesser extent, in agricultural communities the main movements for progress are today nationalism and socialism and that the latter can be made the stronger of the two. In other words, they hold that Europeanization through nationalism can be supported and eventually supplanted by socialism. Europeanization is now therefore proceeding from two different polities by two conflicting policies, with a fighting front between them drawn across Asia from west to east. The course of post-war history in Asia and of the Europeanization which has transformed the east to a changeling of Europe is found in the fluctuations of these two fronts. The first successes of the Communists were secured by their complete concessions to nationalist aspirations in the buffer states of Turkey, Persia and Afghanistan and in China. Their subsequent setbacks were due to their overconfidence in the socialist factor, which led them to press the pace unduly, resulting in the secession from their system of Turkey and Persia and in the separation from it of Afghanistan and China by the capitalists. But besides this vertical geographic and national front there is a horizontal and social front. For obviously capitalist Europeanization appeals most to the princes and to the propertied classes, while communist Europeanization appeals most to the proletariat and peasantry. But for these divisions the communist Europeanization of Asia would be inevitable. If communist philosophies and policies did not mean the end of all propertied classes in power throughout Asia as elsewhere, Asia would by now have been Europeanized according to the Russian model. Just as the imperialist Europeanization of mandated territories like Irak or Syria must be distinguished from the nationalistic Europeanization of Japan or Turkey, so Asiatic Europeanizations based on nationalism, as in Japan, must be distinguished from those based on socialism, as in Mongolia.

The traditional conception of Europeanization as based on the history of the last century must be revised. The epoch of Europeanization in terms of the pressure of European colonial expansion, of capitalist exploitation and of Christian cultural education is rapidly passing. The future Europeanization of Asia will proceed from Asia itself, under pressure of nationalism

and communism, both of which will tend to end its dependence on Europe and possibly eventually to establish its dominance over Europe. Asiatic peoples that can combine these two forces will become thereby not only impervious to but imperious toward European peoples whose nationalism is wasting itself in armaments and whose socialism is wilting in internecine antagonisms. In short, Europeanization in the future will not mean the political or even the economic domination of Asiatic by European nations. The flanking movement by which Asia is encircling Europe to the north, and which counterbalances the flanking movement by which Europe has encircled Asia to the south, may be the first advance of Asia in a new pendulum swing of Asiatic ascendancy.

This analysis of Europeanization explains not only the general alignments of the balance of power in terms of world movements but also some curious anomalies, such as why the most prompt and productive of Europeanizations took place in the most easterly of the Asiatic peoples, the Japanese, and conversely why the latest and least promising has been that of the westernmost peoples, the Moroccans. It also explains why the only place where the old Ottoman society survives is in the heart of Europe, Bosnia, where it has been preserved by European imperialist rivalries; why the liveliest centers of communism are in the citadels of western imperialism, the treaty ports and the East Indies; and why imperialist Europeanization has failed to push over the Eurasian Soviet system in the West although it has pushed it back in the East.

Not only Asiatics but also Africans and, so far as they survive, American natives possess cultures and social constitutions that are more ancient than those of Europe and better adapted to the pursuit of happiness in their communities, especially in the climates and countries concerned. They regard the supersession of these by the simple social systems of Europe much as Europeans regard the subversion of the Roman or the Byzantine by simpler Asiatic societies. The Asiatics have always had little to learn from the Europeans in ethical and religious matters and could teach them much in matters of social morality. It seems probable that the period of direct educational Europeanization passed with the last century and with such successes as the education of the future leaders of the Near East by institutions like Robert College. Education of Asiatics in Europe has lost some of its earlier disadvantages, one of which is said to have led

Midhat Pasha to complain: "Je vous envoie mes jeunes gens pour être civilisés, ils me reviennent syphilisés." Asia now educates itself in Europe and for every European who has a knowledge of Asiatic languages, literature or life there are hundreds of Asiatics who have learned not only the strong but the weak points of European civilization and culture. Competition in educational Europeanization has been transferred from Asiatic colleges to European universities. America, Eurasia and Europe, New York, Moscow and Paris, now compete for the responsibility for teaching the young of Asia and Africa how to shoot-and whom to shoot. The Christian missions are making no more progress abroad than before and are enlisting even less support at home, while the propagandists of the communist creed are undoubtedly a most formidable factor making for Eurasian education. As against this there is the individualistic education in competition, capitalism and scientific production provided by the impact of European industrialism on the arts and crafts of the East. So far this education has been mainly destructive, and it has therefore a temporary and tactical advantage over the more constructive and conscious propaganda of communism.

In North America the earliest epoch of Europeanization by extermination so simplified matters that North America is more European than Europe. For it is evolving a type of citizen representative of all the races of Europe and a type of society that realizes the best and the worst of the European individualistic industrial system. This fact and its geographic position make it likely that the American empire will replace the British Empire as the leading exponent of exploitative and educative Europeanization of the East. In this role it has been up to the present retarded by its reluctance to assume responsibilities and by rivalry with Japan, also a protagonist of capitalism and the competitive system in Asia. In its dependencies, notably the Philippines, and in its domestic Negro problem America has so far made all the initial errors committed by the British with inevitably the same results in friction and frustration. Nevertheless in the associated activities of the Americans, British and Japanese lies the only prospect of preventing the Eurasianizing of Asia into a communist confederation.

In South America, however, an entirely different Europeanization is slowly creating a new South American race out of south European and South American peoples and will doubtless contribute a new culture of art and literature after the present effects of European impacts have been forgotten. There Europeanization is producing new life from seed; elsewhere Europeanization has been effected by grafts that cannot even prolong the life of the old stock.

In Africa Europeanization still works by the extermination of the weak peoples, such as the Hottentots, or of the warlike peoples, such as the Hadendoa. European and American disease, drink and drugs cause even more deadly and direct destruction than the dissolution of tribal tradition and communal custom, which is no less fatal for being philanthropic.

The earliest epoch of Europeanization was one of militarist conquest and mass colonization characterized by the expulsion of the native races. But the regions where this was possible were restricted and lay rather to the west than to the east. With the ninetcenth century there came in the East an epoch in which the Europeans resembled concessionaires rather than crusaders. The European presented himself indeed in many friendly guises as mandatory, missionary, merchant and money lender. It was the last of these, the money lender, who was responsible for the most significant political consequences, consequences that produced a Europeanization not of expulsion but of exploitation of peoples, from the Morocco Sultanate in the west to the Chinese Empire in the cast. The Europeanizer adopted the money lender's policy of granting loans to the successor of the self-made man for his youthful dissipations and then foreclosing on his estates before he came to years of discretion. For example, a century ago in Turkey Mahmud II, who was half French, and in Egypt Mohammed Ali, an Albanian, broke up the ancient Asiatic system and Europeanized their estates. Their inferior successors, however, squandered not only their accumulations but also the apparently unlimited resources of European credit offered them at usurious rates. The sultans Abdul Mejid and Abdul Aziz in Turkey, the pashas Mohammed Said and Ismail in Egypt, the beys Ahmed and Sadok in Tunis, pawned their realms to Europeans and only too late discovered that British or French controllers and tax collectors were installed. Such control, the modern form of conquest, led in the case of the weaker states to armed occupation, as in Tunis by the French in 1881 and in Egypt by the British in 1882. Such occupation and imperialist Europeanization was delayed in Turkey and Morocco by the able rulers Abdul Hamid II

(1876–1908) and Muley Hassan (1873–94) and was eventually ended in Turkey and Egypt by post-war nationalist risings and the Eurasian eruption. Turkey has altogether freed itself from the political servitudes of the Ottoman debt administration and almost freed itself from its financial service. In other countries, such as Egypt, financial contracts of this kind are still respected, although the political controls based on them have been repudiated. In China the foreign control of the customs revenue for the service of foreign loans is one of the most controversial issues in the emancipation of the Nationalist government.

Another Europeanizing procedure that produced a European imperialist and international control of eastern states has been the independent status acquired by European colonies in the East through judicial, commercial and eventually political capitulations. These exterritorial establishments do not, as is generally assumed, owe their origin to the inadequacies, inequities and improbities of the eastern judicial systems. They antedate in western Asia the fall of the Byzantine Empire, the original Ottoman Capitulations being reproductions of those accorded by the Byzantine Empire to the Genoese and Venetian merchants. Similar exterritorial jurisdictions existed everywhere in Europe itselfas, for example, those accorded in London to the Hanse-and were based on a principle of law more equitable than the strict territorial jurisdictions subsequently established by national sovereignties. They were juridically akin to the special jurisdictions and constitutions enjoyed by the religious and racial minorities. In the period of European dominance over eastern decadence that began with the eighteenth century, however, the powerful colonics of European bankers and traders engaged in cutthroat competition for concessions and controls and, backed by their imperialist governments, rapidly developed these regimes of exemption and exception into a means of controlling all native legislation, litigation, finance and commerce. In a few rare instances, especially in the judicial and financial administrations, this power of intervention was used for progress and reform. But in most cases, even when there was no conservative or coercive intention, the rivalries of the respective powers proved irreconcilable in respect to proposed changes. If the life of the foreign colonies as an example of Europeanized civilized comfort was not without educational effect, their influence was even greater in inciting eastern peoples so to Europeanize themselves as to escape from a foreign interference that was all the more intolerable to them because it was so intimate. Eurasian Europeanized states such as Japan, Turkey and Persia entirely emancipated themselves from these servitudes but the latter are still maintained in the north African and Central American states and in China. In cases where they have been abolished too abruptly in centers of international commerce, as in Constantinople, both foreign colonies and commerce have suffered severely and Europeanization even of the most unexceptionable type has been prejudiced.

Next to the commerce and capitulations of the foreign colonies there comes, as a Europeanizing factor, their culture and, associated with it, the Christian missions and the colonial administrators. These while superficially in conflict with one another nevertheless cooperate substantially in Europeanization by education, a procedure which, now that executive control and even exploitation are passing, is the most prominent and most promising. Even when executive control and exploitation were at their height, there was always an educative element. The Spanish conquistador in the West Indies or the Portuguese crusader in the East expressed the most moral motives for extermination or enslavement. Later Dutch, British and French Europeanizations in a milder and less mediaeval age and with a less missionary mandate helped to transform Europeanization from enslavement to education, although it is questionable whether their education is not as deadly to the souls of the Asiatic and American races as enslavement was to their bodies. In either case such Europeanization defeated itself by exciting rebellion. Spanish and Portuguese domination was overthrown, in spite of the devoted educational and spiritual missionizing of the Jesuits, by an absorption of the ruling race in a miscegenation that may have a future of its own. The Anglo-Saxon attempt to educate Asia in the principles of a creed which it preached but did not practise and of constitutions which it worshiped but could not work has produced such rebellions as that of the British educated babus in India, who prosecute their Eurasian emancipation of India from the British by preaching the immediate and unmitigated introduction of British industrial civilization and political institutions.

The educational epoch of Europeanization has passed through phases. The role of the Catholic missionaries in the early epoch of con-

quest was reproduced later both by Protestant missions and by political proconsuls like Stratford Canning and Cromer, Henry Lawrence and Charles George ("Chinese") Gordon. With the new imperialism of the end of the last century there appeared a less sincere and more sanctimonious Anglo-Saxon attitude in the "white man's burden" of Kipling, "the yellow peril" of Wilhelm II and the A and B mandates of the Peace Conference. It is this later assumption of a moral supremacy and a mental superiority that has already raised Asia in revolt and that will some day raise Africa. But with the present century prospects of a pacific Eurafrican Europeanization of Africa have improved, for the same ideas and interests that have caused twentieth century imperialism to attempt to conserve the existing customs and constitutions of Asia have also caused African administrators to try to revitalize African tribal and communal societies rather than revolutionize them. Such Eurafrican experiments as those of the British in Nigeria or the Sudan have so far a vitality and virtue that are wanting in the more revolutionary educative efforts of Americans in Liberia or the more exploitative enterprises of Belgians in the Congo. The Europeanization of central Africa is in any case in its earliest stages.

The Europeanization of north Africa is still in a first phase of conquest which has been prolonged for over a century. The latest and probably the last of these conquests was that of the Riff tribes of Morocco Berbers who rose against, and for years resisted, the whole force of France and Spain. From this there emerges a remarkable difference in the development of Europeanization in northern Africa from that in western Asia. The Berber tribes of north Africa, a virile and versatile stock of European type, whose development has been delayed by Asiatic imperialism and Islamic institutions, have so far been partitioned into Spanish, French and Italian protectorates under military regimes. Since the French finally broke the piratical power of Algiers in 1830 the revolts of the Berber tribes, from that of Abd-el-Kader in the years from 1836 to 1847 to that of Abd-el-Krim nearly a century later, have been crushed. One of the last of the Eurasian Europeanizations will be that of Morocco, Algiers and Tunis by a Berber nationalist movement; and it may in a future century in combination with the Eurasian expansion of the Soviet system provide the southern claw of an encirclement like that which in the early Middle Ages nearly pinched out a

decadent and undeveloped European civilization.

Tripoli and Arabia represent regions, races and regimes wholly recalcitrant to Europeanization whether imperialist, nationalist or socialist. The Arab tribes of the Tripolitan Sahara, as organized under the regime of the Senoussi, have been successfully subdued by French, British and Italian imperialism; while the far more formidable Arabs of the homelands in the Arabian deserts, now all dominated by the Wahabi sect, have never yet been subdued. The descrts of Arabia and the plateau of Tibet are therefore now the only regions of Asia which so far have excluded all Europeanization of every sort and sense. If Asia should ever seek a more satisfying solution of its future than the Eurasian nationalist-socialist systems of Japan or Russia it will find it in the church militant of the Arab or in the church mystical of the Buddhist. But neither Europeanism nor Eurasianism has anything to say to the soul of Asia, although the spiritual schism between them accounts for such developments as the divergence between the Swaraj and the Swadeshi that is delaying the emancipation of India, or between the southern Kuomintang and the northern Kuomintang that has delayed the evolution of China.

The Europeanization of Egypt and Syria can be classed together. The first is proceeding under British, the latter under French, auspices. The peculiarity in both cases is that these peoples have now at least acquired a spirit of nationality almost a century after they achieved or might have achieved the status of nations. Mohammed Ali not only organized Egypt a century ago as a militarist nation that fought both Arabs and Turks on land and sea on equal terms and that would have established an Egyptian empire were it not for foreign intervention, but this Albanian adventurer and acolyte of Jeremy Bentham also organized it as a mercantilist community on a basis of state ownership and state trading. Without infringing Islamic institutions he anticipated most of the collectivist constructions of the Soviet system. These early Eurasian experiments, although they did not survive his successors, are significant of what may at some later date supervene. At present Egypt's nationalistic Europeanization is being delayed not so much by the relics of British occupation as by the autocratic aspirations of the present king and his factional fight with the nationalist organization of the Wafd. The Sudan, which has become diplomatically and administratively involved in the controversy between the British Empire and the Egyptian nation, really belongs to the Europeanization enterprises of central and southern Africa and should be classed with Nigeria or Uganda. In Syria the far more bitter and bloody struggle of the natives against the French occupation seems to be rapidly consolidating the rival races, religions and the regional autonomies which they wrested from the Turks and have now wrenched from the French into a Syrian nationalist movement of a Eurasian type. But on the other hand the future of Syria is seen by some rather as lying within the range of a purely Asiatic Arab ascendancy.

The possibility of an Arab ascendancy is the point de mire of the mandatory policy of the western powers in their Europeanizing enterprises in this region. It is easy to ascribe more conscious constructiveness to imperialist policy than really exists, especially when it is British. But whether British policy in Palestine and Irak be intelligent or merely instinctive, in its aspect and probably in its aspiration it is an effort to Europeanize the sedentary Arabs and through them the tribal Arabs of the desert by giving progress in the north of the peninsula a western orientation and by providing an opening for the infiltration of western ideas and institutions into the south. For this purpose two conductive canals have been constructed, the one the establishment in Palestine of the Jews, who by their Semitic race and monotheistic religion are akin to the Arabs, and the other the erection in the fertile plains of Irak of a state of Syrian and Mesopotamian Arabs receptive of western civilization. If these are protected from the West against conquest by the recalcitrant and reactionary Arabs of the desert, they may in a generation or so develop sufficient population and power to form a self-supporting western culture center for the whole race. This procedure would promise well but for two impediments. One is the race rivalry that has arisen in Palestine between the majority of Arabs, who regard that region as an essential frontage for their homeland, and the minority of Zionist immigrants, who regard it as the "promised land" for their new national home—a situation which has been complicated by the confusion between promises to Jews and Arabs contracted under pressure of war. The other impediment is the schism between the Eurasian Iraki and the Asiatic Wahabi, which is getting worse rather than better. If British protection were withdrawn, this would result in Wahabiism Asiatifying by force the

officials. After the death of Sun Yat-sen this nationalist-socialist Eurasian movement, led by communist propagandists from Moscow, spread rapidly northward seeking contact with the reformist-militarist organization of Feng, the "Christian general," who was supported by Soviet communism across the Soviet Republic of Mongolia. So rapidly did these two movements, representing the very different mentalities and methods of north and south China, overrun the interior of China and meet on the Yangtze at Hankow that a Eurasianizing of China under Soviet auspices that would push Europeanizing imperialism out of China seemed only a matter of months. But two counteractions combined first to check and finally to choke this movement. In the north Manchuria, militarized under Chang Tso-lin, was supported by the Japanese in effective operations on the northern flank of nationalism; while in the south a British reenforcement of the Shanghai garrison, analogous to the military intervention against Soviet Russia, effectively enlisted the property owners of central China against the communists. The result was the establishment of a bourgeois democratic government at Nanking and the secession from the southern nationalist-socialist movement of all its middle class and moderate elements. In the subsequent conflict between this constitutionalist center and the communist south and north, Nanking established its control over Peiping and Canton, but the latter withdrew from the coalition in 1931. That control has never been imposed on the tuchuns, or provincial governors, and is still imperiled by communist movements in the north and south.

During this period the industrial Europeanization of China has been proceeding rapidly. There are already about a thousand modern power factories and several thousands of other factories. Conditions in these are universally almost as bad as can be, although they are best in the Japanese and other foreign owned enterprises. Such social legislation as exists is not enforced. Work is generally on a double shift of twelve hours without a rest day and reaches fourteen hours a day in the Wuhan Steel Works. Women and children are practically unprotected and flogging is still practised. Health and housing conditions are abominable. Consequently the early success of communism is not surprising, nor the later failure of nationalism to combine and control China after losing its socialist support. Certainly communist propagandists could never have revolutionized the social system of

China to the extent they have, had it not already been shaken by capitalism.

Educational Europeanization has so far mainly affected the masses through communist propaganda and only to a very much less extent through Christian preaching. The leaders of the new nation seem, with a few prominent exceptions, to be Euramerican and capitalist in their education, while the lieutenants, drawn from the students and intellectuals, are mainly Eurasian and communist. Native education is embryonic and chaotic. Foreign schools and the commercial press of Shanghai are the main channels of European education, while both northern and southern Communists use their military cadres and corps for a very extensive and effective Eurasian education in the principles of Sun Yat-sen and Lenin.

In China the prospect of success in the Asianist movement for reviving and revitalizing the ancient culture and civilization is uncertain. As yet there is no Asian prophet like Gandhi and no popular appeal like Swadeshi. China has its philosophers, some of them known to Europe, but young China goes for its philosophy of life to Bertrand Russell and John Dewey or to Karl Marx and Lenin rather than to Buddha and Confucius. But it is quite possible that after the period of Europeanization from England and America that is now ending and after the period of Eurasianizing from either Japan or Russia that is now beginning there will come a period of Asian renaissance from the monasteries and mysticism of Tibet.

In comparison with the Europeanized evolutions of India and China, which affect almost half the human race, those of intermediate regions like Korea, Siam, Cochin China and the Malayan islands of the Pacific, however interesting in themselves, are of a different order of importance. The Malays have given a communist character to their resistance against imperialist Europeanization by the Dutch. The Pacific populations intermediate between India and China are seeking solutions for a reconciliation of their Asiatic faiths with the forms of scientific civilization. The Burmese are tending to be drawn into association with Calcutta Nationalists against the British, while the Anamese and Tonkinese are being drawn into association with the Canton Communists against the French. The Philippines present to the Americans, on a very small scale and in a very simple scheme, the same fundamental problems of Europeanization as the East Indies have produced for the

British. The Pacific islanders, whether Melanesian savages recalcitrant to all the benefits of European civilization or Polynesian societies only too receptive to its abuses, seem to have no more important future than that with which Europeanization has requited the hostility of Hurons, the hospitality of Hawaiians or the harmlessness of Hottentots. The position of the pacific and progressive Koreans may be more promising. Their attempt to make a Tibet of Korea by massacring Christians as a reaction against European imperialism failed, as did their attempt in 1920 to make an Afghanistan of Korea by rising against the Eurasian imperialism of Japan. Under Japanese rule their country has improved its condition without losing its character, and it is only a question of time before they secure an adequate autonomy in a Eurasian East, whether capitalist or communist.

The lead taken by the Japanese in becoming the earliest example of Eurasian evolution has given these islanders the same political and economic hegemony in eastern Asia that a similar lead gave to the British islanders a century ago in western Europe. Japan has passed rapidly through the first phase of a nationalism expanding into an imperialism of conquest and colonization. In the last decade it has entered into the last phase, an imperialism of education and exploitation. The rapidity of this evolution is partly due to the failure of the Japanese, in this unlike the British, both as colonists of other regions and controllers of other races, although in military conquest, maritime commerce and mechanized civilization the Japanese are now inferior to none. The comparative failure of the Japanese to find an outlet for their surplus population by overflowing, like the Chinese, into all available lands has had the advantage of enabling them to undergo a more effective Eurasian evolution whose capitalist character counterbalances the communist Eurasianism of the Russians. The success of capitalist Europeanization in Japan is more highly developed or at least less hotly disputed than that of the collectivist experiments of its rival. For although European industrialization has not yet thoroughly permeated the core of Japanese society or indeed penetrated far from the coastal center, it has entirely Europeanized the whole surface of its civilization. The increase of power factories from about two thousand in 1896 to over forty-five thousand in 1928, the growth of the urban population to about thirty-five percent and the increase of the population as a whole by more than a half since

1880 have given Japan an international interest which is similar and scarcely second to that of the United Kingdom. And while it is dependent on the new Eurasia for the supply of its materials and the sale of its manufactures it is dependent on Euramerica for the monetary support that is as essential to a competitive capitalist system as munitions are to a campaign.

The ethical growth of Japan has kept pace with the economic. Social legislation has developed considerably since the war under pressure of labor organization and the fears of communism. It is now, broadly speaking, on a level with that of the United States and in some political respects, such as the emergence of a Labor party, is in advance of it. Education is still Euramerican, although the national attitude has become wholly Eurasian. Japan has faith in science and learning and follows them with efficiency, as is evidenced by an extremely high attendance in its schools. In this it has not been hampered by any ancient attachment to native Asiatic culture, for the national traditions, for example, bushido, are not characteristically Asiatic and can be adapted easily to a Eurasian or even Euramerican philosophy and procedure of life.

The answer to the question whether Asia will be Eurasianized by evolution under Euramerican auspices or by revolution under Russian authority must be sought in the maintenance of the basis of Japanese Europeanization in its Euramerican evolution. Nor are the prospects of an evolution such as would suit capitalistic civilization improved by a rivalry in the Atlantic between Americans and British that has led the latter to exchange an alliance with Japan for association with the United States or by a rivalry in the Pacific between the Americans and Japanese that has led the latter to rely on agreements with Russia.

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Sec: Conquest; Empire; Imperialism; Colonies; Industrial Revolution; Foreign Investment; Industrialism; Science; Missions; Near Eastern Problem; Egyptian Problem; Far Eastern Problem; Chinese Problem; Philippine Problem; Indian Question; Indian Problem, North American; Nationalism; Pan-Islamism; Pan-Turanism; Pan-Arabism; Communist Parties.

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EUSEBIUS OF CAESAREA (c. 265-340), church father and historian. Eusebius received most of his training in his native city from the priest Pamphilus and became bishop of Caesarea shortly after 313, the year in which the Edict of Milan granted toleration to the church. Believing that this edict marked the end of an era he conceived the idea of relating the stages through which Christianity had passed during the three centuries leading up to the conciliation. Thus he became the father of ecclesiastical history. Knowing his own limitations he made no effort to compose a harmonious and eloquent work like that of a Thucydides or a Tacitus. For him loropla consisted merely in the diligent selection and convenient classification of the relevant documents. His Ecclesiastical History (311, last ed. 324) is little more than an anthology of the texts which he gleaned from the

two rich Christian libraries at his disposal, those of Caesarea and Aelia. But as such, in spite of his misconceptions and his apologetic bias, it has rendered an immense service to later historians of Christianity, a service to which Bishop Lightfoot was the first to give full recognition. For sociologists also, the *History* is replete with information concerning the spirit and organization of early Christianity, the part played by women and the psychology of persecutions. Among Eusebius' other historical works is the Chronicle (303), a compendium of universal history which as translated, revised and continued by Sain. Jerome became a fundamental guide for mediaeval scholars and remains an indispensable source for modern historians of antiquity.

PIERRE DE LABRIOLLE

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EVANS, GEORGE HENRY (1805-56), American labor journalist and agrarian reformer. Evans came to the United States from England in 1820 and shortly thereafter was apprenticed to a printer. Together with his brother, Frederick William, he avidly studied the writings of Thomas Paine and other radicals and freethinkers. His brother later became a leader of the Shaker sect; but Evans, who was a man of action by temperament, turned instead to the labor movement. In the Workingman's Advocate, the

first important American labor journal, which he edited and published in New York from 1829 to 1837, he set forth as the solution of the labor problem the program of the agrarian movement for the equal division of all property, including land and capital. When the depression of 1837 practically wiped out the labor movement, Evans retired to a farm in New Jersey, taking his printing press with him; there he wrote the "History of the Origin and Progress of the Workingman's Party in New York," which was published in the Radical in 1842-43 and formulated anew his agrarian philosophy. When he returned to New York in 1844 he resumed publication of the Workingman's Advocate, in which he now preached a "new agrarianism." He still expounded the Paine-Jefferson theory of natural rights to the soil and the equal division of all land, but since he now considered capital a product of labor rather than a gift of nature he no longer believed in its equal division. Appreciating the difficulties of securing an equal distribution of land in the settled states Evans demonstrated his practical bent by concentrating on the public domain, advocating freedom of public lands, homestead exemption and land limitation and by thus laying the foundation for the homestead movement. He foresaw the nation wide effects of such a movement: the price of land would fall throughout the country; in order to hold their population the settled states would limit land ownership, until in the final analysis land values would be based entirely upon improvements; since wage carners would thus be given the possibility of taking up free land, the bargaining position of those who chose to remain in the cities would be considerably strengthened; and thus a remedy for inequality of ownership, the "new agrarianism," would replace all "isms" including trade unionism and strikes.

DAVID J. SAPOSS

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EVIDENCE

GENERAL ASPECTS. Evidence in the legal sense consists principally of oral testimony of witnesses, written documents and various other objects ("real evidence," such as the fatal revolver in a murder trial) perceptible by the senses.

Proof is the process of adducing evidence before a judicial body. The purpose of proof is to aid the tribunal in finding the facts, i.e. conclusions as to the truth of any disputed matters other than disputes about the content and application of legal doctrine, which are questions of law.

Every field of investigation has its problems of verifying the data or evidence upon which conclusions are to be based. Why is it that in the field of law the relatively simple and almost intuitive techniques of valuing evidence which obtain in the other sciences do not suffice? The scientific investigator may find his evidence when and where he may; he may reach his conclusions immediately or after years of calm and maturing reflection; and he is usually a practised expert and himself the judge of the decision to be reached. In the law all this is changed. The trial ordinarily takes place long after the events investigated, and oral reports by witnesses rather than direct observation by the tribunal must usually suffice. The place of trial, moreover, is fixed, and it is a restricted court room where elaborate experimentation with scientific apparatus is impracticable. The atmosphere too is charged with emotion which comes from partisan contest and the contending parties have strong motives to falsify and deceive, motives usually absent in scientific inquiry. Again, the decision must be reached immediately at the close of the case. Finally and most important, the consideration of the evidence in court often devolves not upon one or more experts in trying cases, but upon a group of twelve ordinary citizens assembled temporarily and selected at haphazard.

It is difficult today to conceive of settling judicial disputes through any other method than by informing the tribunal as to the facts and thus appealing to the human reason of the court. In truth, however, this point of view was reached only at a very late stage in the cultural progress of a people. The primitive conception was quite different and doubtless much better adapted to the conditions of precivilized life. That conception was that the appeal must be not to human reason, but to divine judgment. The trial was not a search for facts from witnesses or otherwise through the use of reason, but a mechanical test. Formal ceremonials invoking God's decision were the early methods of trial. Such were the ordeals of fire and water, the wager of battle and the wager of law, or compurgation. This last process did indeed involve "witnesses," but they were not sworn to tell the truth about the

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facts in controversy; they were simply formal sponsors who swore that the defendant's oath was clean.

By the time that Caesar's legions stepped upon the shores of Britain to find the Germanic tribesmen settling their disputes by the ordeal, the courts of Rome were deciding cases chiefly upon facts and reason. But in the twilight of Roman culture the principle of rational proof became gradually obscured although never entirely lost. Formalism reassumed through two devices the importance it had had in primitive Rome. One was the "decisory oath" (similar to the oath of the defendant in the Saxon's "wager of law"), by which a case might be staked upon the willingness of one of the parties to take an oath about the dispute in a form prescribed by the court. The other was the rule that one witness was not enough; two credible witnesses were necessary to constitute "full proof." This last rule came in with Constantine; perhaps derived from Scripture, it was taken over by the church into its Romano-canonical procedure as the plinth of its science of proof. The civilians and canonists elaborated a curious system: one good witness was "half" proof. Common rumor and documentary evidence were other species of half proofs. A doubtful witness was worth less than half. Under these scholastic rules the evidence of witnesses had to be added up to make "full" proof. It was vainly sought by these advance generalizations about the value of types of evidence to reduce the judge to a mere accountant.

From the Norman Conquest to the French Revolution the continental system of procedure preserved little of its enlightened inheritance from classic Rome and under churchly influence became more and more sterile and academic. The canon law with its requirement of strict proof was the pattern upon which much of the continental criminal procedure was molded. Older Germanic systems both in church and state had broken down because they depended upon private accusers and hence lacked the impetus of official prosecution and because the accused might exculpate himself by ordeal or oath. But by the thirteenth century a "process of inquisition" had been developed by the church, later to be borrowed by secular courts, by which the accused could be required to answer the questions of the judge and by which the testimony of other witnesses could be taken, secret and apart. The church borrowed from Rome and gave to the new Germanic states the practise of enforcing confession by torture. The stricter the

legal requirement of "full" proof, the more essential was resort to torture to extract it. This mode of prosecution was cruel but effective, but in eras of recurrent civil disorder it was reconciled to a harshness which bore most frequently and severely upon the robber and the brigand. Indeed, the inquisitional theory is the basis of continental criminal procedure today.

In English courts two centuries after the Norman Conquest the ancient rites of the Teutonic forest tribes were still in use. In 1215, however, the church forbade the clergy to participate in the religious ceremonies attendant upon the ordeal and thus in effect abolished them. In the meantime the "inquest" inherited by the Norman kings from the Carolingian empire, a practise of appointing local fact-finding committees to investigate and report on local disputes as to taxes and dues, gave rise first to the "grand" or accusing jury and then the jury of trial in both civil and criminal cases. Although juries for a long time decided cases in the main on individual knowledge and the report of the neighborhood as gathered by them out of court, the stage was at least set for the elaboration of the law of evidence. Even before the appearance of the jury the judges had dealt with documents, and they continued to control the effect that should be given them when juries came in. The witnesses who attested the documents were also required to be produced in court. But before the fifteenth century the use of oral evidence of witnesses was rare. Counsel for the parties pleaded their cases, not in writing as now, but orally; and these pleadings included the counsel's repetition of the statements of those who knew the facts. The judges, however, strictly controlled these statements of counsel and ruled on their sufficiency. But by the sixteenth century England was less primitively rural, the jurors could not be relied upon to know all about neighborhood disputes and witnesses were increasingly brought in. In 1562-63 Parliament for the first time permitted compulsory process to require the attendance of witnesses in common law courts. Conceivably, this innovation might have taken the course that it has in the case of the prosecuting or "grand" jury, which continues to this day to hear witnesses in secret with no judge present to exercise control over what testimony the jurors shall hear. So it was at first with the trial or "petty" jury, and if this practise had continued there would have been no law of evidence. When the custom arose of hearing the witnesses in open court, the judge, accustomed to regulating the effect of documentary evidence and to controlling the oral pleadings of counsel, which often so nearly resembled statements of the witnesses, easily formed the habit of controlling what the witnesses should be allowed to tell the jury. It is this practise of control by the expert, professional judge, governed by precedent, over what shall be heard and seen by the jury, the group of laymen unskilled in trying disputes, that constitutes the subject matter of the Anglo-American law of evidence. The groundwork of the modern system was laid in the two centuries from 1500 to 1700 and consequently it may be said that the common law of evidence is of comparatively recent growth.

Rules of evidence in Anglo-American law are not a science of weighing proof; they are chiefly regulations governing the admissibility of proof. In other words, the problem is: what shall the judge, in view of the limitations of time and space which a judicial trial imposes and in view of the limited educational and intellectual equipment of the jurors and their liability to prejudices and emotion, permit the jurors to hear at all? It is safe to say that without the jury there would be no law of evidence remotely resembling the rules of admissibility which make up its content in English speaking countries today.

In attempting to summarize the principles of the law of evidence as finally developed at common law, it is well to notice that a system of written pleadings, filed before the trial, has also developed in modern times and has superseded the more flexible practise of oral pleading. The scope of allowable evidence is sharply limited to the issues made by these written pleadings. It should also be noted that some contentions do not have to be established by evidence. Under the principle of judicial notice the judge may dispense with evidence of a fact which it would be useless to debate before the jury, either because it is universally known, as that ice is lighter than water; or because it was susceptible of ready ascertainment by the judge beyond possibility of reasonable dispute, as in determining whether a certain date fell on Sunday; or because it is within the purview of the judge's range of official information. Thus the judge officially knows without proof the terms of the laws of the state, although not of foreign states. Again, proof is dispensed with, obviously, when the adversary formally admits the fact in his pleadings or at the trial.

Most evidence comes to a court through the mouths of witnesses, and the common law mi-

nutely regulated their competency. Witnesses were classed as either to be accepted or to be rejected altogether, according as they fell in one strict category or another. First, the witness had to have mental and sensory capacity to observe the facts to be related, to remember them and to narrate them. In the seventeenth century there was a tendency to bar insane persons and children under seven, as such, but the more general standard came to be accepted in the next century and obtains today. Second, where the witness was called to testify to matter susceptible of being perceived by the senses, the witness must have had first hand knowledge of the facts. Third, belief by the witness in a God who here or hereafter would punish falsehood was conceived to be essential, as a corollary to the requirement that an oath should be administered. Fourth, parties to an action civil or criminal were disqualified as well as their husbands or wives; a mechanical extension of this rule was its converse that a party could not call his adversary, a rule mitigated, however, by the fact that suitors could resort to the Chancery, where the judges with their inheritance of canon and civil law doctrines regularly permitted a party to examine his adversary. Those who, although not parties, had a direct pecuniary interest in the result of the trial were also disqualified. Fifth, those who had been convicted of a serious crime were considered "infamous" and as such debarred from testifying as witnesses.

The last three common law categories of the disqualification of witnesses were almost completely swept away by legislation after the middle of the nineteenth century inspired by the criticisms of such reformers as Bentham, Brougham and Denman in England and Field and Livingston in America. The requirement of a religious belief in divine sanctions was in England, Canada and all but a few American states changed to permit those who have religious scruples against swearing or no religious belief to testify upon bare affirmation. Many American states likewise forbid any inquiry into the religious belief of the witness upon cross examination in order to prevent the arousing of prejudice.

The disqualification of parties who are generally those who know most about the facts in dispute seems perverse today. It was a late excrescence, of which the first trace is to be found in the time of Elizabeth. It seems to be explained by the contrast which existed between the early proceedings where the oath was a decisive ceremonial, as in wager of law, in which the party's

oath was an essential and characteristic step, and the later trial by jury, where it was the jury's oath that was considered to be the conclusive act of the trial. In the seventeenth century, when the tradition that the jurors decided on their own knowledge and that oral evidence was merely incidental was still lingering, the notion of an oath taken by a party "with no flavor of decisiveness" such as it had in wager of law seemed unnatural. The exclusion of parties was rationalized as being based on the motive of selfinterest, which was considered to render a party unreliable as a witness; the same reason justified the disqualification of those pecuniarily interested in a case, but a piece of scholastic logic based on the Scriptural fiction that husbands and wives are "one flesh" was necessary to explain the exclusion of husbands and wives of parties. Unlike the canon law the common law attached no disability to other relatives of parties. These rules bore with especial harshness upon the accused in a criminal case. Although permitted to make an unsworn statement he was denied the privilege of testifying himself and could call no other witnesses at all until 1695; he was denied the right to be represented by counsel until 1836. Even in the United States persons accused of crime did not acquire the right to testify in their own behalf or to call their husbands or wives as witnesses until the latter half of the nineteenth century. Not until 1898 did England accept this last reform, and in Georgia even today the accused may only make an unsworn statement to the jury. Vestiges of the rule of disqualification for infamy still exist. A conviction of crime may still be shown to cast doubt upon the credibility of a witness. While the federal courts in the United States have abandoned the disqualification for infamy in criminal cases, they still retain the rule which denies a person accused of crime the privilege of calling wife or husband as a witness for the defense.

Closely related to these rules of competence is the privilege of avoiding self-incrimination. In criminal cases the accused down to the seventeenth century was grilled and questioned by the judges as a matter of regular routine. When, however, the political conflicts of that century between crown and parliament brought to issue the practises of the Star Chamber and the ecclesiastical courts, where the inquisitory procedure assumed supreme importance in the absence of a jury, the forced self-incrimination customary in those courts became associated

with royal tyranny in the minds of the prevailing popular party. A canon law maxim (nemo tenetur prodere seipsum) was seized upon to condemn the practise out of the mouths of the canonists; and when in 1640 the Star Chamber was abolished, the practise of examining the accused was likewise forbidden in the ecclesiastical courts and the common law courts of the commonwealth began to recognize the existence of a privilege of one accused to refuse to answer questions. By the logic of that day the spouse of the accused was likewise held immune from compulsion to testify for the crown. The present privilege against self-incrimination allows a witness to decline to answer any question exposing him to the danger of criminal prosecution. In legal theory at least a person accused of crime may remain silent in the face of all questions from the time of his arrest through the completion of his trial. It is true that the privilege against selfincrimination is not so absolute as it seems. Juries do in fact tend to make all possible assumptions of guilt against those who fail to tell their story, and a realization of this usually impels an innocent man to take the stand. The strongest consideration in support of the privilege is that it stimulates the police and prosecuting officers to make a more thoroughgoing investigation of the facts than they would if they could rely on getting the proof by grilling the prisoner. In England, where the police are carefully selected and trained, it is probable that the privilege does have this beneficial effect; but there is reason to believe that in the United States it tends to cause our relatively inefficient officers to resort to extralegal methods of extorting confessions by force. On the whole, it seems that under careful safeguards the privilege might well be abolished, but it is still firmly entrenched in federal and state constitutions. Alongside the privilege of the accused still stands the privilege of the husband or wife of the accused not to be called by the prosecution. Justified upon the supposed social policy of preserving marital harmony, it still obtains in practically all common law jurisdictions.

The only relics which remain of the disqualification of interested parties in civil cases are the so-called Dead Man's Statutes adopted in most American states. By their terms, when one of the participants in a contract or other transaction has died and a lawsuit arises between the survivor and the estate of the deceased, the surviving party may not testify about any transaction or communication which he has had with the de-

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ceased. It would seem, however, that the statute is relatively ineffectual to shield the dead man's estate from fraud, since only the claimant himself is barred as a witness, and one who is willing to fabricate a claim would be willing to suborn third persons to swear to the alleged facts. The object of the statutes could better be secured by permitting the survivor to testify but at the same time admitting statements made by the deceased to third persons about the transaction, which would normally be banned as hearsay.

A further important ground of privilege is that of confidential communications, such as those between husband and wife or lawyer and client. Originally the privilege in the latter case was that of the lawyer on the theory that his professional honor would be violated by the disclosure, but it came to be recognized as being that of the client, which means that the latter may waive it while the lawyer cannot. Important officials also are privileged to withhold secrets of state. Similarly, prosecuting officials may not be required to disclose the identity of informers. The common law thus permitted a witness to refuse to divulge a confidence only where for special reasons the maintenance of secrecy seemed extraordinarily important; no general privilege for family, friendly or professional confidences was conceded. Under pressure from professional groups, however, a substantial number of states have by statute extended the privilege to professional confidences communicated to physicians and to confessions made to priests and ministers. Probably a similar privilege should be accorded to secret confessions made to judges and especially by children to judges and officers of juvenile courts; in the latter courts the privilege has been recognized by statute in Connecticut.

Apart from the rules as to the competency and privileges of witnesses the common law developed a number of drastic rules of exclusion, of which the chief in importance is the hearsay rule. It was said by Wigmore that this rule, next to jury trial, is England's greatest contribution to the world's jurisprudence of procedure. The rule is closely allied historically and practically to the requirement mentioned above that a witness must be qualified by first hand knowledge of the facts he relates, a requirement imposed from early times upon attesting witnesses. The rule directed specifically against hearsay first emerged in the common law as late as the second decade after the Restoration. It did not forbid all evidence of

previous out of court statements and writings. Otherwise it would be impossible to prove written or oral transactions which constitute the everyday subject matter of legal disputes, such as contracts, frauds and slanders. Only where some person's out of court statement of fact was offered to show that the fact was as stated because that person said so, was the evidence hearsay. The rule amounted to this, that common law courts were unwilling to admit in evidence an assertion which the party against whom it was offered had had no opportunity to test by cross examination. During the eighteenth and nineteenth centuries, however, numerous exceptions to the hearsay rule were gradually accorded recognition: evidence given at a former trial is admitted if offered against a party who had an opportunity to cross examine in the former suit on the same issue; a dying declaration relating to the immediate circumstances of a homicide (such as a declaration identifying the murderer), made when hope of life has fled, is admissible but only where the declarant's death is the subject of a criminal charge; statements against interest are allowed when the interest affected is not an emotional but a material one; declarations by a member of a family about matters of pedigree or other facts of family history are permitted; mercantile book entries and entries made in the regular course of any business are admissible. In each of the five foregoing classes of cases the hearsay statement will not be admitted unless it is shown that the person who made it cannot now be produced as a witness, because of death, physical or mental infirmity or absence from the jurisdiction. This has caused difficulty in the case of book entries, which are often a composite product. It sometimes becomes more economical to abandon the collection of a debt than to meet the requirement of producing all the employees necessary as witnesses because they have participated in making the entry. A mere showing that the books are regularly kept in the course of a business should suffice to secure their admission as evidence, which the adversary could contradict or explain.

The following classes of statements are admitted under other exceptions to the hearsay rule without any requirement that the person who made one be unavailable as a witness: (1) Admissions and confessions. A party could hardly be heard to object that his own statement ought not to be received because he did not have an opportunity to cross examine himself. Similarly statements are admitted when made by the

party's agents in the course of the agency, or by persons under whom the party is claiming his rights asserted in the suit, such as statements made by an ancestor offered against the heir. The term confession designates an admission of the crime by the defendant in a criminal prosecution. Confessions are surrounded by special safeguards and the courts are sedulous to exclude them when the proof shows that they have been extorted by fear or inducements of reward, such as promise of a lighter penalty. This judicial vigilance, however, cannot always forestall "third degree" methods by the police, since an extorted confession may often yield fruit in a plea of guilty. (2) Official registers and reports, e.g. birth certificates, legislative journals and certificates of registration of deeds. (3) Evidence of reputation, which is common hearsay circulated in the community but is distinguished from isolated rumors, may be received as evidence of the character of a person where such evidence is at all allowed. Reputation may also come in to prove ancient matters of general interest, such as the boundaries of counties, townships and (in the United States) of private estates. (4) Declarations made as to one's physical condition at the time of utterance, e.g. "I have a terrific headache," but not "I had a headache yesterday." (5) By analogy to the last, declarations as to one's present mental state, such as declarations of intention ("I shall make my home here") or motive ("I am leaving because I wish to work for someone else") or emotion (wife's declaration of affection for defendant in alienation case). (6) Spontaneous exclamations made under stress of excitement produced by some startling event, as where an automobile driver after an accident exclaims, "My brakes wouldn't work," a type of evidence frequently important not only in collision cases but in crimes of violence. In view of the well known distorting effect of excitement the psychological soundness of the legal theory that excited statements are especially reliable is open to question.

Wigmore finds these common elements in all the exceptions to the hearsay rule: the classes of hearsay statements admitted are those which are supported by such a circumstantial guaranty of special reliability as to furnish a substitute for the safeguard of cross examination, or those for whose admission a special need appears, either because the author of the statement is now unavailable as a witness or because his statement was probably more reliable than his present testimony would be. These exceptions to the hearsay

rule almost swallow it up. It must be difficult for a judge to administer them accurately by snap judgment in the heat of trial. It may be that the next stage in the evolution of the hearsay rule will be the emergence of a general rule based on Wigmore's generalization, e.g. that hearsay shall be admitted only when it seems needful to the trial judge for the elucidation of the facts and seems to have been made under circumstances which give it reasonable assurance of trustworthiness. A step in this direction is the Massachusetts statute of 1921 which admits all statements of persons since deceased, where made in good faith before suit and on personal knowledge.

An offspring of the rule requiring that a witness speak from first hand knowledge is the "opinion" rule, which excludes evidence of conjecture or inference as distinguished from concrete description of objects, situations or events. Where objective description is difficult, however, inference or opinion is allowable. Thus a witness ordinarily gathers only a general impression; for example, that a horse is wild or a man is drunk. Obviously every verbal description, however concrete, has in it a large measure of inference beyond the mere statement of primary sense impressions, and the difference between fact and opinion is one of degree. Many American courts, however, are prone to attach a false importance to this distinction and to reverse cases when the trial judge has admitted the opinion of a witness, especially when the opinion relates to some ultimate issue in the case. They fear that they may open the door to the overbearing of the jury's judgment by the expressions of influential citizens on the merits—a fear which seems exaggerated. A second qualification of the rule against opinions is the doctrine that expert witnesses, who have such training and experience as qualifies them to do so, may give in evidence their inferences and conclusions as to matters in their special fields.

Some peculiar rules as to proof of character should be noted. First, there are the rules as to the method of proving it. It has already been observed that the normal way under the Anglo-American system is by proof of reputation in the community. The more vivid method of showing specific instances of good or bad conduct is banned because of its liability to involve the trial in side issues and thus waste time and confuse the jury. Likewise evidence of a witness' opinion of the man's character based on personal observation is usually forbidden, although there seems

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little reason for such prohibition. Second, there are rules as to when character is open to proof at all. Character evidence is always proper where a person's character is directly in issue. More often proof of character is sought to be used as the basis for an inference that the person on a given occasion has acted in keeping with such character, but such evidence is allowable only in a few situations and with limitations. In any case the credibility of a witness may be attacked by evidence of his want of veracity in the form of previous conviction of crime. In criminal cases the accused may give evidence of his good character in order to raise the inference that he did not commit the offense. It is only when the accused opens the door to evidence as to his character, either by calling witnesses or by voluntarily going on the stand himself, that the prosecution may offer evidence of his bad character. Such evidence may be so damaging to him in the eyes of the jury that it is conceivable that a defendant who is innocent but who has a criminal record might prefer not to take the stand and explain his innocence. The English Criminal Evidence Act of 1898 probably follows sound policy in protecting the accused who takes the stand from having his criminal record revealed, except where he has given evidence of his own good character or has attacked the character of the witnesses against him and with certain other exceptions. In general, it may be added that, while the courts hold within strict limitations evidence of character to show conduct, evidence of specific habits to show probable conduct in accordance with the habits is freely received—a distinction which seems in accord with psychological findings.

With respect to documents there are some special rules. In the first place, documents are not received in court until their signatures have been proved. Another salutary rule, the best evidence rule, requires that if evidence is to be offered of the contents of a document the original writing must be produced. A copy or oral evidence may be received, however, if it is shown that the original has been lost or is in the hands of the adversary who on notice has failed to produce it in court, or that for some other reason it cannot be procured. Under recent cases, carbon copies are sensibly treated as duplicate originals. Another rule about documents which is productive of much conflict and confusion in the cases is the parole evidence rule, which prevents the varying of the terms of written agreements when they appear to have been intended

to supersede any preliminary oral agreements. The parole evidence rule is regarded by Thayer and Wigmore as a rule of substantive law rather than as a rule of evidence. It has a distinctive procedural cast, however, in that it requires the special intervention of the judge to protect rights claimed under writings against the danger of improvident findings by juries.

The responsibilities of the trial judge for the enforcement of evidential rules and standards are heavy and unremitting. The law offers no all embracing formula for determining whether a given item of proof is relevant to the issue, and logic and experience must be the only guides. Even when evidence is logically probative, the trial judge must still exclude it if he finds that its probative value is slight and is overborne by the danger that it may arouse undue prejudice in the jury, may confuse the issue or lead to undue consumption of time. This is a vague standard and the trial judge's decision in applying it will seldom be disturbed on appeal. Again, the trial judge in requests to dismiss or to direct a verdict, at various stages of the trial, must constantly face questions of the sufficiency of the proof offered by the parties to support their respective contentions in accordance with the rules relating to the "burden of proceeding." The burden of proof rests upon the party who asserts a contention; the party must proffer such evidence as will lead to ultimate persuasion of the jury, while the burden of proceeding merely requires a party to carry the evidence to a point where reasonable men might be persuaded that his contention is true. While the burden of proof is constant, the burden of proceeding continually shifts. In civil cases the formula used by the judge in speaking of the burden of proof is that the party pleading a fact must prove it by the "preponderance" or "greater weight" of evidence. This is but a metaphorical statement that he must satisfy the jury. In criminal cases the state must prove its case "beyond a reasonable doubt," which is thought to require a greater degree of intensity of conviction on the part of the jury. Appellate courts have been inclined to attach much importance to exact correctness in the trial judge's instructions on burden of proof, but it is questionable whether the jurors ordinarily give any attention at all to them.

Oft recurring states of fact have been the occasion of frequent rulings by judges as to their sufficiency to form a basis of inference. These habitual rulings, based sometimes on notions of probability, sometimes on social policy, are con-

stantly becoming crystallized into established rules; and where they do they are called presumptions. Thus the presumptions have become established that a child born to a married woman during wedlock is legitimate and that a person who has disappeared for seven years without being heard from is dead. Legislatures are constantly adding to the list of presumptions; for instance, the presumption in most prohibition acts that one who is in possession of liquor holds it for sale or some other unlawful purpose. Presumptions may be permissive, i.e. merely requiring a ruling that the proof is adequate for the jury to find in favor of the inference if no contrary proof is offered; or mandatory, i.e. requiring that the jury must so find in the absence of counter proof.

In the traditional English practise which is preserved throughout the British Empire the trial judge has the power to comment on the credibility of the witnesses and the weight of evidence. In other words, while the jury can disregard the judge's opinion and decide the facts as they see them, he may nevertheless give the jury his inferences from the evidence. When it is remembered that the judge and the counsel on each side are the only men in court who are professional experts in weighing evidence and that of these the judge is the only one who has the official duty to maintain an impartial attitude, it is remarkable that it should ever have been suggested anywhere that the judge by statutory muzzle should be prevented from giving his opinion on the facts to the jury, while the lawyers retain in fullest luxuriance their power to express theirs in argument. This topsy turvy regulation has nevertheless been established in nearly all the American states, although not in the federal courts. The first statute, that of North Carolina in 1796, was a reflection of the patriots' hatred of royal judges; but the curtailment of judicial power, like the change from appointment to popular election of judges, was in accord with the frontier ideals of Jacksonian democracy, and it spread rapidly in the newer states. In diminishing the control of the judge the position of the advocates was magnified, a fact which explains why the legislatures with their many lawyer members supported the change.

So casual and haphazard are the acts of Congress on the subject and so few and scattered the decisions that it is difficult to give a general answer to the question of how far the federal courts are governed by distinctive federal rules

in matters of evidence and how far they are governed by the local rules in the states where they sit. As to competency of witnesses, local rules govern in civil cases, but in criminal cases they do not. As to questions of admissibility of evidence, seemingly in actions at law the local state rules govern; but in equity and admiralty federal decisional rules, uniform throughout the country, will be followed. A desirable simplicity would be promoted if Congress would either make the local state rules of competency of witnesses and admissibility of evidence applicable in all classes of cases in the federal courts or, preferably, would empower the Supreme Court to formulate uniform nation wide rules of court procedure, regulating witnesses and evidence as well as all other matters of procedure in the federal courts.

The Anglo-American law of evidence is, as Thayer called it, "a piece of illogical, but by no means irrational, patchwork; not at all to be admired, nor easily to be found intelligible, except as a product of the jury system" (A Preliminary Treatise on Evidence, p. 500). These rules, when applied to a tribunal where a highly trained officer must regulate what shall be heard by a large untrained group delegated to find the facts, have a large measure of practical wisdom. As cautionary guideposts they are valuable to any investigator of facts who has judgment enough to know when to disregard them. As rules they are absurdly inappropriate to any tribunal or proceeding where there is no jury. It is somewhat surprising to find that in the courts of Chancery, where the judge has always determined the facts without a jury, and also in courts of law in cases where a jury is waived the judges profess to be bound by the jury trial rules of evidence. In fact, these rules are administered very loosely under such circumstances; and if the trial judge admits incompetent evidence, the upper court will assume that he disregarded it if there was other competent evidence upon which he might have based his judgment. Fortunately, administrative tribunals have generally not been fettered by the ordinary rules of evidence.

How, if at all, can the Anglo-American system of evidence be better adjusted to social needs? Wigmore's masterly discussion of the shortcomings and future of the rules gives a wise and comprehensive ground plan of needed reforms drawn in the light of his uniquely exhaustive study of their history, philosophy and actual functioning. A distinguished committee of judges, practitioners and law teachers, of which Professor E.

M. Morgan was chairman and which was appointed by the Commonwealth Fund to study the problems of the law of evidence, has also drafted an extremely valuable report. The committee went beyond the law in books and has questioned judges and practitioners as to the actual operation of certain rules, such as the federal rule empowering the judge to comment on evidence and the Massachusetts hearsay statute. The root and branch expedient that all rules for the exclusion of evidence be abolished except the requirement that the evidence be relevant, has been strongly urged, but this would probably be a backward step, if the jury and the contentious theory of trial are retained. Of course, many changes in particular rules are essential for their effective working. But of more importance in the United States is the need for certain changes in attitude by the trial lawyer as well as the trial and appellate judges. The American trial lawyer might well imitate the English barrister, who rarely makes an objection except where evidence vital to the merits is seriously questionable. It is not unusual for contested murder trials in England to be completed without a single objection from the defense to the evidence. A corresponding change in the attitude of trial and appellate judges toward evidential technicalities is equally essential in the United States.

A fertile possibility for the future improvement of the law of evidence lies in the contributions which psychologists may offer to the science of proof. The psychologists have already by controlled experimentation accumulated much statistical data about the accuracy of witnesses in perceiving, remembering and reporting. Thus errors in observing colors in different lights, in identifying sounds and in fixing the direction from which they come, in estimating time periods and in determining the number of persons in a group have all been elaborately measured. Again, the degree of improvement of perception where the attention of the witness is especially directed to the object and the degree of distortion resulting from shock have both been shown to be of controlling significance in evaluating testimony. Experiments with groups reporting upon short moving picture scenes show clearly the fallibility of memory. Apparently, the curve of forgetting starts with a sharp rise but flattens out after two or three days and errors double after an interval of forty-five days. Here again, whether the observation was attentive or casual plays a great part in the accuracy and completeness of the recall the extent of which has been measured. Likewise memory of words heard has been especially measured with results that not only confirm the lawyer's hostility to hearsay but arouse great skepticism of the value of testimony as to oral contracts and other oral transactions. Among the interesting findings as to reliability of reporting are those which indicate that the taking of an oath reduces the completeness of the report but substantially increases its accuracy. Comparison of results as between free narration, giving greater accuracy, and answers to questions, giving greater completeness, and as between leading and non-leading questions bears directly upon the soundness of methods of examining witnesses in court.

Equally epochal and less explored are the possibilities of psychological study of methods of judging. Contrary to court room beliefs, a psychologist finds that the emotions of a witness cannot be learned from his face. Inspired by a suggestion of Wigmore, preliminary studies have been made by W. M. Marston, a psychologist with legal training, of the effect of cross examination in revealing inaccuracy and of the relative success in judging facts from witnesses' stories by variously qualified judges and juries. The most extensive research in this field has been in the study of methods of detecting deception or guilt. The older method of measuring reaction times in a free association test, although still successfully used, seems to be yielding to the use of various devices for measuring bodily changes under excitement, such as changes in breathing, in blood pressure, in activity of the sweat glands and in muscular contraction. An apparatus for measuring changes in breathing and blood pressure of persons under questioning is reported to be in actual successful use in several police laboratories. None of these tests is suitable for actual use in court before a jury, because untrained observers cannot correctly interpret their results; these could, however, be made available through the reports of experts. In 1923 the District of Columbia Court of Appeals held that the blood pressure test was not yet of sufficient scientific acceptance to warrant the admission of its findings in evidence (Fryc v. U. S., 293 Fed. 1013). Wider experience with the tests will probably soon induce courts to accept them. One chief obstacle to progress in this direction is the broad gulf in language and experience between lawyer and psychologist. The lawyer tends to echo the shibboleths of an outworn psychology of faculties, grossly to overvalue oral testi-

mony as a revealer of objective fact and to be bewildered by the statistical correlations of the psychologist. The latter in his turn fails to realize the need for speed and simplicity in the court room and the inability of a jury to handle effectively the results of psychological tests. Moreover, his experiments often fail to help the lawyer because they deal with subjects different from the type of transaction usually testified about in court. A series of articles jointly written by R. M. Hutchins, at that time a law teacher, and D. Slesinger, a psychologist, points the way to fruitful cooperation. These articles criticize the legal rules of evidence relating to competency of witnesses, recording and refreshing recollection, declarations of mental state, spontaneous exclamations and acts showing consciousness of guilt, in the light of psychological and sociological findings.

Eventually, perhaps, Anglo-American court procedure may find itself gradually but increasingly freed from emphasis on jury trial with its contentious theory of proof. With responsibility for the ascertainment of facts vested in professional judges, the stress will be shifted from the crude technique of admitting or rejecting evidence to the more realistic problem of appraising its credibility. Psychologists meantime will have built upon their knowledge of the statistical reliability of witnesses in groups a technique of testing the veracity of individual witnesses and assessing the reliability of particular items of testimony. Judges and advocates will then become students and practitioners of an applied science of judicial proof.

CHARLES T. McCORMICK

Modern Civil Law. Nowhere in the civil law is there to be found a more or less independent body of evidential norms similar to the rules of evidence of the common law. Rules of evidence appear mainly as rules of substantive law and as incidents of procedure, so that, to paraphrase Maitland, the law of evidence is secreted in the interstices of substantive and procedural law. Yet the small part which these rules play in the civil law tends at the same time to obscure the similarities and accentuate the differences between these rules and those of the common law and to act inversely as regards the widely differing rules of evidence between some of the civil law systems themselves.

The conclusion is obvious that were it not for the adumbration of exclusionary rules in the common law, due in large part to the existence of

the hearsay rule, the Anglo-American system would probably have developed along similar lines. The commonly accepted reason for the hearsay rule is the necessity of guarding the members of the jury from their own inexperience in distinguishing the probative value of evidence, and it would seem therefore that it is to the absence of the jury from continental procedure that the difference between the two systems must be laid. But although the jury is unknown in civil cases in almost all countries and in others is used only exceptionally in criminal cases, other and more positive forces have also played their part. The lesser role of counsel, having as its corollary increased importance of the presiding judge, has tended to give the court almost unlimited discretion in the examination of witnesses. The prevalence of specially trained judges has resulted in greater confidence in the ability of the judiciary. Where a certain mode of proof is admitted, rules of evidence will frequently operate merely as admonitions to the judge to disregard certain facts in reaching his decision rather than as rules excluding these facts from the record. Thus the principle of relevancy is generally accepted, but objections on the ground of irrelevancy are rarely heard in continental courts and in the practical conduct of the trial the rule seems of little consequence. Moreover, peculiarities of procedure, mainly in the reliance placed upon documentary proof, have been of supreme importance in shaping evidential rules and account for the divergence between the two main continental systems, the French and the German.

Living forces must be accounted of more importance than historical development in the evolution of the present undifferentiated body of evidential rules in the civil law. Indeed, the influence of history has rather been negative, the attempt to bind the court by predetermined, rigid rules of proof having resulted in a reaction toward the greatest possible freedom. The principles of "mathematical proof," the securing of the impartiality of the judge by forbidding personal contact with accused or witnesses, the "classic witnesses," the extortion of confessions by inquisitors, are no more. The labors of Beccaria, Voltaire and Sonnenfels against this system were brought to fruition when the French Revolution swept it out of existence. Undoubtedly some remnants of it are still discernible. The use of the oath as a means of proof still lingers as a curious survival of compurgation. The mathematical presumptions of some European laws

bear the impress of the old notion, and it may be argued that French criminal procedure is patently the offspring of the Inquisition. Yet it is too easy to be led astray. French civil procedure rests upon the use of documents, but this represents a more or less modern development from the principle that témoins passent lettres.

Nor must it be overlooked that striking differences exist among the civil law systems of evidence, particularly between those of Germany and France. The general principle of burden of proof, that the party asserting a claim must establish it (ei incumbit probatio qui dicit), runs through all the codes; the practical application of the principle varies from country to country. Everywhere presumptions are divided into those established by law and those arising from the facts, but the individual presumptions depend upon differing substantive laws. Real incompetencies of witnesses are few in number and hardly exist at all in some countries. Often witnesses may be impeached for specified reasons, yet their testimony goes into the record.

The other points at which the civil law systems agree will be found often to be such as have obtained acceptance in the common law. Continental codes generally set up certain specified modes of proof—documentary evidence, oral testimony, testimony of experts, examination of the place by the court—but these are rarely exclusive and other modes are frequently employed. The rules as to presumptions, admissions by the parties and self-serving declarations will frequently be found similar to those of the common law.

Of the two main continental systems, the French, followed more or less closely by Italy, Belgium and the Netherlands, contains a larger body of exclusionary rules. Yet an examination of these rules reveals clearly their inseparability from substantive and procedural law. In the main these rules are resorted to for determining whether or not any sort of oral testimony is to be admitted. The Code civil (art. 13.6) details five means of proof, documentary, oral testimony, presumptions, admissions of the parties and oaths. In reality these categories are not exhaustive; among others, inspection of the scene must be included. Theoretically, judicial notice of rules of foreign law is not permissible and they must be proved by the parties. A few absolute incompetencies of witnesses exist, e.g. insanity, and witnesses may be excluded for certain reasons at the request of a party (reproche).

But all modes of proof excepting the docu-

mentary are resorted to only exceptionally. The essence of the trial in civil cases is the submission to the court of documents tending to establish or defeat the establishment of obligations. These documents are of two kinds, authentic instruments (actes authentiques) defined as an instrument "received by public officers entitled to practice in the place where the instrument was drawn up and with the requisite solemnities" (Code civil, art. 1317) and private agreements (actes sous seing privé). The most important exclusionary rules relating to documentary proof are those providing that commercial books may be admitted as proof only between merchants (Code de commerce, art. 12) and that ordinary memoranda may not be used in favor of the party writing them.

The secondary importance of oral testimony in French procedure derives in the first instance from the substantive provision of art. 1341 of the Code civil, which provides that an instrument must be drawn up before a notary or under private signature for all matters exceeding one hundred and fifty francs and that no testimony by witnesses is admissible to add to or to controvert the contents of these instruments. This provision is an adaptation of the Ordonnance de Moulins of 1566, which abolished the previous rule of French jurisprudence that oral testimony prevailed over written. Standing alone it might have affected the French law in much the same manner as the statute of frauds and the parole evidence rule affected the common law, but procedural rules have saved it from emasculation. Oral testimony is taken not in open court but before an individual judge, the juge-commissaire, in a proceeding known as the enquête. Such a proceeding will be instituted only in certain defined cases, such as in commercial transactions, where the creditor cannot obtain documentary proof of the obligation, e.g. in obligations arising from torts or quasi-contracts or where the creditor has lost the documentary evidence through an unavoidable accident or where there is a commencement de preuve par écrit. This latter is defined as any written instrument which emanates from the person against whom the claim is made or from the person he represents and which renders probable the fact alleged (Code civil, art. 1347). Typical cases are recitals in an authentic instrument which are not relevant to the principal covenant and the domestic papers of a father or mother tending to prove the legitimacy of a child. Once the enquête is instituted, however, there are no restrictions on the testimony. The questions are put by the judge and the parties may not interrupt a witness nor ask him any direct questions (Code de procédure civile, art. 276).

The same fundamental principle of primary reliance on documentary proof is carried through in criminal cases. Here the *procès-verbaux* or reports of police or administrative officers constitute written evidence before both the preliminary magistrate (*juge d'instruction*) and the trial court. The judge in both instances may hear oral testimony, and when he does so the same freedom from exclusionary rules obtains.

The salient point of departure in the German system lies in the greater reliance on oral testimony. Moreover, the principle of free evaluation of evidence is more extensively employed (Zivilprozessordnung, sect. 286). Express provision is made in the code of civil procedure for five modes of proof: inspection of the place, testimony of witnesses, expert testimony, documentary evidence and the oath. An important difference from the French system is the wider acceptance of the principle of judicial notice. No evidence is required of facts notoriously known to the court (Zivilprozessordnung, sect. 291). In collegial courts it suffices if the facts are known to a majority of the members. Nor are the judges bound to accept the testimony of the parties on the existence of foreign law but may find it out in any way they can (Zivilprozessordnung, sect. 293).

While there exist no incompetencies of witnesses properly speaking, the privileges of witnesses go far beyond the French law and are substantially similar to those of the common law; relationship by blood or marriage, professional and state secrets, self-incrimination, danger that a direct property damage or dishonor may result to the witness, are included. Aside from these privileges of the witness the parties may ask any questions which they consider necessary to explain the matter in question or to determine the relation of the witness. Parties do not testify as witnesses, but their testimony is given under the form of the party oath.

The great freedom in the admission of evidence in the civil law becomes obvious when it is compared with that which obtains not only in the common law but other systems of law. Thus the Mohammedan law of evidence contains a much larger body of exclusionary rules and approaches closely the common law system. Oral testimony is the chief means of proof and documentary evidence is resorted to only exception-

ally. A certain number of positive incompetencies of witnesses exist: parties may not testify, a father may not testify in favor of his son, children and persons in certain degrading occupations are incompetent. The principle of mathematical proof still obtains: the testimony of a single individual is generally insufficient; usually two male witnesses or one male and two female witnesses are required. An interesting parallel to the hearsay rule exists in the exclusion of "indirect" testimony. Exceptions are made in regard to evidence as to the paternity, marriage or death of an individual and where a party to a contract is dead or absent. In the latter case the testimony of any person who had heard the party state that he had assisted at the execution of the contract is admissible. Declarations of a party are admissible only when a presumption in his favor arises from the circumstances. Many presumptions of law are laid down but these differ among the various schools.

Interesting as other systems are, they seem destined to vanish before the spread of the civil law. The Japanese and Turkish codes of civil procedure borrowed from Germany mark the introduction of civil law principles of evidence into Asia. In British India both Hindu and Mohammedan principles have been displaced by the English rules through the passage of the Indian Evidence Act of 1872. The procedural law of Egypt has long followed that of France. Chinese procedural law is in the process of revision. The desire to shake off the burden of treaties imposing exterritorial rights has hastened the Europeanization of the law of evidence, already rendered inevitable by the triumphal march of the civil law.

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See: PROCEDURE, LEGAL; COURTS; JURY; EXPERT TESTIMONY; JUSTICE, ADMINISTRATION OF; JUDICIAL PROCESS.

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EVOLUTION. The word evolution has been applied by many writers to any process of change or becoming, but this use of the expression is not defensible. It should be restricted to cases in which two factors enter, an organism and an environment; thus its principal application is in biology, where living creatures and their inorganic surroundings are both present. We cannot speak of the evolution of the universe but only of its flow of change. Evolution, then, means primarily the passage from simplicity to complexity, from homogeneity to heterogeneity, which, from empirical observation of living creatures and their remains, may be deduced to have occurred and to be still occurring in the world of life,

The difficulties caused by the entry of the evolution concept into the world outlook of modern man arise from the fact that it is a doctrine drawing its being from two distinct realms of human experience, science and history. It is scientific in that it deals with the concrete objects of biology and therefore speaks the language of the laboratory, but it is historical in that it deals with non-repeatable occurrences, which are thus outside the realm of scientific investigation although not outside that of scientific imagination and speculation.

Evolution must not be superficially equated with progress, unless progress be defined as progress toward perfect adaptation to environment. There are numerous cases of organisms which retrogress, as far as complexity is concerned, such as the sessile tunicates, which in each life cycle lose their structural and locomotory vertebrate features, retaining only nutritive, respiratory and generative mechanisms. The same is true of large numbers of parasites. The best adapted type is not necessarily the "highest." Evolution as a biological theory must be entirely freed from ethical questions, and moral standards must not be imposed on the world of living creatures. But the opposite fallacy, the confusion of origin with value, must also be guarded against. What a thing is, is not explained by saying how it has come to be there, any more than it is possible to say how it has come to be there by saying what it is.

Whether the process of evolution has taken place continuously or discontinuously is a problem which will probably never be solved, for continuity and discontinuity are two alternating modes of scientific expression neither of which is permanently victorious. The question arises in two ways. There is, first, the psychophysical difficulty, since mind may or may not be coextensive with life and may or may not have evolved parallel with the physical phenomena of living things. The theory of emergent evolutionism is the principal modern representative of the discontinuity view; it speaks of matter, life and mind as a series of levels rising above one another by a succession of steps, at each of which an external creative activity injected an essentially novel element. Some authors, on the other hand, regard mind as coextensive with life or even with matter, and in this way the complete continuity view is at last reached. Secondly, the question arises in more technical form when the biologist studies the mechanism of evolution. An infinite series of infinitely small differences may give an evolution, and this was the common view in the middle of the nineteenth century. But, on the other hand, evolution may occur as the result of a smaller number of appreciably large sudden jumps, or mutations. In modern times this discontinuity view has been incorporated into the theory of the gene, by which the biology of inheritance seeks to account for evolution.

The evolution theory appeared first, as far as is known, among the ancient Greeks, but it did not succeed in taking any root in the ancient

world. This is so much the more peculiar in that Aristotle applied the notion of biological development to ontogeny, the development of the individual from fertilized egg cell to adult, while quite failing to apply it to phylogeny, the sequence of adult forms in time. Two thousand years later the same position was taken by Hegel. Perhaps both philosophers felt that things can only be understood in the light of the ends to which they are tending and that the rational, although everywhere present and permeating everything in nature, is everywhere disguised. If the order of development from lower to higher were also the order of temporal development, this disguise would be gone. But neither Aristotle nor Hegel was able to conceive of any mutability of organic types; such a conception is essentially post-Darwinian.

The pre-Socratic Ionian philosophers were led to the concept of evolution by the distinction which they made between the shifting temporal flux of phenomena and the eternal changeless reality beneath. To Heraclitus, it seems, only the former existed and as but a kind of chaos, but Empedocles discerned a gradual development in the processes of life and taught that imperfect forms are slowly replaced by more perfect ones. The atomists, Democritus and Epicurus, have often been claimed as evolutionists, but it is doubtful how far this claim can be substantiated. Hippocrates, so important a figure in other respects, has little of an evolutionary character, and it was not until Aristotle that an important advance was made. Aristotle was undoubtedly the first great comparative biologist, the first man to realize the importance of comparing one type of organism with another.

In order to formulate their relationships he arranged them in a scala naturae, or ladder of nature, beginning at the lower plants, going on to the higher plants, the "zoophytes," the sponges, holothurians, ascidians, and so up to mollusks, crustaceans, other arthropods, fishes and mammals. "Nature," he said, "passes from lifeless objects to the highest animals in such unbroken sequence, interposing between them beings which live and yet are not animals, so that scarcely any difference seems to exist between two neighbouring groups owing to their close proximity." For Aristotle this ladder of nature always remained temporally static, the form in which the Prime Mover had created living organisms from the beginning. Nevertheless, in his embryology he distinguished a succession in time of ever more complicated states and deciared himself in favor of epigenesis rather than preformation, i.e. of the production of form from not-form, rather than the mere unfolding of form which was present, although invisible, from the beginning. Furthermore, he distinguished between the vegetative, the animal and the rational soul, and asserted that the embryo was additively animated by each of these in turn as it developed.

Alexandrian and later Hellenistic biology did not further elaborate Aristotle's rudimentary evolution theory nor did the mediaeval Aristotelians, such as Albertus Magnus. Leonardo da Vinci, however, appreciated the true nature of fossils. More important were the progressive steps toward a satisfactory classification of living organisms made by Matthias de l'Obel (1538-1616), Andrea Cesalpini (1519–1603), Joachim Jung (1587-1657), John Ray (1627-1705) and Karl Linnaeus (1707-78). In the eighteenth century such writers as Charles Bonnet took up again the Aristotelian ladder of nature but gave it no temporal significance. Their insistence on a scale of infinitesimal gradations passing from inanimate matter to man was, however, of some historical importance and led in the following generation to the *Naturphilosophie* school. In the persons of Goethe and Lorenz Oken this school emphasized chiefly the idea or type common to many subgroups of organisms but obscured in any one subgroup by special adaptations of form. Parts of the flower were found to be modifications of leaves, and missing vertebrae were located in the skull. The conception of mutability of species was, however, still nonexistent or almost so. In 1825 M. H. Rathke made the important discovery that structures homologous with the gill slits of fishes exist for a time in avian and mammalian embryos.

The theoretical approach to evolution had begun somewhat earlier than the Naturphilosophie school. Buffon (1707-88) instead of being interested, like Linnaeus, in minute differences between organisms was more impressed by their similarities. He was also the earliest eighteenth century biologist to doubt the fixity of species, noting that animals often have parts to which no special or adequate use can be ascribed (they would now be called vestigial organs). He considered that some species are degenerate forms · of others, the ape a degraded man, the ass a degraded horse and so on. Buffon's ideas were examined by Erasmus Darwin (1731-1802), who held that species may undergo changes in the course of time and that changes produced by

the environment are passed on to the offspring. This was the first statement of the Lamarckian view, which was put forward in detail shortly afterward by J. B. Lamarck himself (1744–1829). Accepting as undeniable the fact that species vary under external influences and are subject to progressive development, he studied the mechanism of these changes and enunciated the principle of use and disuse, which ascribes changed structure to changed habits and involves the inheritance of acquired characters.

At this stage what would now be called the social sciences exerted a profound influence on biology. Just as a botanist introduced to physics the wide range of osmotic phenomena, so the further course of the evolution theory was guided by an economist. Malthus' Essay on Population (1798) with its contention that periodical checks on the numbers of human groups are biologically necessary came at a time when the "rights of man," "natural justice," the "return to nature," the "noble savage" and Franklinism filled the intellectual atmosphere, and it sounded a timely warning with respect to the difficulties of overpopulation. Both Darwin and Wallace admitted that the essay of Malthus had introduced to their minds the idea of natural selection as an evolutionary factor. Charles Darwin (q.v.), the grandson of Erasmus Darwin, published his Origin of Species in 1850, and his name has been so much associated with evolution theory ever since that to many people Darwinism means evolution. Evolution theory, however, existed before Darwin, and the two questions whether evolution has occurred and how far natural selection can account for it are entirely different.

"In October 1838," said Darwin, " . . . I happened to read for amusement 'Malthus on Population,' and being well prepared to appreciate the struggle for existence which everywhere goes on, ... it at once struck me that under these circumstances favourable variations would tend to be preserved, and unfavourable ones to be destroyed. The result would be the formation of a new species" (The Life and Letters, vol. i, p. 83). Darwin and Wallace, having recognized each other's conclusions as fundamentally identical, published a joint essay the year before the Origin of Species; and this was, as Singer says, the first public pronouncement in which an effective mechanism was suggested to explain the evolution of organic forms. This mechanism could be described by four propositions: that gradations exist in the perfection of organs and instincts, each good of its kind; that

all organs and instincts are in ever so slight a degree variable; that there is a struggle for existence leading to the preservation of each profitable deviation; and that these profitable deviations are inherited. Yet Darwin's position suffered from certain inherent weaknesses. He believed in a continuous system of change and argued that domestic breeds, for instance, had been obtained by the selection of very slight individual differences, although this is probably not the case. He did not account for the early stages of a favorable variation; a lung so little developed as to confer no power of breathing air would be of no advantage. Finally, his conception of heredity was as crude as Lamarck's. But it is impossible to overestimate his importance in the history of evolution theory.

His views were developed by Huxley and Spencer. Herbert Spencer (q.v.) was a philosopher, not a biologist, and had been advocating an abstract theory of evolution some years before the publication of Darwin's great work. His writings bear throughout a certain quality of a priori dogmatism in great contrast to the modestly presented but overwhelmingly convincing enumeration of facts which is found in Darwin, but historically he had a great influence on his time. His system, constructed very much as might have been expected from a man who by training and temperament was an engineer, was very much in the taste of the period and contributed powerfully to the general acceptance of the concept of evolution. Thomas Henry Huxley (q.v.) exercised his influence as a champion of Darwin's theories against theological opposition.

More important scientifically were the writings of the Darwinian embryologists. Aristotle's ladder of nature was at last to be unified with his ontogenetic succession. Fritz Müller (1821–97) broke away from the older embryologists, such as K. E. von Baer (1792–1876), who had seen in the developmental stages of the higher animal a succession comparable with the various lower animals but had not interpreted this structural relationship as really a relationship of descent. Müller, who studied crustacean embryology, maintained that the series of developmental stages is a historical document. This in due course led to the work of Haeckel, Kovalevski and F. M. Balfour.

It has been said quite rightly that biologists today are more certain than ever that evolution has taken place, but are not so certain as they were about the method by which it has taken

place. The main influence which has acted on the modern theory of evolution has been the experimental study of inheritance. This took two paths, one cytological, the other statistical. August Weismann (1834-1914) identified the cell nucleus and the chromosomes within it as the physical basis of heredity. Gregor Mendel (1822-84) investigated the phenomena of crosses between races (e.g. tall and dwarf peas) and explained them on the basis of postulated factors within the individual organism controlling the visible characters. Each pea plant, for instance, would possess two height influencing factors; both of these might be for tallness or both for shortness or there might be one of each. Characters were divided into dominant, if only one factor was necessary, or recessive, if two were required to be present to bring about the visible effect. Mendel's work was the beginning of all modern genetics. Parallel with these tendencies went the study of discontinuous variation by William Bateson (1861-1926) and Hugo de Vries). Mutations, or sudden jumps, were actually observed and these play a great part in modern speculation, the problem now being to ascertain in what way the genes (Mendel's factors) can be so modified as to produce a sudden change to another comparatively stable state. With the technique of studying large populations of an organism in captivity under controlled conditions (e.g. T. H. Morgan's work on the fruit fly, Drosophila), it became possible to measure mutation rate quantitatively. It has been found to be greatly affected by X-rays, and it has been suggested that the course of evolution as a whole was due to the effects of natural radiation, either from outside the earth or from radioactive substances in living organisms or their surroundings. Careful computations, however, have not encouraged this view.

Indeed, neither Darwinian variation nor Mendelian mutation seems as yet quite to account for those fundamental differences on which the genera and species depend. In particular, the theory of the gene, although undoubtedly able to demonstrate the reason why one animal has a green liver and another a pink liver, simply assumes that the same mechanisms explain why one animal has a liver at all and another a hepatopancreas. Still less is it possible to offer an explanation for the paucity of "missing links" between the phyla of the animal kingdom, for it will hardly do now to throw all responsibility upon the imperfection of the geological record, as was the common practise in Darwin's own

day. Whereas complete series of types can often be found within phyla, this is not the case between them. Some biologists consider therefore that the early stages of evolution were not monophyletic, as classical theory would suppose, but polyphyletic. On this view the phyla of today do not all arise from a common ancestor but from a limited number of ancestors, a limited number of possible lines of evolution into which primordial living matter separated itself as soon as it began to vary at all.

The idea of fitness—that only those organisms survived which fitted themselves to their environments—while introduced by Darwin, was much elaborated by Spencer and seemed to do away with teleology, since variations would arise by chance and what happened to fit its surroundings would be perpetuated. L. J. Henderson, however, showed that the relation of fitness was in reality a reciprocal one, the environment being fitted to living organisms just as much as living organisms are fitted to it. Cosmic teleology has thus a perfectly sound status in philosophy, while at the same time it does not interfere with mechanical modes of explanation in biological science. Of these natural selection still remains the most important. The calculations of A. J. Lotka, R. A. Fisher and J. B. S. Haldane show that it may be almost as important as Darwin himself thought it. On the other hand, neo-Lamarckianism, as it is called, continues to lay emphasis on the principle of use and disuse and the inheritance of acquired characters. The experimental evidence, however, which is from time to time brought forward in support of this doctrine (as in the work of Kammerer and Harrison) has so far failed to survive the general critical consideration of biologists. Nevertheless, those biologists who believe that a biological story cannot be told save in psychological terms naturally persist in holding various degrees of non-Darwinian opinion.

If the present array of living organisms is the product of a long evolutionary process, one would expect to find some indication of the fact in fossil remains. Geologists have long been able to ascribe more or less accurate dates to the various strata in the earth's crust, and it has been by examination of the animal and plant remains at different depths that much of the evidence in favor of evolution has been accumulated. The primary fact is that the oldest deposits of rock contain the simplest forms and that the nearer one approaches modern times the more complicated and specialized the re-

mains become. Thus in the strata of the Cambrian period the characteristic kinds of animals are lower invertebrates, mollusks, trilobites and corals; in the Silurian strata the fishes with cartilaginous skeletons predominate; in the Permian and Triassic, the reptiles and primitive mammals. Primates begin to appear in the Miocene, and eventually the bones of forms intermediate between apes and men appear. In certain cases the series of related animals can be traced through closely similar stages during long periods of time; thus the origin of the horse from its five-toed ancestor can be observed in detail. One of the most fascinating problems of evolution is involved in the disappearance of dominant types, such as the reptiles, which were once the supreme terrestrial group and only after a considerable time yielded their place to the mammals and birds.

The arguments for evolution from morphology are all based on the resemblances between the structure of different animals and the ability of the theory to explain these as due to derivation from a common ancestor. The members of any great group possess a common ground plan. Thus the crustacea have a certain number of appendages, some modified for swimming, others for egg carrying, walking, prehension, mastication, smell and touch; the more locomotory appendages there are, the fewer the nutritive ones, but there seems no reason why this should be so except that the ancestor had a limited number and the descendants have specialized in various directions. Again, the limbs of vertebrates show a common plan of structure with diverse modifications; thus the wings of bat, bird and pterodactyl are all variations on the theme of the pentadactyl limb. Rudimentary or vestigial organs, inexplicable save on some theory of descent, occur very frequently in animals and plants, e.g. the semilunar fold of the human eve, the mammalian pineal gland, the limbs of whales or, to take botanical examples, the leaves of the parasitic dodder, reduced to tiny scales, and the staminodia, or functionless stamens, of many flowers. The fact that animals fall naturally into a group-within-group classification, which may be compared to the branching of a tree, although established by systematists long before Darwin, did not receive its logical explanation until it was interpreted as the result of gradual divergence and descent from common ancestors.

In the embryonic development of all vertebrates there appear on the sides of the neck

region a series of slits, which in fishes and amphibia join up with corresponding slits pushed out from the pharyngeal wall. This is the origin of the gills. But although the slits are formed in reptiles, birds and mammals, their development is for the most part cut short; nevertheless, the Eustachian tube in man is derived from one of these slits. Generally speaking, all traces of gill slits disappear in the adult mammal. But still more remarkable, the arterial system of the human embryo develops exactly as if it were planned to supply blood to the gills of a fish and only later becomes modified into the permanent vascular system. Again, the apodic amphibia have complete limbs while still in the embryonic state, the "flat" pleuronectid teleostean fish has one eye on each side of its head before it hatches, and the crab at the megalopa larval stage just after hatching has an abdomen as large as that of a lobster or a prawn. The collar bone is absent in sheep, deer and many other ruminants, but in the embryo sheep it is completely formed. Embryos thus betray the ancestry of their species. But with exactly what degree of clearness they betray it has been much discussed among embryologists, and in maintaining that ancestral adult stages rather than ancestral embryonic ones could be described from the appearances of embryos Haeckel has not been followed by the majority of investigators. Yet on the fundamental thesis that embryonic development is a historical document there is no disagreement.

Chemical as well as morphological tests of genetic relation exist. The blood of animals responds to the introduction of foreign proteins, such as are contained in the blood of another species, by the production of antibodies and precipitins. Although sensitized blood serum reacts most strongly by precipitation to the blood of the animal used in producing the sensitized condition, it also reacts more or less to the blood of related species. It has been found that the degree of reaction runs roughly parallel with the degree of structural similarity, and in this way affinities of descent may be charted out. Thus human blood reacts most strongly with the blood of anthropoid apes, next with that of Old World monkeys, next with that of New World monkeys and least strongly with that of lemurs. Again, mammalian blood, as has long been known, is very similar, as regards the composition of its ash, to sea water. The probable changes in the composition of the ocean during geological time being known, it is possible to obtain a

picture of the evolution of terrestrial forms by comparing their blood with sea water. Chemical phenomena of recapitulation are also seen in the appearance and disappearance of certain enzymes during embryonic development. The course of evolution must have been largely conditioned by chemical factors; thus it has been said that mammals would have been impossible without the blood pigment, haemoglobin, and the terrestrial oviparous animals without uric acid.

Once launched in the scientific world, the evolution concept became the center of furious controversy in the intellectual life of the nineteenth century. Its most obvious impact was on the theological problem of authority. The doctrine of special creation and even that of the immutability of species were embedded in the Old Testament; and wherever the automatic writing view of the Scriptures or the belief in literal inspiration was dominant, a clash with the evolutionists could not be avoided. The defenders of the book of Genesis were perfectly logical in wishing to exclude the sacred writings from all criticism, for they realized, perhaps unconsciously, that criticism would not stop there and that the historians and anthropologists were only waiting until the biologists had finished with the Old Testament before they attacked the New. The whole extraordinary story of Bishop Colenso, whose mild emendations provoked such fury, is well worth reading as a view of the temper of the time. Other excellent accounts may be found in the autobiographies of Gosse (from the point of view of an English layman) and in Houtin (from the point of view of a French priest). Modern liberal theology, realizing that scientific criticism of the Biblical corpus must have a completely free hand and that the historical events themselves are much less important than the ideas and concepts which they involve, finds it difficult to understand the bitter atmosphere of nineteenth century polemics.

In part the opposition to evolution theory was connected with that general aversion to scientific investigation which is present in all epochs but attaches itself now to one, now to another, of its forms. Thus in the Middle Ages chemistry was invested with an unholy glamour; and the opposition to biological evolution theory in the last century has in the present been transferred to psychology, which is often regarded as unearthing many things which would be better unknown. Such opposition, however, only stim-

ulated the tendency to exalt natural science into a philosophy; and scientific naturalism, the philosophical form of nineteenth century materialism, found in evolution theory one of its principal pillars. The world, consisting wholly of matter and fundamentally a fortuitous concourse of hard round microscopic billiard balls, had come into existence by chance and not as the result of any intelligent design. Life, originally produced by some haphazard collocation of carbon compounds and the colloidal state, had obeyed the Spencerian law of increasing heterogeneity and had produced an infinite number of forms, most of which had been destroyed in the course of evolution. And it was here that the Darwinian hypothesis of natural selection fitted in so perfectly with the world outlook of scientific naturalism, for in abolishing purposiveness in biology, either individual, on the part of the animals (as in Lamarckianism), or general, on the part of the whole process, it made biology safe for the physicist and opened a magnificent vista (which is not yet nor likely to be closed) in which physics and biology are seen to be one science.

Materialism, however, or what comes to the same thing, natural science regarded as a philosophy, suffers from one serious defect; namely, that being a theory it happens to be a product of mind. It is never easy to see on what ground a materialist can have sanction for his materialism, since materialism is nothing if not a system of thought. And a similar undermining process did in fact take place historically, for biological evolution theory while at first seeming to support scientific naturalism was presently seen to be deserting to the other side. Mind as a product of biological evolution would probably be better adapted for practical and mundane uses than for grasping absolute truth. From this consideration there arose the whole antiintellectualist movement, mainly represented by Bergson and the pragmatists and chronicled by Aliotta. What Ward and Bradley were unable to do by attacking scientific naturalism from the front on the basis of idealist philosophy, was accomplished by Mach, Avenarius and Bergson by a rear attack; and this was in its consequences even worse than the first, since now not only biology but physics too was assailed and shown to be, however useful as a science, anything but satisfactory as a philosophy.

Another important consequence of the evolution concept was largely psychological. The biology of the nineteenth century was no longer

content, like that of the previous century, to dwell largely on the more edifying aspects of living organisms; on the contrary, it faced all the facts it could and described calmly such phenomena as parasitism, putrefaction and the struggle for existence. This raised the problem of evil, that perennial difficulty of religious thought, in an acute form; and biologists such as Romanes particularly emphasized the universality of disease, pain and death, although it is likely that he very much overestimated the importance of pain in organisms with undeveloped nervous systems. Nevertheless, the issues raised by biology forced all progressive theologians to reconsider their positions very carefully at this time. Such a book as the Education of Henry Adams shows how the theory of evolution entered into the thought of every man who lived in the intellectual climate of his period.

The insistence on the seeking out of origins, which characterized the end of the nineteenth and the beginning of the twentieth century, may to a large extent be attributed to the influence of evolution theory. The origins of religion from primitive animism, of episcopal miters from Mithraic hats or of mystical experience from sublimated sex instinct were urged in a sense derogatory to the end products, and at first it was insufficiently realized that origin is essentially irrelevant to questions of value. Against these attacks there was little defense. The apparatus of theology, as Balfour put it, is "much better contrived for dealing with the points on which theologians differ than for defending against a common enemy the points on which the theologians are for the most part agreed" (The Foundations of Belief, 8th ed., p. 177). The early victories of scientific naturalism led to a theological stampede, but this was not lasting; and while modern liberal theology is united in acceptance of evolution it does not admit the naturalist claim, which used to be allied with it, that the scientific method is alone competent to acquaint man with the nature of the world in which he finds himself.

Philosophical examination of the nature of scientific law has also led to a great difference in the outlook of the twentieth century as compared with that of the nineteenth, for no small part of the past polemics was due to a mistaken conception of scientific "law" as legislative. Regularities which may be observed in nature are by no means the same thing as regularities imposed upon nature by some external creative force. This was a concept taken out of jurispru-

dence and misapplied in science, but even more numerous were the concepts taken out of natural science and misapplied in the social sciences. Thus evolutionary continuity has been used by some writers as an argument for slow social development and parliamentary methods; evolutionary discontinuity has just as commonly been used as an argument for revolutionary changes. Social selection in human communities has been identified with natural selection, and the survival of the fittest has been constantly used by capitalist writers as a rationalization for laissez faire doctrines. The temptation to carry over the phenomena of recapitulation into the mental field and to speak of mental stages passed through by each human child as representative stages in the past history of the race has been too great to be resisted. Certain physical phenomena of childhood as described, for example, by Hrdlička certainly seem to merit an evolutionary explanation. But in general further critical work is needed to investigate the degree of applicability of the recapitulation concept in this

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See: EVOLUTION, SOCIAL; BIOLOGY; HEREDITY; ENVIRONMENTALISM; PROGRESS; MECHANISM AND VITALISM; ORGANISM, SOCIAL; CHANGE, SOCIAL; ADAPTATION; MAN; SICULARISM; SCIENCE.

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EVOLUTION, SOCIAL. The idea of a changing and transmuting society was foreign to primitive culture. Conservative and self-complacent, primitive men thought of the present as heir to the past and of the future as a projected present. No idea of social progress was formulated. Whatever was done by men deliberately as a contribution to the social process chiefly concerned conservation not change. Innovations made or brought in by individuals were not unknown, but they were primarily concerned with particular things, rites or customs, and no attempt was made to fit these into a scheme of improvement. There were some exceptions, however, as when the Iro-

quois Indians in the sixteenth century formed a league or confederacy for the preservation of peace.

Among the Greek thinkers both Plato and Aristotle entertained definite notions about social change and the possibilities of its direction by legislators. Plato, who projected a new society based on ideals deduced from rational principles, thought little of the trends and resistances of social institutions. Aristotle, on the other hand, taught that social structures had flourished and decayed many times in the past; he discussed at great length the various tendencies which impede or enhance social change or a particular kind of change and never tired of warning legislators and social reformers against proceeding too precipitously. No significant advances in the theory of social change were made until the seventeenth century. Both Thomas Hobbes in the Leviathan (1651) and John Locke in Of Civil Government (1690) drew inferences from the conditions of modern savages concerning those of the primitive ancestors of civilized peoples. The search for cultural similarities was stimulated by the interest taken by Cartesian science in the uniformities and laws underlying the diversity and apparent disorder of the sensible world. The similarities observed between the cultures of savage contemporaries and those of the primitive ancestors led to the notion of stages of development. Bossuet in his Discours sur l'histoire universelle (1681) distinguished twelve successive cultural epochs. Building upon Bossuet but with an emphasis upon progress rather than mere temporal sequence Turgot in his Plan de deux discours sur l'histoire universelle (1750) traced culture from a hunting stage through pastoral life and the rise of agriculture to the beginnings of government. The tendency to consider culture history as a series of progressive stages received its definitive expression in Condorcet's Esquisse d'un tableau historique des progrès de l'esprit humain (1793). David Hume had contributed to the theory of cultural change in his essays, Of the Rise and Progress of the Arts and Sciences (1742) and Of National Characters (1748). He had rejected the environmentalism of Montesquieu's L'esprit des lois (1748), in which national differences were traced to differences in physical environment. He stressed the importance of tradition and imitation as molders of local peculiarities, ascribed preservation and conservatism to the influence of powerful governmental agencies and explained

change and advance as due to normal and persistent fluctuations or the "inconstancy to which all human affairs are subject," to the influence of nation upon nation, to the ideas of exceptional individuals and to violent interruptions of government or of learning brought about by diverse causes which break down tradition and pave the way for the new.

In the nineteenth century the immediate precursor of modern evolutionism was Auguste Comte, whose Cours de philosophie positive (1830-42) foreshadowed the ideology of the classical evolutionists in several important particulars. Building upon Pascal's analogy between the life of an individual and that of the race Comte for the first time adopted the use of the comparative method on a large scale, confident that the early stages of civilized groups may all be observed among primitive peoples distributed in different parts of the globe. In surveying the vast array of cultural forms thus brought into view—forms conceived by Comte as changes achieved in the cultural advance of mankind—he made the following significant assumptions: cultural changes are slow, gradual and continuous; they follow an order which is fixed and determined; and the differences between separate cultures are due to the speed with which different social groups pass through the successive stages. This brought social thought to the very doors of classical evolutionism. Arguing that every phase of culture, moral, intellectual, technical, must pass through the same stages and that these stages were identical for all periods in history Comte simplified his task by restricting his examination to the intellectual development of western Europe and thus reached the philosophical law of the three stages—the theological, the metaphysical and the positive.

Herbert Spencer was undoubtedly influenced by Comte, but the more significant predecessors of Spencerian evolutionism were Karl Ernst von Baer, the embryologist, Charles Lyell, the geologist, and Thomas Robert Malthus, the political economist. In his Über Entwickelungsgeschichte der Thiere (2 vols., Königsberg 1828-37) von Baer had established the biological principle that ontogeny recapitulates phylogeny; that the embryonic individual passes in somewhat abbreviated form through the stages represented by the different species of animals. Charles Lyell had sounded a dynamic note in his Principles of Geology (2 vols., London 1830-33) by introducing the concept of stratification.

Malthus had formulated in the first edition of his Essay on Population (1798) the principle that while the food supply increases in an arithmetical ratio population increases in a geometrical one, resulting in inevitable pressure on the food supply. From this theory Spencer derived the concept of survival of the fittest. Spencer's dependence on Darwin in the broader field of evolution should not be exaggerated. As can be gathered from an examination of his Prospectus, the First Principles (1862) and the first edition of the Principles of Biology (2 vols., London 1864 67; rev. ed. 1898-99) his own ideas were already developed in definitive form, except in regard to the theory of natural selection, when he became acquainted with Darwin's work. Before Spencer could pursue the main argument of the Principles of Sociology (1876-96) or E. B. Tylor that of his *Primitive Culture* (1871) they had to meet the theory of degeneration propounded by the theologians to the effect that primitive cultures represented degenerated remnants of once higher civilizations. Spencer countered with the observation that these hypothetical higher civilizations, if granted, must have once developed from more primitive conditions and that the argument of the theologians instead of meeting the problem was merely deferring its solution. For Spencer the development of society or culture represented but one phase of universal evolution. The progressive redistribution of matter and motion, the change from the simple to the complex, from homogeneity to heterogeneity, the integration of wholes and the differentiation of parts and all the other aspects of evolutionary change which applied to the astronomical cosmos, the earth, the species of plants and animals, the history of mind, also held true for the history of human culture. Except in a few passages Spencer held that these changes in all domains led to the development of progressively higher forms, a view held by most evolutionists but not inherent in the concept of evolution. In the general exposition of his thesis Spencer held that evolutionary change applies to culture as an integrated whole, but he also traced separately the evolution of the different aspects of culture, such as religious, industrial, military and professional institutions. He omitted discussion of material culture and technology, an omission found also in Wundt's Völkerpsychologie, but other evolutionists have filled this gap. The effect of his exposition of the theory of social evolution was magnetic.

After brief resistance social theory began to reflect its influence everywhere, especially in Russia, France, England and the United States.

In the search for origins interest had long been centered on the primitive or preliterary period in man's development, where chronology was vague and relatively few facts were accurately known. It is in this field that the evolutionists made their contributions. In the domain of social organization the theory of Henry Maine was overthrown by J. J. Bachofen, Swiss classicist, John Ferguson McLennan, Scotch jurist, and Lewis H. Morgan, American anthropologist. Maine had taught the priority of the patriarchal individual family. The evolutionists held that the earliest form of social structure, following upon the primal "undivided horde," was based upon the clan, a unilateral hereditary unit with maternal descent. It was their belief that in the course of historic development this was followed by the gens, a unilateral hereditary unit with paternal descent, and that at the dawn of the historic period the gens ceded its place to the bilateral individual family with patriarchal features. Morgan's argument in support of this scheme was based on a vast array of data collected by him and others in many parts of the world, consisting of relationship systems and associated terminologies which were interpreted as indicating corresponding forms of social organization and especially of marriage. Marriage was represented as having had its beginning in a state of promiscuity—no sexual regulations whatsoever-which reigned in the original horde, After two forms of group marriage, in which certain classes of men and women were regarded as actual or potential husbands and wives, individual marriage emerged. Bachofen taught in addition that the period of maternal descent, the clan stage, was characterized by the precedence of woman in socio-political matters – a matriarchate. This scheme was accepted and utilized by such writers as J. Kohler, Friedrich Engels, Maxim Kovalevsky, Peter Kropotkin, H. Cunow and others.

In religion Spencer and Tylor established the doctrine of animism as a "belief in spiritual beings" (Tylor's minimum definition of religion) derived in the main from dream experiences. Spencer stressed in addition the genetic priority of the human spirit or ghost. He regarded fear as the emotional root of religion, inventing in this connection his famous aphorism: all religion comes from the fear of the

dead, all society from fear of the living. In discussing worship he placed ancestor worship at the bottom of the genetic scale. J. G. Frazer taught the priority of magic to religion; F. B. Jevons identified totemism with plant and animal worship and then derived the cultivation of plants and domestication of animals from totemism. The works of Andrew Lang, E. S. Hartland, Grant Allen, Laurence Gomme and in the United States those of Daniel Brinton were similarly oriented. In art A. C. Haddon argued that realism, based on the representation of natural creatures and objects, came first; that this was gradually conventionalized, assuming more and more geometrical features, and that finally the original realistic connotations became attached to these geometrical features in the form of symbols.

Similar schemes prevailed with reference to economic conditions and property. Economists like Karl Bücher and popularizers like C. Letourneau taught the doctrine of three stages of economy: hunting, pastoral life and agriculture. Other forms of the three stages were read into the archaeological record: the ages of stone, bronze and iron. Communal property ownership was regarded as the universal primitive form from which individual ownership became differentiated in later periods. Periods and stages were constructed by writers like J. Kohler and A. Post with reference to legal forms and concepts.

In dealing with these diverse topics the evolutionists assumed a general psychic unity of mankind, a notion they had derived from preevolutionary writers such as Johann Gottfried Herder, Adolf Bastian and Theodor Waitz. The psyche of man, reacting to physical environments similar in their general features, expressed itself in a cultural development which was uniform, gradual and in the opinion of most evolutionists progressive. Uniformity here meant that culture everywhere evolved in essentially similar ways and passed through analogous or identical stages—the so-called parallelism in development. By gradual the evolutionists meant that cultural changes were slight and cumulative like the imperceptible gradations of the Darwinian biologists. The cultural changes were held to be progressive in so far as they led to higher forms, a belief which introduced an optimistic note into evolutionist thought for which Spencer was largely responsible.

The mode of procedure adopted by the evo-

lutionists came to be known as the comparative method. An inspection of evolutionary treatises such as Frazer's Totemism and Exogamy, Westermarck's Origin and Development of the Moral Ideas or even Briffault's recent The Mothers reveals bibliographics of extraordinary length reflecting the evolutionist's practise of scanning innumerable sources for illustrations of stages and substages. The evolutionists admitted that errors and inaccuracies were inevitable in view of the defective nature of much of this source material, but they expressed the complacent faith that the errors would cancel out and that thus the very mass of the data assured the fundamental correctness of the resulting picture.

Associated with the comparative method was the use of the concept of survival, a term introduced by Tylor. The evolutionists believed that as culture changes separate cultural elements are not always wholly obliterated but that some survive in a transformed or attenuated form, such as the games of children, which originally functioned as magical rites, or the complex of ideas and practises associated with the mother's brother which, the evolutionists held, belonged to the stage of maternal descent but were frequently encountered in the succeeding stage of father right. Survivals were utilized by the evolutionists as a proof of their contentions about stages in culture.

The determinism implied in evolutionist thought brought to the fore the problem of origins, particularly of first origins. If development was fixed, origins were not casual, and first origins gained prestige as nuclei pregnant with all that was to follow. The evolutionists became tireless origin hunters. Numerous origins of religion, totemism, the state, of particular technical devices, the dance, forms of address and etiquette, were invented and discussed with enthusiasm. The idea of evolution brought animation and imagination to the field of social thought. Many welcomed a philosophy of history which stood for broad perspectives, logical coherence and finality; others eagerly reaped the rich harvest of new facts, interesting and exciting in themselves, and accepted without too much probing the curious answers to many particular puzzles, such as the origin of Christmas, marriage or the art of making fire. The alliance of social thought with the older and more firmly rooted science of biology brought a sense of security and enhanced prestige.

The triumphal phase of evolutionism was, however, of short duration. With the accumu-

lation of adequate anthropological material the concept of uniformity and of stages was shaken and then collapsed altogether. In social organization, for example, it was shown by Starcke, Westermarck and anthropologists in the United States that the individual family was the one ubiquitous social unit, the most primitive as well as the most persistent. Telling arguments were advanced to the effect that neither the clan nor the gens had rightful claims to universality, that gentes were but seldom preceded by clans and that the notion of a primal matriarchate, in particular, had no factual basis, inasmuch as the socio-political preeminence of women was exceedingly rare in primitive societies still surviving and no convincing arguments in favor of its previous existence had been advanced by the evolutionists. Eduard Hahn and his followers attacked the dogma of the three stages in economics and succeeded in showing that wherever man was a hunter women gathered wild plants; that a pastoral stage did not necessarily follow hunting for there were agricultural tribes in North America and elsewhere who had never known domestication; that the agricultural stage, finally, required an analytical restatement, since two forms of agriculture were to be distinguished which were very different in their cultural status. These were primitive agriculture without domestication, with the hoe as its only tool and mostly practised by women; and historic agriculture with domestication and the use of the plow, practised by the male, whose labors as tiller of the soil were shared by the domesticated cattle and later the horse. The belief in the universality of primitive communisms was forced to give way before the proofs that certain types of personal property were everywhere individually owned and that among some hunting peoples there existed private territorial ownership. In religion animism and magic have been found to be equally primitive, while ancestor worship is recognized as a feature of more advanced rather than most primitive conditions and totemism has been redefined on the basis of fuller data. In art it has been shown that in a number of instances geometrical art does not arise from realistic art but has independent primitive origins.

Other attacks came from among the evolutionists themselves. Karl Marx, who in his youth had absorbed Hegel's dialectic trilogy—thesis, antithesis, synthesis—supplemented the concept of gradual change with the concept of

cataclysm or revolutionary change, an ideological reconstruction which with Peter Kropotkin, the communist anarchist, took the form of "evolution through revolution" and which also had practical consequences of vast significance. Anthropologists, on their side, were able to show that relatively sudden as well as vast changes, for example in religion, were by no means unknown even in primitive society and that similar revolutions were at least probable in early industry. This theory of cataclysm in social evolution can in no way be derived from the parallel shift in biological theory, which came a generation later.

The evolutionist conception of progress prevailed for a long time, but with accumulation of evidence it was recognized that regression was as common in history as progress and that culture, moreover, seldom advanced in all its parts. The rise of Greek civilization, which culminated in the Periclean age and during which architecture, drama, philosophy, the writing of history and the theory of politics advanced simultaneously, was declared to be unique; partial or one-sided progress was found to be the rule. The notion of progress, furthermore, implied judgments as to what constituted improvements, and no such judgments could be made without standards, which are notoriously subjective. The idea of progress was thus relegated from the domain of fact to that of opinion.

The psychological postulates of the evolutionists were attacked by Wilhelm Wundt, German psychologist, who in his Völkerpsychologie undertook an independent analysis of the phenomena of language, art, religion, myth, social organization, law and history. Wundt criticized the intellectualism and individualism of the evolutionists and pointed out that the conclusions of most people were not the result of rational analysis but of intuitively creative mental acts, or "apperceptions." He insisted that culture could not be understood without taking account of the formative and cooperative functioning of the group, whereas the evolutionists while doubtless aware of the existence of group phenomena had analyzed cultural facts as if they had sprung up in a social void populated by discrete individuals.

Anthropologists also criticized the evolutionists for treating separate tribes or tribal groups as if their culture had developed in a geographical void. Aware of the inner forces which were shaping culture, the evolutionists neglected the

outer forces engendered in intertribal contact. When later anthropologists took cognizance of historico-geographical settings of culture and studied intensively particular tribes, tribal groups and culture areas in relation to their neighbors, unforeseen complexities emerged. The part played by borrowed elements in the building of culture was recognized and evolutionary ideology inevitably appeared as an unjustifiable simplification. When the evolutionists had encountered cultural similarities in different tribes they had unhesitatingly referred these to parallel developments from similar or identical origins. But if diffusion was actual, cultural similarities might also be due to a remote common origin or to direct borrowing among the tribes. Thus a series of investigations and disputes was initiated the end of which has not yet been reached. The problem of diffusion as against independent development in fact antedates evolutionism. Adolf Bastian had already distinguished both factors, without, however, recognizing the attendant difficulties in the interpretation of similarities. Friedrich Ratzel initiated a series of studies dealing with the geographical distribution of single cultural features and unwittingly became the forerunner of the modern diffusionists. Not all evolutionists had ignored the problem or lightly brushed it aside. Tylor, in particular, in his Researches into the Early History of Mankind (1865) had discussed diffusion with insight and acumen. A shift from a critical examination of culture borrowing to doctrinal diffusionism is seen in the works of F. Graebner and G. Elliot Smith.

The practise of interpreting cultural similarities as parallel developments was also put in question by the doctrine of convergence. This concept, first used in ethnology by Paul Ehrenreich in 1903, was further elaborated and illustrated by Franz Boas, Robert H. Lowie and Alexander Goldenweiser. Cultural similarities were shown to have developed or converged in two or more places out of conditions or features originally dissimilar or less similar. Parallelism was no longer the only alternative explanation to diffusion wherever cultural similarities were to be accounted for.

The evolutionists were taken to task for the use they made of the comparative method. The validity of this method when rightly employed and its enormous significance for science were granted, but it was pointed out that no proof could be furnished for such a dynamic generalization as evolution by an arrangement

of static instances. For such precisely were the elaborate proofs of the evolutionists; they had gathered separate cases from many different tribes and places and had then attempted to piece these together into a quasi-historical series which was to represent a development. Disregard of historical and geographical factors is feasible when the uniformity of cultural developments is accepted as a postulate, but if this is granted the case for evolution is prejudged (for an elaboration of this criticism see A. Goldenweiser's *Early Civilization*, p. 20–27).

Of all social scientists the historians proved most nearly immune to evolutionism, for they knew the facts. They were accustomed to deal with series of successive events, and as their experience did not tally with evolutionism, they proceeded for the most part to ignore it. Had the evolutionists been historians rather than amateur anthropologists, the classical theory of social evolution would probably not have progressed beyond its early phases. When Karl Lamprecht wrote his Deutsche Geschichte (13 vols., Berlin 1891-1908), in which he attempted to fit his data into an abstract scheme of development, most historians were not receptive. The same fate befell Kurt Breysig with his Die Geschichte der Menschheit (Berlin 1907). When Oswald Spengler published his *Der Un*tergang des Abendlandes (2 vols., Munich 1918-22; tr. by C. F Atkinson as The Decline of the West, New York 1926-28), in which he revived the cyclical form of evolutionism, the popular success of this pessimistic work did not extend to his professional colleagues, who preferred to regard the book as ponderous journalistic propaganda.

Whatever its merits or demerits the ideological heritage which evolutionism has left to posterity is impressive. The tradition of the psychic unity of man which the evolutionists carried on has now become the common postulate of all but a few anthropologists and of the majority if not of all of the other social scientists. The evolutionist's wholesome respect for man's inherent creativeness is now shared by most social theorists, psychologists and progressive educationists, while the diffusionists, who reject this faith, find their skepticism a double edged sword. While denying the dogmas of the evolutionists modern social science carries on their search for causes and effects in the historic process. If prediction here is dubious and analysis necessarily subjective, it is due to the emphasis on individual events which is a characteristic of all historic inquiry. The evolutionists, finally, have taught us to evaluate historic events, to know that not all past events are history but only those that carry over into the future.

Since the World War students of the social sciences without aiming at the logical orderliness of evolutionary schemes have renewed their search for relatively stable tendencies and regularities in history and society. On the other hand, the growing discrepancy between ideals and the workings of history is guiding the sciences of society into more and more pragmatic channels. If there is social evolution, whatever it may be, it is no longer accepted as a process to be contemplated but as a task to be achieved by deliberate and concerted human effort.

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See: Evolution; Change, Social; Progress; Envi-RONMENTALISM; DETERMINISM; SOCIAL ORGANIZATION; CULTURE; DIFFUSIONISM; ANTHROPOLOGY; HISTORY. Consult: Principal Works of Social Evolutionists: Spencer, Herbert, First Principles (6th ed. New York 1900), and Principles of Sociology, 3 vols. (London 1876-96; vol. i, 3rd ed. 1885); Maine, Henry J. S., Lectures on the Early History of Institutions (London 1875), and Ancient Law (14th ed. London 1861), and Dissertations on Early Law and Custom (London 1883); Bachofen, J. J., Das Mutterrecht (2nd ed. Basel 1897); McLennan, J. F., Studies of Ancient History (new ed. London 1886); Morgan, Lewis H., Systems of Consanguinity and Affinity of the Human Family (Washington 1870), and Ancient Society (New York 1877); Kovalevski, Maxim, Pervobitnoe pravo (Primitive law) (2nd ed. Moscow 1886), and Tableau des origines et de l'évolution de la famille et de la propriété (Stockholm 1890); Kropotkin, Peter, Mutual Aid, a Factor in Evolution (New York 1902), and Etika (Petrograd 1922), tr. by L. S. Friedland and J. R. Piroshnikoff as Ethics in Its Origin and Development (New York 1924); Cunow, H., Die Verwandtschaftsorganisationen der Australneger (Stuttgart 1894), and "Les bases économiques du matriarcat" in Devenir social, vol. iv (1898) 42-65, 146-62, 330-42; Kohler,]., Zur Urgeschichte der Ehe (Stuttgart 1897); Tylor, E. B., Researches into the Early History of Mankind (3rd ed. London 1878), and Primitive Culture, 2 vols. (3rd ed. London 1891), and "On a Method of Investigating the Development of Institutions, Applied to Laws of Marriage and Descent" in Royal Anthropological Institute of Great Britain and Ireland, Journal, vol. xviii (1888-89) 245-72; Jevons, F. B., Introduction to the History of Religions (6th ed. London 1914); Lang, Andrew, Myth, Ritual and Religion, 2 vols. (London 1887), and Social Origins (London 1903); Gomme, G. Laurence, Folklore as an Historical Science (London 1908); Hartland, E. S., The Legend of Perseus, 3 vols. (London 1894-96), and Primitive Paternity, 2 vols. (London 1909-10), and "Matrilineal Kinship and the Question of Its Priority" in American Anthropological Association, Memoirs, vol. iv (1917), and the contro-

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EWERS, JOHANN PHILIPP GUSTAV VON (1781-1830), German historian of Russian law and institutions. Ewers was born in Westphalia and studied with Heeren and Schlözer at the University of Göttingen. In 1803 he went to Livonia and from 1810 until his death was professor at the University of Dorpat. His first important work, Vom Ursprung des russischen Staats (Riga 1808), set forth the now discredited theory that the Varangians were not of Scandinavian origin but were Chazars who came from the region of the Black Sea. The work which made Ewers famous and gives him an important place in Russian historiography is his Das älteste Recht der Russen in seiner geschichtlichen Entwickelung (Dorpat 1826). This book marks the beginning of the scientific investigation of early Russian law and social organization and is the first work to propound the theory, later developed by Solovyev and Kavelin, of the clan origin of the Russian state. According to Ewers the clan was the oldest social organization in Russia. Strife among the clans forced them to choose as ruler an outsider, who governed the entire country in the same fashion as a patriarch ruled over a clan. The Russian state thus in its primitive condition was nothing less than a union of many clans. The chiefdom and property were not transmitted from father to son but were inherited by the brothers who held them jointly. While this theory has been refuted it is important in Russian historiography as the first attempt to offer a reasoned explanation of early Russian history. E. SMURLO

EXCESS CONDEMNATION is the practise of taking by public authority under the right of eminent domain more land than is actually needed for a contemplated public improvement, with a view to selling the excess when the improvement is finished. It is thus an extension of the power to take private property for a public purpose on payment of just compensation.

The right of eminent domain in its usual exercise is limited to the condemnation of such land as is required for actual public use. Aesthetic and economic reasons, however, may sometimes make it highly desirable to secure in connection with a public improvement more land than is needed for the immediate purpose. The aim may be to facilitate good city planning by providing environmental safeguards for public improvements. For example, when a site for a new city hall is being acquired in a congested district it is usually deemed expedient for the

municipality to acquire control of the area immediately surrounding this site in order that the new structure may have a favorable setting. This purpose is accomplished by reselling the excess land under suitable building restrictions. A more common illustration occurs in connection with the widening of a city street. If no more land is taken than is actually required for the broadened thoroughfare, there may be left on both sides various remnants which by reason of their inadequate size and awkward shape are usually unsuitable for the erection of attractive buildings unless they can be consolidated. Such consolidation is often difficult if the property belongs to several private owners. By excess condemnation a municipality is enabled to acquire the whole tract and then to reparcel the excess land in a way that will insure satisfactory rebuilding on both sides of the highway.

Excess condemnation also sometimes permits the municipality to recoup itself for expenditures involved in a public improvement to a greater extent than would be possible through the levy of special assessments on the benefited property. The constitutional provisions and laws relating to the levy of special assessments usually limit the proportion of the enhanced value which the municipality may recover in this way, whereas by the process of excess condemnation the public gets all of the increase in value traceable to the improvement. Thus any profit resulting from betterments financed out of public funds is socialized and accrues to the community as a whole. Too much emphasis, however, should not be placed upon this aspect of excess condemnation, for the amount of recoupment obtained by the public authorities is usually below their expectations. This results from the fact that the acquisition of land by right of eminent domain is frequently an expensive process involving litigation and from the further fact that the completion of public improvement is often delayed, with a consequent holding of the excess land for a considerable period while the carrying charges mount up. Moreover, it sometimes happens that political influences intervene to procure the disposal of the replotted building lots to favored purchasers or lessees at figures which are not solely determined by considerations of public interest.

Both the theory and the practise of excess condemnation originated in Europe. The plan has found favor in German and English cities especially and has been used by them to a considerable extent during the past thirty years. In

London, for example, the Kingsway project included the excess condemnation of a wide swath on both sides of the new thoroughfare. But in the United States the proposal to utilize this method encountered at the outset a serious obstacle in constitutional provisions which restrict the right of eminent domain to the taking of private property for public use and do not permit its condemnation for resale into private hands. Such restrictions exist in most of the state constitutions; and although the courts have been fairly liberal in their interpretation of the term public use and have given municipalities the benefit of any doubt in this connection, it was not to be expected that they would go so far as the employment of the excess condemnation procedure required. In many cases an amendment to the state constitution was necessary before the plan could be utilized. Such amendments have been made in various states, including New York, Massachusetts, Ohio and Wisconsin. In other states, because of the greater flexibility of the constitutional provisions, the end has been achieved by the enactment of general statutes permitting municipalities to condemn excess land under certain restrictions.

With constitutional and legal barriers thus removed in various states, it seemed that American municipalities would make free use of the new method. For a time there was some disposition to do so; but the early experiments did not prove altogether satisfactory and in recent years the plan has not been used to the extent that was anticipated. Many municipalities throughout the United States have found that the plan of recoupment by the levy of special assessments when it is effectively worked out can be made to secure most of the financial advantages which accrue from the use of excess condemnation, while avoiding the danger of serious losses through political manipulation. Excess condemnation is consequently being used for the most part only in cases where the aesthetic protection of public improvements is an important consideration.

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See: EMINENT DOMAIN; SPECIAL ASSESSMENTS; CITY AND TOWN PLANNING.

Consult: Cushman, R. E., Excess Condemnation (New York 1917); Williams, Frank B., The Law of City Planning and Zoning (New York 1922) p. 128-63; Purdy, L., "Why We Need Excess Condemnation" in National Municipal Review, vol. xii (1923) 363-68; Illinois, Legislative Reference Bureau, "Eminent Domain and Excess Condemnation," Constitutional Conventior Bulletins (Springfield, Ill. 1920) no. 7.

EXCESS PROFITS TAX. As early as 1863 in order to provide war pensions the state of Georgia imposed an excess profits tax on the earnings of corporations in excess of 8 percent of the capital stock at rates varying from 5 percent to 25 percent of the amount of such excess. This tax was quite productive, but the law was soon repealed and the experiment was forgotten. The excess profits tax developed anew during the World War as a logical result of the great public need for increased tax revenue and the widespread feeling that it was unjust for business to profit greatly by war when men were dying by thousands in the trenches. The tax was first confined to specified industries, such as the manufacture of munitions, or in neutral countries to companies profiting directly by special war trade with the belligerents; but in 1915 the tax was expanded to cover war excess profits in general in the United Kingdom and the Scandinavian countries, and thereafter it spread rapidly to the British Empire, Austria, France, Germany, Greece, Hungary, Italy, Japan, the Netherlands, Russia, Spain, Switzerland, the United States and other countries.

The principal object of most of these taxes was to tax heavily the excess of wartime profits over pre-war profits. Thus in Great Britain in 1917-18 a tax of 80 percent was imposed upon the excess of current profits over the "pre-war standard," defined as the average profits of any two of the last three pre-war years to be selected by the taxpayer. Where pre-war profits were abnormally low the taxpayer could substitute a "percentage standard," 6 percent or in the case of non-corporate business concerns 8 percent of the capital invested at the end of the last prewar year. In practically all cases the allowance for changes in capital had to be made on a percentage basis: for increase in capital during the taxable year at the rate of 9 percent (noncorporate business, 11 percent); for decrease in capital during the taxable year at the rate of 6 percent (non-corporate business, 8 percent). In the case of new business concerns the pre-war standard was calculated as 9 percent of the capital invested (non-corporate business, 11 percent). There was a specific deduction or credit of £200 increased in the case of small concerns by one fifth of the amount by which the profits were less than £2000. After the year 1918 the rate of the tax was reduced and the amount of deduction to small concerns was raised.

In other countries—notably Canada and the United States—only minor attention was paid to

the profits of pre-war years. Excess profits in these countries meant excess over "normal" profits, which were measured as a percentage of capital invested in the business. This basis was deliberately adopted in the United States against strong opposition in order that businesses which were exceptionally prosperous both before and during the war should not be exempt from the tax by reason of their pre-war prosperity and in order that the tax might be permanently retained if it proved successful. In one year (1918), however, the United States imposed an excess and war profits tax by which the taxpayer paid progressive rates of 30 percent and 65 percent upon excess profits or 80 percent upon war profits, whichever amount was the larger.

The tax was generally administered by the regular income tax officials, supplemented in most countries by a special board invested with unusual discretionary powers. In general it was confined to business profits, exempting wage earners, professional men and the rentier class. Austria, Denmark, Germany and Italy, however, laid taxes on income other than profits, and the American tax for the single year 1917 applied not only to all forms of business but to professions and occupations employing "no invested capital or not more than a nominal capital"; the tax on the latter being 8 percent of the net income in excess of \$6000. After 1917 the American tax applied only to corporations other than "personal service corporations," i.e. those in which capital was "not a material incomeproducing factor."

With minor modifications designed to temper the rate to small corporations and to relieve cases of excessive hardship the American tax in general applied to profit in excess of a normal deduction or "excess profits credit" consisting of a specific exemption of \$3000, plus 8 percent of the invested capital. Upon such excess profits the rate upon corporations for the year 1917 progressed from 20 percent on profits not in excess of 15 percent of the invested capital to 60 percent on profits in excess of 33 percent of the invested capital. In 1918 the rate was 30 percent on excess profits not exceeding 20 percent of the invested capital plus 65 percent on excess profits exceeding 20 percent of the invested capital or, as stated above, 80 percent upon war profits if greater than the tax on excess profits. After 1918 the rate was 20 percent on excess profits not in excess of 20 percent of the invested capital, and 40 percent upon the remaining profits, if any.

Invested capital was computed on a historical or cost basis. It included cash paid in for shares, paid in or earned surplus and undivided profits (not including surplus and undivided profits earned during the year) but excluded borrowed capital and any assets (such as corporate shares) the income from which was not included in computing taxable profit. Assets were valued at original cost, revised by the appreciation or depletion allowed. If not acquired by purchase they were taken at their actual cash value at the time of acquisition, but rigid limitations were imposed upon the value of good will and other intangible assets paid in for stock or shares. Any writing up of assets through revaluation, reorganization after March 3, 1917, or otherwise was in general prohibited, and corporations which wrote up their assets and reorganized before this date secured an enormous advantage thereby.

As a war tax the excess profits tax in the United States was a striking success. Its yield exceeded budgetary estimates; it became the largest source of revenue apart from borrowings; during the three years 1917–19 the average yield of the tax was little short of two billion dollars and supplied more than one fourth of the entire ordinary receipts of the federal government. It was paid without excessive hardship, complaint or evasion owing to the patriotism of business men, the enormous profits which they enjoyed and the "cushions," or relief provisions, provided by the law and administrative regulations.

Later, as business profits fell off, the yield of the tax fell and taxpayers became much more critical in their interpretation of the law; refunds of enormous amounts were claimed and collected. In 1920 the complexities of the income and profits taxes were described by Secretary of the Treasury Houston as "clogging the administrative machinery and threatening, indeed, its possible breakdown." In times of peace the excess profits tax did not wear well. While efforts were made, particularly in Great Britain and the United States, to keep the excess profits tax permanently, the movement for repeal set in strongly during the year 1920, and by the close of 1921 the tax had been repealed in most of those countries in which it had proved successful.

In countries not badly disorganized by war, where public opinion supported the policy of paying war expenses so far as possible by war taxes, the excess profits tax was a success not only from the standpoint of yield but in supply-

ing an invaluable complement to price regulation and in allaying public indignation at the spectacle of private business profiting inordinately by war. It was widely charged in Great Britain and the United States that the excess profits tax was ordinarily shifted with additions to the consumer. Although it is true that many business men used the excess profits tax as an excuse for raising prices, there is no basis in price statistics for the belief that the excess profits tax was generally shifted to consumers. As an income tax and as a differential tax (not applicable to producers at low profit and in the United States after 1917 not applicable to partnerships or sole proprietors) both theory and experience are against the likelihood of general or important shifting of the burden of such a tax. The evidence is conclusive, however, that the excess profits tax greatly stimulated expenditures for building up good will by advertising or otherwise and the payment of bonuses to executives. Where, as in the United States, such expenditures could be deducted as current expense, business concerns could make such expenditures at a net cost to them of approximately 40 cents on the dollar when the tax rate was 60 percent.

In theory the excess profits tax on the American or Canadian basis has great merit as a permanent tax. It emphasizes the principle of ability to pay in business taxation, laying especially heavy taxes on extraordinary business success but sparing business undertakings in the developmental stage or whenever they are only moderately successful. It would prove a valuable supplement to rate regulation in such industries as steam transportation, where fair rates for the weaker railways may yield excessive profits to their stronger competitors.

As a peace tax it has failed in practise because of its complexity and the unfair discrimination among taxpayers and the excessive administrative burden created by this complexity; because the necessarily high rates of the tax have exaggerated all its defects; because in the long run it falls not so much upon supernormal profits as upon fluctuating profits and with special weight upon the hazardous industries, exempting the investor or business wealthy enough to accept a normal but safe and regular rate upon its invested capital; and because American experience indicates that invested capital cannot be successfully measured on the basis of original investment. With the passage of time the real significance and value of the capital of a business

changes radically according as it is successful or unsuccessful. If the excess profits tax is to succeed as a permanent tax, "excess or supernormal profits" must be measured in some other and better way than as a percentage of invested capital.

T. S. Adams

See: Taxation; Income Tax; Business Taxes; Corporation Taxes; War Finance.

Consult: Adams, T. S., "Principles of Excess Profits Taxation" in American Academy of Political and Social Science, Annals, vol. lxxv (1918) 147-58, and "Should the Excess Profits Tax be Repealed?" in Quarterly Journal of Economics, vol. xxxv (1920-21) 363-93; Plehn, C. C., "War Profits and Excess Profits Taxes" in American Economic Review, vol. x (1920) 283-98; Seligman, E. R. A., Essays in Taxation (10th ed. New York 1925) p. 700-08; Licht, H. II., Die Besteuerung der Kriegsgewinne in den Vereinigten Staaten von Amerika, Finanzwissenschaftliche und volkswirtschaftliche Studien, vol. iv (Jena 1926); Bräuer, Karl, Die Besteuerung der Kriegsgewinne in den europäischen Staaten, Finanzwirtschaftliche Zeitfragen, no. 72 (Stuttgart 1921); Haig, Robert M., and Holmes, G. E., "The Taxation of Excess Profits in Great Britain" in American Economic Review, vol. x, no. iv, supplement (1920); Montgomery, R. II., Excess Profits, Estate, Gift, Capital Stock Tax Procedure-1926 (New York 1926) p. 3-547.

EXCHANGE in modern economic usage implies a mutual and voluntary transfer of property (including services) and a fundamental equivalence in the things exchanged, an equality in value which rests upon economic rationality and developed market institutions. In this sense exchange is the central concept of economic science, whether of the theoretical or empirical type, in so far as the exchange economy is the characteristic form of economic organization in the modern capitalistic world.

The modern economic organization, however, is not an exchange economy pure and simple; it is not based on the actual exchange of goods and services by their producers, directly or through the medium of money, which has been characteristic of an earlier and different stage of economic development, such as the town and guild life of western Europe in the Middle Ages. The existing economic system, which may be regarded as an outgrowth of the exchange economy, is more accurately described as an enterprise economy. Production in the active, responsible sense is now typically carried on by an abstract entity, the business unit, or enterprise, which is functionally distinct from the natural person or persons composing it. Enterprises and not individuals own the products of

economic activity, and these are not literally exchanged against each other either by enterprises or by individuals. Individuals and families get their livelihood through a twofold process of buying and selling which is not properly exchange, because the role of money in it is so important that it cannot be replaced by barter, as should be possible in the case of true exchange. The individual sells productive services to enterprises for money and buys with the money from enterprises the consumable goods and services which constitute his real income.

In some stage theories of economic development the earlier history of economic institutions has also been viewed from the standpoint of the evolution in scope and form of exchange taken in the broad sense. For example, Bruno Hildebrand's scheme, in which the medium of exchange is used as a criterion, provides for three main stages in economic development: the natural or barter economy, money economy and credit economy. Karl Bücher's still more famous scheme takes for the index of progress the increasing number of hands through which products pass between producer and consumer. Bücher also found three main stages: self-sufficient economy, producer and consumer identical; town economy production to order or direct sale; and national economy, production for a nation wide market. Later writers found it natural to add to this list a fourth stage, world economy.

Even from the standpoint of exchange itself these schemes disregard some of the most important developmental changes. Thus at the very beginnings of economic society the commodities exchanged must have been relatively inessential things, objects of adornment or implements and materials of a not indispensable sort, for a primitive group dependent upon other groups for prime necessities would be in a rather precarious position. Trade was under these conditions an "exchange of surpluses," a phrase which must be categorically avoided in application to the later times when goods have been produced expressly for exchange and exchange has become a part of production. Under advanced conditions exchange is an incident of specialization, and its significance is that of increasing the productiveness of labor and of other resources.

Again, division of labor through exchange developed first between distinct, even relatively distant, groups and became effective as between members of the same group much later. It is

difficult to prove any such general statement regarding prehistoric or primitive peoples, but it is certainly true of mediaeval European civilization that interlocal and overseas commerce achieved importance far in advance of local trade. The course of modern economic history has been largely one of development within the group of those "commercial" relations—the "cash nexus" and all that it implies—which previously obtained between groups or between members of different groups. It would only be natural that exchange should develop first between peoples where because of differences in natural resources or culture traits notably divergent and hence especially attractive articles were found. If exchange in any sense takes place between members of the same primitive group it is a ritualistic or gift exchange, which does not mediate productive specialization. Its motive is good will or ostentation, not economic efficiency, and its control is ritualistic and customary, not rational-economic. Economic relations within the group are communistic, based on tradition and authority.

Finally, in primitive trade the parties are the groups as such rather than individuals; exchange is likely to be carried on by the groups in a body or by the chiefs or their agents. Yet it is also a very general phenomenon at some stage for the actual conduct of the trade to be in the hands of a special caste within the tribal society or of a separate ethnic group specialized to the function. Even in mediaeval Europe this position is approximated by the "Syrians," Jews and later Lombards and Cahorsins in the north, who were more or less outlaws as well as aliens. These trading castes or nations universally manifest a peculiarly individualistic psychology as compared with the family or clan or corporate attitude of the fixed populations among whom they move. Later commerce furnishes the drive to break up the fixity of old forms and create the spirit of progress and the modern world order; it has been largely responsible for the development of the individualistic outlook on life characteristic of the modern west, including the sentiment of liberty in that individualistic sense which is largely antithetical to political liberty historically understood, although the modern citizen tends to identify the two.

Although commerce dominated industry not only in the Middle Ages but also in the following centuries of Renaissance and mercantilism, this domination is not characteristic of fully developed capitalism. In current economic life it is not acquisitiveness but a form of the creative impulse which dominates and gives the tone. It is a rather childish form, well expressed in the slogan "bigger and better" as generally used and understood; but still it stands for constructive activity and not "greed of gain" in anything like the sense characteristic of the mediaeval and early capitalist or oriental trade.

Many institutions of primitive trade, such as the "silent trade" and "armed market," its generally ritualistic character and the universal ethical antipathy to the trader seemed to early students to prove that the general relationship between primitive groups was one of hostility or armed truce and that trade must have grown out of war and plunder. But later study has given more emphasis to the guest gift and other peaceful origins against a background of friendly social intercourse and even travel. The details of the development of price fixing are especially obscure. Those who hold to the hostility theory of primitive relations contend that as trade differentiated itself from robbery the prices were fixed by a mixture of force and deception. Under a peaceful sociability theory they would be a matter of the purchase of good will and competitive ostentation. The later history of price would in either case be one of alternation between periods of standardization and of the breakdown of standards by sudden or accumulating change, with chaotic higgling gradually settling to new standards. In any case, the idea of competitive price is very modern, equally antithetical as it is to a price fixed by law or custom and to higgling. And the notion of price fixed by conditions of production or in terms of division of labor, as contrasted with competitive relations between immediate sellers and buyers, is still very imperfectly grasped.

The conception of a system of prices, of products and of productive goods and services guiding the choices of individuals in the various economic relations and implementing an "automatic" control of production and distribution as a whole, more or less in the interest of all, is the creation of modern economic theory, which in turn is the product of the growth of free enterprise itself. In the period of the Renaissance the ethical, disciplinary, spiritual-perfectionist mediaeval world view was replaced by a conception of life in terms of desire and satisfaction and the intelligent use of means, but the immediate result was a struggle for power between the new national states. It was the later controversy over state control of foreign com-

merce which gave rise to the modern doctrine of individual economic liberty or laissez faire. The balance-of-bargain theory was displaced by the broader one of the balance of trade, which actually worked toward liberation, until free trade came to be openly espoused and theoretically defended. The doctrine of economic freedom was also a by-product of the disintegration of the internal regulatory system of the national states, which at the Renaissance replaced that of the church, the towns and the guilds. When in 1776 Adam Smith published his epoch making Wealth of Nations, economic conditions as well as political controversy had prepared the minds of educated men to listen to an argument for "economic liberty" not merely in the narrow field of exchange or commerce, but in the broad and vastly more important one of enterprise, including the purchase and sale, borrowing, leasing and hiring of the material and human means of carrying on production. Thus arose the so-called classical, or orthodox, economic theory, which views economics as a pure "mechanics of exchange" or, more accurately, of free enterprise. Its practical mission has been to educate governments and the public regarding the mutuality of interest and of benefit in market dealings and their productiveness as against the primitive feeling that trade is robbery and chicane or at best waste. Its intellectual task has been to explain the organization of production and distribution under the influence of intelligent price competition in the two markets in which business enterprises buy productive services and sell products. It has also attempted to explain social growth under the private profit incentive to save and invest, explore, invent and improve; but the notion of rational reaction to price data is much more vague and uncertain here.

More recently it has become clear that the "exchange mechanics" type of economic theory is subject to several fundamental limitations. Its explanation of economic phenomena runs in terms of perfectly abstract wants or needs, available resources and methods of using the resources. It deals merely with the maximizing of wholly unspecified satisfactions under wholly unspecified "given conditions" and is not interested in what actually happens, not even in the distribution of consumption or of economic power in the system as it works toward equilibrium. Its assumption that economic rationality is the general form and tendency of individual behavior and in any case the ideal toward which

it should be directed is becoming increasingly difficult of acceptance. It overlooks the new social stratification based on wealth and the modifications introduced thereby in the exchange relations in the market for products and particularly in the market for productive services. These considerations do not impair the value or necessity of a mechanics of exchange as long as civilization regards satisfaction of individual wants and individual liberty and intelligence as good. But the reaction against it which has developed in economic science is to be welcomed in so far as it leads to more knowledge of the content and workings of economic conditions and forces. In the historical study directed to the securing of such knowledge the nature, condition and meaning of exchange must constitute the central and guiding idea.

Frank H. Knight

See: ECONOMICS; MARKET; PRICE; VALUE; MONEY; ANTHROPOLOGY; PRIMITIVE ECONOMICS; BARTER; COMMERCE; FREE TRADE.

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EXCISE is a tax on commodities of domestic manufacture levied either at some stage of production or before the sale to home consumers. The excise is an indirect consumption tax and is generally supplemented by the customs duty, the tax on imported commodities. Other means of indirectly taxing the consumer are a transportation tax, a turnover or sales tax and under certain conditions monopolization by the state of the production or distribution or both of specified commodities. The term excise has been extended to cover license duties required of producers and dealers in excisable articles as well as those paid for permission to practise or follow certain sports, trades or occupations. In the

United States excise taxes are usually referred to as internal revenue taxes.

Excise taxes were introduced at the close of the Middle Ages, primarily in order to provide a reliable and steady flow of revenue to meet the mounting indebtedness of the states. But they soon acquired a political significance in that they afforded to the royal power and rising commercial class a convenient means of shifting a part of the tax burden to the privileged clergy and nobility who could not be reached by direct taxation. Originally levied on certain commodities of widespread consumption like beer, meat and flour, the excise duties were extended in the course of time to include an increasing number of commodities and developed into the general excise tax levied on virtually all articles of consumption. In the Netherlands the struggles for freedom from the Spanish, in England the struggle between Parliament and Charles I, in Saxony the burdens of the Thirty Years' War, led to imposition of excise duties and eventually to the general excise; in Prussia the latter was introduced under the Great Elector. Toward the end of the seventeenth century the excise taxes assumed decidedly oppressive forms; complaints about them were particularly loud in eighteenth century England, where scarcely any article of importance was left untaxed. With the democratization of political control in the nineteenth century and the consequent shift of emphasis in taxation from consumption to property and income the excise taxes have been gradually deposed from their commanding position.

Excise taxes in the United States have been levied by both the federal government and the states, although the federal constitution prohibits state taxation of commodities entering interstate commerce. Federal excise taxes were first levied under Hamilton's administration as a means of providing revenue to meet debt charges. They aroused considerable hostility and were repealed in 1802. The experiment was repeated for a wider range of commodities during the War of 1812, but all internal taxes were repealed in 1817. During the Civil War the excise was used on a larger scale than ever before; a series of specific and ad valorem taxes was levied on all manufactured products and license taxes were imposed on trades. In the three years following 1862 the tax rates were raised several times; but after 1865 the system was gradually contracted, until by 1883 only the tax on liquors and tobacco was retained. The rates on these commodities were raised and the tax extended to a number of

other articles during the Spanish American War. In 1914 excise taxes were again resorted to as a war measure, but the most objectionable of them were abolished by 1928. The outstanding examples of state excise duties are the gasoline tax (q.v.) and the tax on tobacco and tobacco products.

At present excise taxes in all countries are confined to a few commodities. The taxes on such commodities of mass consumption with a fairly inelastic demand as alcoholic beverages and beer (see Liquor Traffic), sugar (q.v.), salt (q.v.) and tobacco (q.v.) are the most important and most frequently used. Their purpose is primarily fiscal, although in the case of liquor and tobacco they are intended in part as a means of sumptuary control. Excise still supplies about one fourth of the ordinary revenue of the United States and Great Britain; it is of considerable significance in France and of some importance in Germany. After the World War the enormous growth of the budgetary requirements of many European countries led them to place an increasing reliance upon the excise in order to mitigate to some extent the oppressiveness of property and income taxation.

The excise tax may be levied on the raw material or the finished article or it may attach to an intermediate stage of the production process. When it is imposed on the raw material it is proportioned either to the area under cultivation or to the quantity of the raw material as measured by weight or by the size of the container. Since taxable capacity is determined in the last resort by the finished product, the legislator must in determining the tax rate take account of the average raw material content of a unit of the finished product. As the relationship between the raw material and the finished goods is subject to variation, a tax on the raw material stimulates the manufacturers to perfect the processes of production in order to increase the yield per unit of raw material and thus to escape a part of the tax burden. The beet sugar, beer brewing and liquor industries have made remarkable progress in this respect by selecting raw material rich in the ingredients desired as well as by improving the refining processes. On the other hand, a raw material tax is disadvantageous to producers inasmuch as it is collected at the very beginning of the production process, long before the manufacturer has the opportunity to recover it by selling the finished product. This disadvantage is sometimes remedied by the government through the grant of tax credits calculated to run for the average duration of the production process. The manufacturer may also resort to storing the goods in bonded warehouses, thus postponing the payment of the tax until the commodities are withdrawn for sale. If the finished product is exported the raw material tax is refunded; as this refund is based upon the legally prescribed relationship between the raw material and the finished product, the more efficient producer receives back a larger amount than he really paid. Such refunds constitute a drain on the treasury and have the effect of a premium on export at the expense of the general taxpayer.

When the tax is applied at an intermediate stage of production or on the finished product, the period for which the tax is advanced by the manufacturer is considerably shortened. These forms of taxation have the further advantage of enabling the legislator to take into account differences in quality, so that commodities of greater value may be subjected to higher tax rates. This is quite simple in case of finished products and is also practicable wherever it is possible to ascertain the specific contents of intermediate products, e.g. the sugar content of beet juice with the help of the saccharometer. Taxation of intermediate or finished products often involves a close supervision of the production process by the revenue authorities and may therefore prove too costly to the government and too burdensome to the manufacturer.

License duties are a peculiar relic of older conditions; they occupy an intermediate place between the taxes on industrial occupations and taxes on consumption. License taxes have been widely adopted in England, France, the United States and other countries. Besides the license fees proper, consisting of fixed annual amounts, there are license duties graduated according to the quantity of excisable goods manufactured or handled by the holder of the license. Such licenses are often used as an aid in the effective administration of the excise.

The effect of the excise on the price of the commodity taxed depends upon the conditions under which the commodity is produced. If the industry is one of increasing returns and the demand is not absolutely inelastic, the price is likely to be increased by an amount greater than the tax; the reverse is true for an industry of diminishing returns. Where the article is a standard product with a nationally advertised retail price, a low rate tax is quite likely to have no effect on price; that is, it may be absorbed by the producer or distributor. The effect of price changes

caused by the imposition of a tax on consumption is determined by the elasticity of demand for the commodity in question. Where the commodity can be easily dispensed with, the consumer is in a position to avoid a part or the whole of the tax burden without doing injury to himself. Even in the case of necessaries a curtailment of consumption may occur but only at the expense of injury to the health or the general welfare of the consumer. The great mass of the population, however, will not resist the tax increase on necessaries even when it amounts to a considerable addition to the tax burden and will compensate by economizing on less imperative needs. Hence the taxes on necessaries offer, particularly in times of great financial stress, a welcome but often abused means of considerably increasing the public revenue. At present consumption taxes yield a large amount of revenue even after the considerable costs of their collection and administration are deducted; this is due to the fact that they apply preeminently to commodities of mass consumption.

Excises like all consumption taxes seek to distribute the burden of taxation in proportion to the consumption of goods and services. They are apparently based on the assumption that the volume of consumption bears a definite relationship to the income of the individual and thus reflects his ability to pay. Attempts to introduce the principle of progression by graduating the tax rates according to the quality of the product are of rather limited application. In so far as this principle is applied to differentiate between business concerns in accordance with the size of the enterprise or quantity of output it may serve to protect the smaller concerns from the strangling competition of technically and economically superior large scale industry. Such measures, however, partake of the nature of instrumentalities of domestic economic policy and cease to be purely fiscal devices.

Consumption taxes are often unfavorably contrasted with income and property taxes. It is justly pointed out that consumption taxes are regressive in that they impose a relatively higher burden upon the income of the poorer classes of the population, because the latter's expenditures on necessaries absorb a much higher proportion of income than in the case of the middle or upper class families. It is overlooked, however, that even the poorer taxpayers may succeed in shifting the tax to the employers or the community in general. Thus recent experience indicates that a considerable increase in consumption taxes

gives rise almost automatically to a demand of organized employees for higher wages and salaries. The significance of consumption taxes can be rightly understood only when they are considered as a constituent part of the whole system of taxation. They form a certain counterpart and important supplement to progressive taxation of income and property, when the latter is no longer capable of supplying sufficient revenue for the needs of modern states. The more heavily the burden of taxation is laid upon income and property and the more rigorous the progressive graduation, the more necessary and unavoidable becomes the imposition of indirect taxes on consumption.

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See: Taxation; Tax Administration; Revenues, Public; Customs Duties; Sales Tax; Monopolies, Public; Licensing.

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EXCOMMUNICATION in one or another of the several different meanings of the term has always and in all civilizations been one of the principal means of maintaining discipline within religious organizations and hence of preserving and strengthening their solidarity. In the sense of expulsion from the religious community excommunication was the earliest punishment inflicted by the Christian church upon its members and, although in the course of time its original character was altered, it has always remained the foundation of the criminal law of the church. A Greek parallel to excommunication by the Christian church may be found in the exclusion from purification with holy water of a person whose hands had been defiled by bloodshed; while it may also be noted that the Druids claimed the power to exclude offenders from sacrifice. Similarly according to primitive Semitic customs restrictions were imposed on contact with persons placed under ban and those

who infringed such restrictions were subject to supernatural dangers; moreover, impious sinners might be devoted to complete destruction. Hebrew custom illustrates the fact that in a theocracy excommunication is both a religious and a civil punishment, and indeed among the Hebrews as in Greece and Rome whole cities or nations could be devoted to destruction by the pronouncement of a ban. The ordinary form of Hebraic religious discipline was, however, the temporary separation or seclusion that was prescribed for ceremonial uncleanness. Spinoza's excommunication for contempt of the law is a modern instance of Hebrew practise.

In secular law one of the closest parallels to excommunication in the sense of expulsion from the religious community is outlawry. In early law outlawry meant expulsion from the community for the most serious breaches of the law; it involved, in fact, the death sentence. In the early Middle Ages in Germany excommunication was regarded as ecclesiastical outlawry, and both in their origin and in their later development there are many points of similarity between outlawry in secular and excommunication in ecclesiastical law. Certain of the minor punishments of early secular law, such as exile, reduction to slavery, abjuration of the realm, removal from villages and towns and the loss of civil and political rights, some of which penalties were derivatives from outlawry in its earlier or later forms, may also be compared with excommunication in one or another of its several meanings.

In the disciplinary and criminal system of the Christian church, as ultimately embodied in the developed canon law, a distinction was drawn between poenae medicinales and poenae vindicativae. The former were censures which had as their main purpose the reclamation of the sinner, while the latter, which were based on the idea of retribution or retaliation, were punishments intentionally directed to the suffering of a hurt on the part of the sinner. Excommunicatio and the closely related forms of punishment, suspensio, which came into use early in the fourth century, and interdictum, which developed in the tenth, were the poenae medicinales; and, while these three forms of censure aimed chiefly at effecting the reclamation of the sinner by absolutio after penance, they also involved an element of the purpose underlying the poenae vindicativae, such as physical chastisement and imprisonment.

In the history of excommunication the centuries before the Carolingian age are of special

interest as the period of origins and early development. The earliest Christian churches, religious communities inspired by the ideal of realizing the kingdom of God on earth, surrounded by heathendom and without the support of the Roman imperial authority, which was either hostile or tolerant, were obliged to depend upon themselves for the preservation of their own existence and welfare. As one of the most essential of all measures for the attainment of this purpose the primitive Christian associations exercised a disciplinary power over their own members; in its most severe form discipline consisted, even as early as the apostolic period, in expulsion or exclusion from the association of those members who proved to be unworthy of its aims or infringed its rules of governance. In general, criminal and disciplinary power, including the power to exclude, resided in each individual community without reference to any higher ecclesiastical authority.

In the postapostolic period before the time of Constantine the spread of Christianity and the development of a Catholic episcopate resulted in a modification of this primitive form of expulsion or exclusion. The conception that the church was a unification of all Christian communities under the episcopate and that communion with Christ was conditioned by communication with the church meant that exclusion from a particular community was not only an exclusion from the entire church but also an abolition of communion with God. The bishop, moreover, had acquired the leadership of the community; and in the exercise of criminal and disciplinary powers, including the power to exclude both clergy and laity alike from the community and the church, he was viewed not as the representative of the community, but as the instrument of Christ. The apostolic principle that members should be excluded only for the most serious sins was maintained; but, while in the apostolic age no sinner who repented and did penance was refused readmission to membership, a greater severity manifested itself in the second century, for not only was the one who had committed for the second time a serious sin refused a second readmission, but in the case of certain of the most serious sins, namely, idolatry, unchastity and murder, the first offense meant exclusion without any hope of readmission. In the case of an excluded member readmission to membership was conditioned on his public acknowledgment of the sin and his public penance. Penance was not viewed, however, as

the fulfilment of a duty owed by the sinner and a duty, moreover, which could and should be enforced by the church, for compulsion was foreign to the idea of true repentance for sin. The church, in fact, regarded penance as a benefit or favor accorded to the sinner; and, contrary to views that have sometimes been expressed, it was not therefore an ecclesiastical punishment or censure in the present day sense of that term. In accordance with the earliest ideas readmission to membership was the restitution of pax, but in the postapostolic centuries it was regarded from a different standpoint. The bishop decided whether the public penance of the sinner was adequate, and if he held that it was he readmitted the sinner to membership by the laying on of hands. Not only was penance, however, viewed as rendered to God, but the readmission of the repentant sinner was treated as His act. The excommunication had been an exclusion from the church and from communion with God; the readmission, an act performed by the bishop as Christ's representative, was no longer merely the community's forgiveness of the sin, but in accordance with the later conception a remission of sin by God Himself.

The recognition of the Christian church by the Roman Empire in the time of Constantine resulted in giving it a legal and privileged position; and accordingly the criminal and disciplinary system of the church, and, not least of all, that part of it which came to be known in later times as excommunication, entered upon a new stage of development. While adhering firmly to many of the basic principles of that system and preserving the established rules in regard to penance the church was obliged, largely as a result of the widening basis of membership, to modify some of the features of her law respecting crimes and discipline.

In the period from Constantine to the loss of the western provinces of the empire through Germanic conquest the church employed three principal kinds of punishment: exclusion from the ecclesiastical community, exclusion from the Lord's Supper and suspension of the rights of church membership. While these were primarily designed for lay members of the church they were also applicable to the clergy, for whom there were in addition certain special kinds of punishment, the severest of which was deposition. Exclusion from the ecclesiastical community took three different forms: exclusion forever and without the possibility of readmission; exclusion until the hour of death, representing a

certain softening of the older rigor; and exclusion without limitation as to time, under which the excluded sinner could be readmitted to membership as soon as he had performed the required penance, although in some cases he was in fact required to do penance within a fixed time as a condition of readmission. Exclusion from the ecclesiastical community in one or another of these three forms corresponded in general to that kind of excommunication which was known to later times as the major ban, or excommunicatio major. The excluded, or expelled, sinner was no longer a member of the church and he lost in consequence all his ecclesiastical rights, such as the right to take part in the Lord's Supper and the right to a church burial. While lay members of the church were merely forbidden to have any religious intercourse with the excluded sinner, the clergy were allowed to have no relations with him whatsoever; and if they broke this prohibition they themselves were subject to punishment by exclusion. The exclusion of a sinner operated not alone in respect of his local ecclesiastical community but removed him from the entire Christian church.

In addition a milder form of ban was sometimes employed in the period after Constantine. Possibly as early as the end of the fourth century, but certainly in the fifth, those members of the church who had committed certain of the lesser sins were sometimes excluded for an indefinite time from participation in the Lord's Supper and in divine services intended only for believers, until by penance they had gained a remission of their sins. This punishment, which did not result in the loss of membership in the church, corresponded to the minor ban, or excommunicatio minor, of later centuries. Exclusion from the Lord's Supper as a form of censure was not used by the pope before the end of the sixth century.

To be distinguished from this early form of the minor ban, although sometimes confused with it, was suspension of the rights of church membership. Like exclusion from the Lord's Supper suspension was used only in the case of the lesser ecclesiastical crimes and did not mean a loss of membership. But whereas only through his penance was the sinner who had been excluded from the Lord's Supper once more permitted to participate in it, in the case of the suspension of the rights of membership there was no need of penance on the part of the sinner; at the end of the period of suspension he

could at once exercise his rights. In this connection it may be observed that the Frankish and West Gothic councils mention an excommunicatio for short periods, such as for one, two or three years, two months and even three days. Apparently, the term excommunicatio when so used meant merely a suspension of the rights of ecclesiastical membership for a limited period, a form of punishment which had been inflicted ever since the early part of the fourth century.

The system of punishments and censures which the church had developed during the time of Roman imperial dominion was preserved in the Germanic kingdoms from the fifth century onward but was modified by many additions and changes. The major ban continued in use as the most important punishment of laymen and clergy alike, and for it the Latin word excommunicatio was used more frequently than in the Roman epoch. Excommunication continued to be described as exclusion, or expulsion, from the church with the resulting loss of membership, and it seems that the ecclesiastical authorities of the Germanic era did not fully realize that St. Augustine's theory of baptism made it theoretically difficult to deprive a person of his membership. St. Augustine taught that baptism impressed upon a person who had received it an indelible character; the natural consequence of this doctrine was the impossibility of completely detaching a person from the church once he had been admitted as a member. Moreover, whereas in late Roman times in the West a person who had completely lost his membership in the church preserved nevertheless his full freedom to live in the Roman Empire and suffered no diminution of his civil rights, the changed conditions of religious and political life in Merovingian times left the one who had been totally excluded from ecclesiastical membership with no place either in church or state. Unconsciously influenced by St. Augustine's doctrine and these altered conditions of life, the ecclesiastical authorities in administering the criminal law combined in a certain sense two of the older forms of punishments: exclusion from the ecclesiastical community and suspension of the rights of ecclesiastical membership. Not only did the church councils no longer prescribe the most severe form of exclusion, namely, exclusion for all time without the hope of readmission, but ecclesiastical authorities in inflicting punishments frequently employed the same language in reference both to total and perpetual exclusion and to the suspension of the

rights of membership for periods of time. Excommunication in the sense of the major ban thus came to have a new meaning in the Merovingian cra; in general practise it was now limited to the temporary withdrawal, or suspension, of the rights of membership, which might be regained.

The canon law of the post-Gratian era gave added definition to the rules of excommunication: only those persons who had become by baptism members of the church were liable to have inflicted upon them the punishment of excommunicatio. Laity and clergy, with the exception of the pope, were alike subject to excommunication; the pope could under no circumstances be punished by excommunication (papa a nemine judicatur). A sharp distinction was drawn between two forms of excommunicatio: excommunicatio minor meant exclusion from the sacraments and in the case of the clergy the loss of eligibility for ecclesiastical office; excommunicatio major, although it did not result as formerly in the loss of membership in the church, had nevertheless as its effect the exclusion of the banned person from the community of believers, or, in other words, the dissolution of his ecclesiastical relations. As in the case of the minor ban the person banned under excommunicatio major was excluded from the sacraments and lost his eligibility for ecclesiastical office; but in addition he was not permitted to attend divine service (except to hear sermons), he became incapable of acquiring ecclesiastical benefices, he was deprived of his rights of jurisdictio and of suffrage, he suffered the loss of communicatio forensis (capacity to appear as witness, procurator or plaintiff), he lost the right to a church burial and in general he was excluded from all participation in the life of the church. In order to make the major ban more effective the church forbade all its members to associate with the excommunicated person. Those who infringed this prohibition were themselves liable to the punishment of excommunicatio minor, and in the later law the minor ban was employed on principle only in such cases. Papal decretals gradually effected a softening of the rigor of non-intercourse by the introduction of certain exceptions, a process which has been carried still further in recent times. Anathema in canon law is legally equivalent to excommunicatio major; since the appearance of the decretals of Gregory IX it has always meant excommunicatio major pronounced in an especially solemn and ceremonial form as a curse. Anathema is not a

punishment separate and distinct from excommunicatio.

The right to decree the punishment of excommunication depended and still depends upon the possession of jurisdictio in foro externo, but this right cannot be exercised in case the judex is himself an excommunicated person or in case his jurisdictio has been otherwise suspended (suspensio ab officio). Every bishop is competent to inflict excommunication upon the persons who are subject to his jurisdiction and excommunication by one bishop must be respected and enforced by all other bishops, but the pope's jurisdiction embraces all the members of the universal church. The dissolution of the ban after due penance on the part of the excommunicated person is pronounced by the judex who has inflicted the punishment, but the pope's power to annul the ban is universal and embraces all the members of the church.

The power to excommunicate could only be exercised in a lawful manner and for lawful reasons; it was not an arbitrary power. In canonical theory an unreasonable or unjust sentence of excommunication possessed no final validity, and indeed such a sentence had no effect whatever before God. Gratian appears to hold that even though an unjust sentence of excommunication has no validity before God it must be respected alike by the excommunicated person and all others until it has been brought before the proper authority; and to this rule, he declares, there is only one exception, namely, where a person has been excommunicated because he will not commit some sin. This same distinction between the validity of excommunication before God and before the church reappears in Stephen of Tournai and in one of the decretals of Innocent 111.

Remarking merely that the doctrines of mediaeval jurists in regard to the nature and effect of "just" and "unjust" excommunications, especially those which brought temporal rulers under ecclesiastical ban, fill a large place in the history of political theory, attention should now be drawn to certain other aspects of excommunication as the earliest and most important of all the censures known to the law of the Christian church. From the point of view of theory and history alike the basis of excommunication was the idea of the reclamation of the sinner. Consonant as it was with the fundamental concept of the Christian church as a divine institution, this idea entailed nevertheless most serious consequences not only for the excommunicate per-

sons themselves but also for the whole society of believers For one thing, the knowledge of the existence of this most serious form of ecclesiastical censure had an important and far reaching psychological effect on society. The fact that excommunication might be pronounced against sinners engendered a widespread fear which in countless cases in western society amounted to terror, permeated as it was by the idea of the importance of the church as God's instrument of salvation and accustomed as it was to the rule of the hierarchy as God's visible representatives. In certain respects salvation was the main interest of memaeval thought; and this intellectual interest suffused the whole of society, the humble and ignorant as well as the great and the learned. The ever present threat of excommunication, since this extreme form of censure was enshrined in the canon law at an early time, acted as a deterrent; for men feared the consequences of sin when it entailed not only the suspension of the rights of ecclesiastical membership but also, if there was no absolution before death, the torments of hell. It was this fear of hell which the major ban, especially as anathema, brought home to sinners; and from this point of view it is easy to see how and why the church enforced the censure as an effective measure of control over mediaeval society, including temporal rulers as well as their subject populations.

It is now generally agreed that the early history of the interdict as a new form of censure fell within the tenth and eleventh centuries. The interdict may be defined in the most general terms as the prohibition of the religious acts in which believers take part; it assumed two distinct forms: interdictum locale and interdictum personale. The so-called general local interdict meant the discontinuance of public ecclesiastical functions in an entire country, a province, a district or a single place; whereas, if the cessation of these functions was applied to a single church, the censure was known as a special local interdict. The earliest well authenticated instance of the general interdictum locale is the one which was placed on France in 998 by Pope Gregory v, as the result of the contumacy of King Robert the Pious; and other early examples are those laid on England by Innocent 111 in 1208 and on Rome itself by Adrian IV in 1155. The destructive effect of the general local interdict on social life, excluding as it did whole kingdoms or other territories from the means of grace, caused its frequent use by mediaeval

popes in their struggle with the temporal power; and it was sometimes met by counter measures on the part of states. Its severity was, however, gradually tempered by the introduction of modifications, which permitted during the period of the interdict not only baptism, confirmation and penance but also divine services on the occasion of great festivals, sermons, daily silent masses and certain other religious functions. Because of this course of development and especially since the general interdictum locale punished the innocent and the guilty alike, this form of the interdict gradually fell into disuse. Although the special local interdict has survived down to the present day, the last historical example of the general local interdict was the placing of the Republic of Venice under interdict by Pope Paul v in 1606. When the interdict took the form of a personal censure (interdictum personale) it was directed against a single person or a complex of persons, such as the inhabitants of a place or the members of a collegiate body; and in certain respects an interdict of this personal character closely resembles excommunicatio. A special form of the personal interdict is the interdictum ingressus in ecclesiam, or the prohibition of entrance into a church; as directed against a cleric it has the effect of preventing him from conducting divine services and thus suspending a part of his official functions.

In addition to excommunicatio and interdictum the canon law recognized still a third kind of medicinal punishment, suspensio. Suspension, which was a censure applied only to the clergy, could be either suspensio generalis or suspensio specialis, partialis. In the former case all rights were suspended, while in the latter there was suspension of the rights of ecclesiastical office (ab officio) or of the rights flowing from ordination (ab ordine) or of the rights to the fruits of a benefice (a beneficio). Suspensio, like all poenae medicinales, could be decreed for a period of uncertain duration, or, in other words, until the reclamation of the sinner by due penance and absolution. Although in the normal cases suspensio was pronounced as a result of judicial proceedings, after the Council of Trent it might also be decreed ex informata tantum conscientia; that is, if the bishop became aware of the fact that a cleric had committed a secret delict, he could without the institution of legal proceedings against the sinner pronounce suspensio ab officio and ab ordine (not, however, a beneficio).

In the later Middle Ages excommunication tended to develop into an instrument serving

ends far removed from its original medicinal purpose. It not only degenerated, especially in periods of corruption within the church, into an instrument of police invoked in almost innumerable trivial causes but, on the other hand, it was elevated into a position of the highest importance as a factor in the world wide politics of the papacy. In the late twelfth century there began the practise of excommunication by "bell, book and candle." In addition to the pronouncement of the decree of excommunication by spoken words there was the act of extinguishing lighted candles by dashing them violently to the ground, and by this method a false meaning of the greater ban was taught to the faithful; for in truth the greater ban, not less than excommunicatio minor, was theoretically founded on the notion of reclamation, not destruction. It is also important to observe that, while the language used by the early church in excommunicating sinners had been restrained, in the Middle Ages there was a tendency to use phraseology that was far from temperate, words that indicate in many cases a high degree of recklessness; and this change was no doubt due, in part at least, to the growth of the anathema as a special form of the greater ban. Again, in contrast with the early law and usage of the church there arose in the Middle Ages the practise, sanctioned by the law, of excommunicating not only living persons but also the dead.

The use of excommunication also tended to become closely bound up with civil polity. In many parts of mediaeval Europe, particularly in the Germanic kingdoms and the Carolingian empire, the secular law adopted certain ecclesiastical penalties, including excommunication; and in such cases the civil power obliged the bishops to inflict the punishment. Excommunication, like outlawry, was used to compel the appearance of contumacious parties in both lay and ecclesiastical courts; and if lay courts employed excommunication for this purpose they were obliged to obtain ecclesiastical aid. Moreover, in the courts of the church excommunication became not only a form of censure for sin and a mode of insuring the appearance of the contumacious but also a general instrument for compelling the execution of all ecclesiastical judgments both civil and criminal.

A special use was made of excommunication because of the fact that in many parts of Europe feudalism tended to preserve the ancient custom of private vengeance. Since the secular law was frequently unable to maintain an orderly state of social life under these disturbed conditions, lay and ecclesiastical authorities united in efforts for the attainment of this end. The most important expedient was the "Truce of God," which, originating in particular localities, was finally extended throughout Christendom. It was called the truce or peace or faith of God because it was made in His name and honor; and, originally applied to certain days in memory of the Passion and Resurrection, it was ultimately made perpetual for certain places, such as churches and public streets, or for certain persons, such as the clergy, women and merchants, or for certain things, such as animals and agricultural implements. Oaths to observe the Truce of God were exacted from all; and heavy civil and ecclesiastical punishments, more especially confiscation of goods, exile and excommunication, fell on those who broke their oaths. In this way religious sentiment, sanctioned by the ecclesiastical censure of excommunication, was used as a means of bringing peace to society in a turbulent age.

The rules in regard to the civil effect of excommunication as distinguished from the ecclesiastical effect of such a sentence fill a large place in European legal history. Since the position of states respecting the church has varied from age to age it is almost impossible to make general statements in regard to the loss or impairment of the civil rights suffered by persons who have been excommunicated. In many respects the course of history has been based on the principle, or fiction, that outlawry meant civil death or excommunication meant ecclesiastical death for the persons who suffered either of these two forms of punishment; and both in the case of the outlawed person and in the case of the one who was excommunicate the death presumed by the fiction was on principle likened to natural death. The civil effect accorded by the state to excommunication has depended in large measure on the extent to which the state, because of its relations to the church, has been willing to place excommunication on an equality with outlawry and thus treat the person who was ecclesiastically dead as also civilly dead. In certain periods of history, when the relations between church and state were especially close and cooperative, the idea prevailed that the person ecclesiastically dead through excommunication was to be regarded as also civilly dead; but, on the other hand, in times of religious tolerance, as opposed to ages in which political persecution of heretics and other persons outside

the Christian community were dominant, the secular laws softened the rigor attaching to civil death. In the period of the Roman emperors after Constantine, since the policy of the state was to maintain unity of faith, there was in general the strict application of the principle that dissenters should be punished by an almost complete loss of their rights under the secular law; but the excommunicate person did not lose his civil rights. While this rigor in regard to dissenters was mitigated under the Germanic rulers, as in Italy, nevertheless excommunicate persons were treated harshly by secular laws. If a person lost the peace of the church he lost also the peace of society; and hence an excommunicate person, standing outside the protection of the civil law, not only lost all his existing rights but was rendered incapable of acquiring new rights. It thus resulted that excommunication and outlawry, the latter of which in Germanic times meant a true civil death in the full sense of that term, were placed on an equality by the secular law. While in many states this idea of excommunication as one of the causes of civil death continued to dominate the secular law of the eleventh and later centuries, the Reformation, which resulted in the withdrawal of many states from the ancient faith, gradually introduced greater tolerance. At the present day, even in states where the Roman Catholic church holds a position of great strength, the old rigor attaching to civil death caused by excommunication seems to be nowhere enforced by secular

Throughout Europe as a whole excommunication played in the Middle Ages a highly important role in the relations of church and state; and, in fact, the development of the canonical theory of the consequences of excommunication was one of the main factors in the historical process by which the church acquired, on principle at least, a position of supremacy over temporal rulers. Moreover, the principle, fully recognized by canonists, that the church had the power to declare that under certain circumstances an oath was null and void and hence the oath giver absolved was closely related to the theory as to the consequences of excommunication. In general the excommunicate person was so cut off from the ordinary affairs of life that no one could enter into relations with him without incurring at least the punishment of excommunicatio minor; and when the excommunicate person was a king or emperor, the consequences of excommunication, serious enough in the case of

an ordinary person, at once assumed a great political significance. In ecclesiastical theory kings and emperors not less than their subjects were liable to excommunication for just cause; and when, as frequently happened, such august temporal rulers were actually punished by excommunication, they not less than ordinary excommunicate persons were cut off from the accustomed affairs of life. In theory at least the excommunication of a king or emperor made any relations between him and his officials and even his people almost impossible; accordingly, the question was raised as to whether under these conditions the oath of allegiance to the excommunicate ruler was truly binding. In general oaths of all kinds were regarded by the church as falling within the province of ecclesiastical jurisdiction, and the rules in regard to promissory and other oaths formed a part of canon law. Oaths such as the feudal oath were invested with a religious character; and hence, it was argued, the oath of allegiance to a temporal ruler, being of a religious nature, fell within the cognizance of spiritual authority. The position of the church was that the pope could absolve a man from the obligation of his oath of allegiance to a ruler who had since been excommunicated, and Gratian appears to have extended the principle when he declared in substance that deposition of a ruler by the pope ipso facto absolved that ruler's subjects from their oaths of allegiance.

In the period of the struggle between the church and the Holy Roman Empire for political mastery of the western world, and not less in the contemporary efforts of the church to bring into political subjection the temporal rulers who were outside the empire, excommunication was in fact one of the most powerful weapons at the disposal of the pope and the bishops. The pope, moreover, in the assertion of his claim to be the supreme authority in temporal as well as spiritual affairs not only excommunicated but also deposed emperors and kings: the excommunication and deposition of the emperor Henry IV by Pope Gregory VII is one of the striking illustrations of the employment of this power by the papacy. In his struggle with temporal rulers the pope also made use of the interdict, sometimes in conjunction with excommunication and deposition, as a political instrument. The general local interdict, which, as already explained, was sometimes applied to an entire country, had a disturbing and even a destructive effect on the religious and social life of the entire community;

for this very reason it admirably served the purposes of the papacy in its effort to control the destiny of political society. By means of the interdict the pope influenced the subjects of a ruler and even the threat of an interdict acted as a powerful measure of spiritual and political control. Thus, to take only one illustration, Gregory VII threatened that if Philip, the king of France, would not abandon the heresy of simony, he would issue such a general interdict, embracing the whole of the country, that the people of France would refuse any longer to obey the king. The exercise of the power to excommunicate and depose emperors and kings and to place their subject populations under interdict was met by counter measures on the part of the temporal rulers, many of whom, and especially the emperor, claimed to be the supreme governors of church and ctate alike. A memorable illustration of the exercise of the pretended power of temporal authority to control the spiritual is found in the history of the long struggle between Gregory VII and Henry IV. Not only at the Council of Worms but also at the Council of Brixen the emperor and council decreed the deposition of Gregory VII from the papal throne while at the latter council they elected Guibert, the archbishop of Ravenna, as pope in succession to Gregory. Gregory's renewal of the excommunication of Henry and his supporters formed the next stage of the quarrel.

In the long era of conflict between the secular and spiritual power this dramatic struggle between the emperor Henry IV and Pope Gregory VII represents not only the culmination of an earlier development but also the beginning of further efforts on the part of the church to control the western world. Excommunication was used more frequently and with an increasing freedom by the pope and the higher ecclesiastical officials, and with the centralization of the power of the church in the papacy there was the tendency to encroach more and more upon the domain of temporal affairs.

The growth of papal power reached its height in the time of Innocent III (1198-1216). Gregory VII had asserted the power to hold to account for moral delinquency not only the emperor but also rulers in extra-imperial lands, and Innocent III made free use of both excommunication and interdict to enforce his pretensions to control the rulers of European kingdoms. The struggle between Innocent III and King John of England well illustrates this aspect of the long

contest between the spiritual and temporal authorities for mastery. In his effort to bring John to terms Innocent first threatened and then proclaimed a general local interdict applicable to John's kingdom; and a general local interdict, which suspended some of the most valued offices of religion, was by this time a much dreaded penalty in all parts of Europe. While not certainly dooming all dying persons to perdition, nevertheless to pious persons it rendered their state doubtful in the extreme and thus it caused fear of the ultimate destiny of their souls. Innocent's interdict of England did not result in total suspension of religious acts, but it was sufficiently enforced to cause much anxiety. Nearly all the bishops went into exile, and indeed only two remained to the end. While marriages were celebrated at the door of churches and baptism and extreme unction were permitted, no masses were publicly said, the ordinary course of the sacraments was intermitted, the dead were buried in unconsecrated ground and, except to those who wished to make offerings, the churches were closed. The interdict was at last followed by the excommunication of the unrepentant king. While the interdict was used to compel the king to yield owing to the fear and indignation arising in the subject population, the excommunication from the point of view of the excommunicate king himself was an even more dreaded penalty; for, as we have seen, excommunicatio major not only cut him off from the church and all its benefits and mercies but removed him from the whole community of Christians and brought the same dire fate upon all who continued to support him or to have any relations with him. Realizing at last that the strength of the papacy was a terrible thing even for kings, John surrendered his kingdom to the pope and received it back to be held of the pope as a fief.

In the feudal age the chief factor in the control of temporal rulers by the pope had been the rebellious tendency of the great vassals of these monarchs; but with the decay of the feudal order of society and the rise of national states, such as England, France and Spain, this aspect of the struggle between temporal and spiritual power ceased to be of any real force. While the papacy had proved to be stronger than the empire, it could not permanently maintain in practise its pretensions to a political suzerainty of the rising states of Europe; and once the territorial states had achieved a position of mastery, excommunication and interdict as po-

litical weapons at the disposal of the papacy ceased to exercise their former terrifying influence on rulers and their subjects. In the gradual progress of this tendency the memorable conflict between Pope Boniface VIII and King Philip the Fair of France, a century after the time of Innocent III, was a prominent landmark; for the successful defiance of the pope by the king of France, who was the monarch of a realm which now possessed a high degree of solidarity. was a clear indication to papal power that kingship had at last risen to a place of great authority in the affairs of Europe. In this connection it should be noticed that Peter Dubois, a prominent jurist who was a trusted councilor to Philip the Fair, laid special emphasis in his writings on the demoralizing effects produced by the free use of excommunication by the popes; he held indeed that although excommunication brought damnation to many souls it yet failed to exercise so much positive influence on human action as did the penalties of temporal law. Similarly, Marsiglio of Padua gave firm expression to the view that excommunication and interdict could be employed by ecclesiastical power only with the sanction of the temporal sovereign; for, he held, the application of those penalties by irresponsible persons interfered with the peace and quiet of the faithful, which it was the very province of the secular ruler to secure.

Although the growth of strong national monarchies tended more and more to lessen the temporal effects of excommunication and interdict, both these forms of ecclesiastical censure were used by the papacy as weapons in the religious and political struggles which marked the period of the Reformation and the wars of religion. The bull excommunicating Luther in 1520, which was publicly burnt by the great reformer himself, is one of the well known examples and others are to be found in the excommunication of King Henry VIII in 1535 and 1538 and of Queen Elizabeth in 1570.

The ecclesiastical disintegration caused by the Reformation introduced a new period in the history of excommunication. Within the Roman Catholic church not only both forms of excommunicatio but also interdictum and suspensio have all been preserved as poenae medicinales; but although a special form of the interdictum personale, namely, the interdictum ingressus in ecclesiam, and also the particular or special interdictum locale, which is applied to a single church, are still sometimes employed, the general interdictum locale, formerly used to overcome the resistance

of temporal princes, is no longer of any practical significance. In non-Catholic churches of modern times there are many survivals of excommunicatio and suspensio, but the nature and effect of these forms of punishment depend upon the constitution and law of each one of the various ecclesiastical organizations and there seems to be but little uniformity. Calvin, contrary to canonical doctrine, draws a sharp line of distinction between excommunication and anathema: excommunication is purely medicinal and has repentance and salvation in view, whereas anathema precludes all forgiveness and devotes the sinner to eternal perdition. In general, however, Protestant churches do not recognize anathema in Calvin's sense and in fact look upon excommunication as purely medicinal; and hence in most churches repentance is followed by absolution. In general, again, distinctions are drawn in Protestant churches between the greater and the lesser ban; and usually admonition precedes the final pronouncement of decrees of excommunication. In the history of many non-Catholic churches, including those in England and America, the question as to whether the power of excommunication is vested in the clergy or in the church has been of much importance. While the power of excommunication, in some form or other, is recognized in most Protestant churches, in some of them this power is rarely if ever exercised. Suspension of a clergyman of the Church of England for serious delict may be cited as an illustration of Protestant application of this form of ecclesiastical censure; and at least in this instance the canon law of the Roman Catholic church in regard to suspensio appears to have exercised considerable influence.

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See: OUTLAWRY; CANON LAW; PAPACY; APOSTASY AND HERESY; ECCLESIASTICAL COURTS; RELIGIOUS INSTITUTIONS; TRUCE OF GOD; ALLEGIANCE.

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EXECUTIVE. Orthodox political theory attributes to the state a juristic personality which consists essentially in an ability to form and execute a will. Government is defined as the various agencies or organs through which the state's will is formed and executed. The classification of governmental functions into legislative, executive and judicial (forming the will of the state, executing the will of the state and deciding controversies as to what is the will of the state) is one of the corner stones of modern political science, whether the doctrine of the separation of powers is accepted or not. And the various organs of government are characterized according to which function predominates. Garner's definition of the executive may be taken as typical: "In a broad and collective sense the executive organ embraces the aggregate or totality of all the functionaries and agencies which are concerned with the execution of the will of the state as that will has been formulated and expressed in terms of law."

The basic assumption that the state is some sort of entity which has a definite and distinct will of its own is obviously a highly metaphysical conception, which contemporary social psychology refuses to recognize. The state may be more realistically conceived as merely a human association which has developed for the meeting of certain human needs, the satisfaction of certain human wants; it differs from most other associations in including in its membership all individuals inhabiting a given territory and in the fact that membership is compulsory not voluntary. This political association is organized, and the officials in this organization constitute the government. They may be designated as the rulers, and there is thus, as Léon Duguit says, a differentiation of rulers and ruled. The exercise of authority by the rulers is subject to basic law which is not the expression of the will of a hypothetical and metaphysical entity but the product of the relationships of the members of the association. The government, from this point of view, may be viewed as a collection of public services rather than as organs for expressing and carrying into effect the will of the state.

The various parts of the governmental mech-

anism appear in their historical and institutional character as elements in the organization of the political community. They have a history, they do certain things, they are organized in a certain manner; various types can be distinguished. But they cannot with any accuracy be reduced to the simple classification of legislative, executive and judicial. All of them contribute to the determination of what is the law, to the settlement of controversies, to the application of the law. In actual practise the orthodox theoretical functions are confused. What effectively emerge are merely social control and public service. The traditional classification of governmental agencies as executive, legislative or judicial is firmly fixed, but the study of government or any of its branches must follow empirical and historical rather than theoretical and analytical

Among primitive peoples there is very little governmental organization, although there are universally found more or less elaborate systems of social control which have developed spontaneously to meet the needs of the group. Such organization as does exist is rudimentary; authority is not clearly defined or sharply differentiated with respect to the performance of particular functions. Generally although not universally warlike enterprise on any significant scale is the occasion for the emergence of leaders who for the occasion gather to themselves relatively large powers and may, if active hostilities continue for a long period, become permanent chieftains, tribal or national leaders, kings, endowed with more or less extensive powers in peace as well as war. Alongside the primitive king there may perhaps be a body of retainers who serve as his lieutenants, a council of elders who deliberate and decide upon important matters affecting the community. In some instances the entire body of armed warriors may assent to or dissent from proposals of the highest importance. Whatever the particular form which primitive government assumes, it is inchoate, undifferentiated, ill defined. In the oriental despotisms of antiquity vast powers were possessed by the rulers and an elaborate organization of officials existed but nothing in the nature of the modern differentiation of government. In the city-states of Greece government was well developed; various officials, magistracies and assemblies had definite functions and there is some suggestion of differentiation along modern lines; but it would be misleading to characterize the various particular authorities by the

terms legislative, executive, judicial. The same is true of the government of Rome under both the republic and the empire. To describe the consuls, the tribunes or the emperor as executive organs of the Roman government would be quite inaccurate.

It is only in the Middle Ages that the historical roots of the present system of governmental institutions are found. Feudalism in its earlier phase bears little similarity to the institutional organization of the modern state. But by the twelfth century, in England at any rate, a system of courts was developing with which those of modern times have a direct historical continuity. And by the thirteenth century there are the clear beginnings of the modern system of representative assemblies. It is too facile an explanation to say that courts and parliaments were split off from the royal authority and that what remained came to be the modern executive. But it is true that the modern executive sprang from the royal power at the time when government was differentiating and acquiring definition. A group of great administrative offices which are the historical antecedents of the later administrative departments emerged at this time. These are indeed historically connected with the earlier great officers of the king's court—the constable, chamberlain, steward, seneschal, marshal and the like. But there was a marked difference. The earlier officers were personal retainers of the king; they served him; they were officials of his household. Theirs was a personal relationship to the king. But by the fourteenth century their character as public officials came to be recognized. Such officers as the chancellor and the treasurer exercised definite governmental functions. Meeting together in the king's council they constituted the mainspring of an incipient administrative system. Parliament was endeavoring to exercise direct control over them, and the question of ministerial responsibility was thus raised. In the sixteenth century the national state clearly appeared and the king gathered to himself all the theoretical power of the state and greatly increased his actual power. But the great administrative officers of government remained; they even enlarged the area of their authority. Their spheres became more sharply defined, their functions more clearly recognized. In the seventeenth century came the great struggle in England between king and Parliament which was to give the latter complete control over the administrative officers of government. Minis-

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terial responsibility to Parliament was not firmly established until well into the eighteenth century; it was not fully recognized until the nineteenth. But it was an implicit and necessary consequence of the Revolution of 1688. Upon the continent the course of political evolution varied in detail from that of England and the process was accomplished a century or more later, but it followed essentially the same course and the product was, as in England, constitutional government.

Institutionally the modern higher executive authorities are directly connected with the great officers of the crown in the period of the absolutist national state. Responsible then directly to the monarch, they have become under the terms of constitutional government in the cabinet type responsible to the representative assembly; in the congressional form they are responsible to the electorate either by being themselves elected by popular vote, as in the case of many of the higher officials in the American state governments, or through the chief executive, who appoints them and who is himself popularly elected. In this shifting of the basis of responsibility there has been no essential change in the character of their functions, although there has been a great expansion of activities. The essential change consists in the larger degree to which they are limited and directed by law and in the political control to which they are subject. In cabinet government ministerial responsibility to parliament is a definitely established principle. But even in governments of the congressional type there is more control of the executive by the legislature than the strict doctrine of the separation of powers would permit. The congressional committees of investigation in the United States perform a most significant role in this respect. In recent years several cabinet members have been forced to resign as a result of such inquiries, and throughout the entire constitutional history of the country such investigations have been effectively used from time to time to enforce an accountability upon executive officials and to control the course of administrative action. The standing committees of Congress, particularly in connection with the examination of department and bureau estimates, have the opportunity to survey the work of the various branches of the administration and to exercise a control over their operations. The appropriation measures and legislation in general are far more detailed in prescribing duties and powers in the United

States than in Great Britain or on the continent. Riders are frequently attached to appropriation bills which constitute definite restrictions upon the executive. Many appointments require ratification by the Senate. Through these and other means a really large control is exercised by Congress over the executive. W. F. Willoughby goes so far as to interpret the relation of Congress to the executive as that of a board of directors to a managerial staff.

The executive in modern governments engages in a wide variety of functions. Garner classifies these functions under the following heads: the diplomatic power, the administrative power, the military power, the judicial power, the legislative power. This is not satisfactory, because the administrative power embraces such a large number of widely different and quite unrelated activities. There is no similarity between such functions as the execution of a death sentence, the investigation of the causes and means of prevention of hog cholera and the appointment of a collector of customs at the Port of New York. The extent and variety of the things which government accomplishes through the executive branch defy classification, and the unquestioned trend toward collectivism in the modern state is continually expanding the scope of these activities. More and more services are demanded of the government. These newer services involve relatively little exercise of the authority of the state; they are not expressions of the mandatory aspect of law. Rather they provide, for those who care to use them, valuable means for the enrichment of life. Thus the executive agencies of government are being transformed from grim law enforcement agents into beneficent servants of the people. The postman on his route, the county agent disseminating useful information on problems of agriculture, the visiting nurse, the highway engineer, the employment bureau, the chemist guarding the purity of a city's water supply, the consul collecting information with regard to foreign markets, the teacher in the public school and the professor in a state university are all formally administrative agents of government and members of the executive. But to pigeonhole them in this wise gives little aid in understanding the work which they do or their significance to our modern civilization.

And if these subordinate members in the hierarchy of administrative officials are excluded from the concept of the executive, it must still be remembered that the heads of the great administrative departments and indeed the chief executive himself are more and more concerned with the supervision and direction of these service functions of government. The executive in performing its many functions is actually engaged in lawmaking as well as law enforcement. The living and effective law is the product to a large extent of the actual doing of things. The policeman on his beat is a lawmaker as well as an administrator. But more definitely, the higher executive authorities possess an extensive power of supplementing statutes by regulations or ordinances. From their content it is difficult to distinguish between these and statutory law; they are indeed law in all but form. With the growth in the scope of government this ordinance power of the executive has assumed large dimensions. In some cases it is directly conferred upon executive officials by statute, in others it is implied from the necessity of the case. In American constitutional law it is an accepted principle that legislative power vested in the legislature by the constitution cannot be delegated, and the courts have attempted to draw the line between legislation and ordinance making but not with very great

In international relations the executive performs a peculiarly important role. A deliberative assembly is manifestly unfitted to conduct the delicate negotiations involved in this area. The requirement of the American constitution that treaties must be ratified by a two-thirds majority of the Senate has frequently proved a serious impediment in the effective conduct of foreign relations. It is only because of the relative isolation of the United States from world politics that it is possible to operate under this constitutional provision. But even in the United States the executive is less hampered in this field than in any other. In other countries the executive is given an even freer hand. The abuses of secret diplomacy may at times be real, and certain safeguards may be necessary, but experience in general is decisive that foreign relations are by their very nature essentially an executive function.

Taken broadly, the executive includes not only the chief magistrate of the nation but the ministers and the entire corps of subordinate administrative officials and even the army, navy and air forces. More narrowly, the term is applied only to the chief of state and his ministers or even to the highest single authority. From the very nature of the executive functions

the organization must be hierarchical. The degree to which the lines of responsibility should run directly from the lowest administrative official to the chief magistrate is a matter of varying practise and opposed opinion. In some countries, for example in France, centralization has been carried out to logical completion; in others, as in the United States, a large measure of local autonomy is preserved. Federal government introduces a complicating factor in providing for autonomous governments with executives quite independent of the central executive. Generally the executive agencies are organized as single officials, although boards, commissions and councils are becoming increasingly numerous. The principle that "to deliberate is the function of many, to act of one" has been generally assumed as axiomatic. "Promptness of decision, singleness of purpose, and sometimes secrecy of procedure" are accepted as desirable qualities of executive action. It has been particularly argued that the chief executive power should be vested in a single individual. Where responsibility is divided among a number of individuals it is likely to be shifted.

There are, however, in practise a number of instances where the highest executive power is confided to a group, with results not so disastrous as the theory would indicate. After the revolution France made several attempts at organizing the executive in plural form, the Directory of 1795 being the most notable. The supreme executive authority in the Swiss Republic is vested in a council; the president is merely a chairman possessed of no larger powers than his colleagues, although he performs the ceremonial duties of the executive office. This system has worked entirely satisfactorily. While the king is the nominal chief magistrate in the English government, the real chief executive is the cabinet, in which the prime minister is perhaps little more than primus inter pares. This indeed is true of all governments of the cabinet type. In favor of the plural type it has been argued that it offers less danger of encroachment upon the legislature, less opportunity for a coup d'état. It is further contended that the executive power is quite as much concerned with policies as with mere enforcement of the laws: that the laws are indeed in large measure actually made in their enforcement and that discretion, political wisdom and statesmanship of a high order are demanded. These, it is urged, are the product of deliberation and discussion which can be adequately provided only if the authority itself is placed in a group of men. It is doubtless this consideration that explains the growth in the number of administrative commissions.

The need of energy and expedition of action, of centralized and definite responsibility, of clear cut and unambiguous policy does, however, give the weight of the argument to the single executive. Particularly in time of war or other national crisis the concentration of all power in one man's hands generally receives universal approval. Some system of advisory councils which would afford the element of deliberation and the range of knowledge of a plural executive but which would leave authority centered in a single individual would appear to offer the advantages of both a unitary and a plural executive. But it must always be remembered that political conditions vary so widely that any generalization as to the best form of organization is extremely hazardous.

Chief executives have been chosen in four different ways: by the hereditary principle; by direct choice by the electorate; by indirect election through a body of electors; by election by the legislative body. The first method is employed in monarchies and has the advantages of enlisting the loyalty and devotion of the entire community by surrounding the chief magistracy with the sacrosanctity of something approaching divine prescription. It avoids the dangers of hotly contested elections and the consequent active or smoldering opposition of the defeated party. It makes for stability in government. Many able political scientists are of the opinion that a hereditary monarchical form of government offers the best chance for success in any community which has not advanced to a high level of political intelligence and capacity.

The tendency of political evolution is, however, strongly opposed to hereditary monarchy. Direct popular election of the chief executive carries all the acclaim of the dogmas of democracy. For a politically educated and self-restrained community it offers certain definite advantages. It stimulates widespread interest in politics and contributes to the political education of the people. It establishes a relationship of direct responsibility between the chief magistrate and the mass of the people and constitutes him a powerful organ of public opinion. When he speaks he does so with the voice of the nation. Although elected as a candidate of

a party he is elevated above parties and becomes the supreme representative of the nation. He possesses many of the attributes of an elected king. The objections to this mode of selection are that even in politically developed communities the electorate is not a competent judge of the qualifications of a candidate for this high office; it is likely to be the prey of demagogues and propaganda; the intensity, excitement and bitterness of political campaigns are demoralizing. Furthermore, the possession of great powers derived directly from the electorate may tempt the republican executive to transform his office into a permanent and hereditary one by a coup d'état, as did Louis Napoleon in 1851. If such an eventuality appears remote in the United States, it is only because of the deeply ingrained constitutionalism of the American people.

Election of the chief executive by a body of electors is the mode prescribed by the American constitution for choosing the president. This device enjoyed universal approval among the members of the Constitutional Convention. There were numerous utterances in the debates stigmatizing direct popular election as dangerous and unsatisfactory. Nevertheless, while the forms of this indirect method have been adhered to throughout the course of American constitutional history, the system was almost immediately transformed in practise into one of direct popular election. The framers of the constitution had not taken account of the party system, which effectively made of the presidential electors mere automatic agents for giving effect to the will of their constituencies. This national experience illustrates the difficulty of any system of indirect election. Theoretically it avoids the excitement, tumult and convulsions of a great popular campaign. The choice is left to a body presumably competent to judge of the merits and qualifications of available candidates. But in practise the electors are almost certain to be chosen subject to party pledges, and thus the system is transformed into one of direct popular election in all but name. The selection of the chief executive by the legislature is opposed as in violation of the principle of the separation of powers and as designed to reduce the executive to dependence upon the legislature. It was for these reasons that the Convention of 1787 preferred the scheme of an electoral college. It was believed that election by the legislative body would encourage bargains, intrigues and cabals; that designing can-

didates would be led to hold out rewards of office or other sources of patronage. Furthermore, the imposition of so important a duty upon the legislature is likely seriously to disturb the deliberation of its members on legislative measures which they may or ought to be considering. On the other hand, the legislative assembly may be presumed to possess a higher degree of political knowledge and intelligence than the mass of the electorate and thus be capable of making a wiser choice. The question is entangled with the basic form of government whether cabinet or congressional and cannot be discussed without reference to this. In cabinet government there is much to be said for election by the legislature, although the German Republic has perhaps found that the method of popular election contributes to stability and strength. In a system of congressional government election by the legislature would be impossible. An amendment to the Constitution of the United States providing that the president should be elected by Congress would speedily result in the transformation of the government into the cabinet type. The condition of election would inevitably be the recognition by the executive of his dependence upon and responsibility to the legislature.

W. J. SHEPARD

See: STATE; GOVERNMENT; AUTHORITY; MONARCHY; REPRESENTATION; CABINET GOVERNMENT; CONGRESSIONAL GOVERNMENT; DICTATORSHIP; SEPARATION OF POWERS; DELIGATION OF POWERS; VETO; EXECUTIVE AGREEMENTS; APPOINTMENTS; ADMINISTRATION, PUBLIC; ORGANIZATION, ADMINISTRATIVE; BOARDS, ADMINISTRATIVE; COMMISSIONS; CIVIL SERVICE; BUREAUCRACY; CENTRALIZATION; LEGISLATIVE ASSEMBLIES; INVESTIGATIONS, GOVERNMENTAL.

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EXECUTIVE AGREEMENTS. Not all international engagements are embodied in the form of full fledged treaties, which in the United States require the approval of the Senate. The Constitution of the United States contains no express recognition of the president's power to make international agreements without the consent of the Senate, but a practise has developed whereby he effects certain agreements without such consent. There are three kinds of executive agreements, classified according to the immediate source of the president's power to make them. In the first place, his power may be implied from the provisions of the constitution conferring on him diplomatic powers, making him commander-in-chief of the army and navy and requiring that he see that the laws are faithfully executed. Agreements of this kind may be entered into without either prior authorization or subsequent approval by the Senate. The Rush-Bagot agreement of 1817 between the United States and Great Britain, whereby the two powers undertook mutually to limit the extent of their naval armaments on the Great Lakes, was negotiated under the military power of the president; the frequent settlement by executive agreement of American citizens' claims against foreign countries is incidental to his power in regard to foreign affairs. Secondly, Congress by virtue of its commerce, postal and other powers may authorize the president or a cabinet officer acting on his behalf to make international agreements relating to the subject matter of such powers. Reciprocal

tariff agreements and postal conventions have been entered into in this way. Finally, the president may be authorized by general treaties to make special executive agreements for the purpose of carrying out the treaty provisions. Such are the agreements on extradition of particular individuals arrived at on the basis of an extradition treaty.

The Rush-Bagot agreement has proved to be permanent, but most executive agreements are comparatively short lived. Temporary or provisional agreements intended to serve until more regular arrangements can be made are sometimes called protocols or modi vivendi. An example was the protocol of 1898 between the United States and Spain embodying specifications of a basis of peace between the two governments. Some of its provisions were subsequently incorporated in the definitive treaty of peace. In nature and importance of subject matter executive agreements cannot always be distinguished from regular treaties. Thus in 1905 President Roosevelt, being unable to secure the Senate's approval of a treaty with Santo Domingo whereby the collection of the latter country's customs duties was to be taken over by the United States, carried out the plan by means of an executive agreement. Two years later the Senate finally approved a treaty embodying substantially the same terms as the agreement.

Some arrangements may be mere "gentlemen's agreements," such as that entered into in 1907 between the United States and Japan regulating Japanese immigration into the United States. Others are effected by an exchange of notes in identical form, as, for example, the Root-Takahira agreement of 1908 and the Lansing-Ishii agreement of 1917, both of which undertook to define the attitude of the United States toward current questions in the Far East. Such agreements are not binding upon the United States government but are simply declarations of a policy valid only as long as the president wants to continue it. If the president desires to abandon the policy involved he may avoid any allegation of bad faith by negotiating a new agreement to rescind the former one. Thus the Lansing-Ishii agreement was terminated in 1923 by the exchange of identic notes between the two governments.

The Constitution of the United States provides that treaties made under its authority are a part of the supreme law of the land. This, however, is not ordinarily true of a simple executive agreement not made under the authority of a

previous treaty or act of Congress. When, however, the president enters into an agreement which is authorized by such prior treaty or congressional act, the agreement has the force of law equally with the prior treaty or act.

In contrast with treaties executive agreements may be entered into secretly. A president seldom wishes to run the gauntlet of the Senate either during or after negotiations, unless necessary; from his point of view the Senate's refusal to ratify certain international arrangements has tended to increase the importance of devices which remove international agreements from its sphere of authority. Although the embodiment of a large part of important international understandings in executive agreements may virtually evade the constitutional requirement that treaties be submitted to the Senate, nevertheless executive agreements are useful and often practically necessary in the conduct of foreign relations.

JOHN M. MATHEWS

See: Treaties; Agreements, International; Government, section on United States; Checks and Balances; Executive; Foreign Policy.

Consult: Crandall, S. B., Treaties, Their Making and Enforcement (2nd ed. Washington 1916) chs. viii-ix; Mathews, J. M., American Foreign Relations, Conduct and Policies (New York 1928) ch. xxii; Moore, J. B., "Treaties and Executive Agreements" in Political Science Quarterly, vol. xx (1905) 385-420.

EXEMPTIONS, TAX. See Tax Exemption.

EXHIBITIONS. See Museums and Exhibitions.

EXILE implies the permanent or temporary banishment of a person from his own country imposed or sanctioned by the authorities for ordinary crimes (especially those against the person) or for political crimes.

As a penalty for common crimes exile is a very ancient institution. Its original character was that of a voluntary withdrawal of the offender; later it became a means of avoiding punishment; it acquired a penal character in so far as the authority forbade the offender to return to his country. In this sense it is found in the Homeric polity under the name of $\phi v \gamma \eta$ applied as a punishment for homicide. Thus Tlepolemus, son of Heracles, flees from Corinth for having killed his father's uncle (Iliad, II: 664 et seq.); Patroclus flees from Opoesis for having killed Amphidamus' son (Iliad, XXIII: 85). In ancient law the homicide was subject to private reprisals

on the part of the victim's kindred but was redeemable on payment of a sum of money $(\pi o \iota \nu \eta)$; custom and religion therefore favored exile as an institution which prevented immediate action by the injured and facilitated acceptance of an indemnity and reconciliation.

In the Greek legislation of historic times. when the homicide became subject to sentence by tribunals, exile persisted as an alternative choice offered by the law to the accused; he was permitted to leave the country before the vote of the judges and after the first plea. The parricide, however, was excluded from this privilege. For voluntary homicide the exile was perpetual, involving complete outlawry and the confiscation of property by the state. The fugitive assassin was to remain outside of Athens and was not to participate in the religious functions, the public games and similar communal activities. In the case of involuntary homicide, however, the exile was temporary and the offender was not attainted with dishonor and did not lose his property. Exile was also provided by Athenian law for other crimes, such as voluntary assault and injuring the sacred olive trees.

The institution of exile is invested with an analogous character for crimes against the person in Hebrew legislation concerning the right of sanctuary. From the very fact that the fugitives in order to avoid all pursuit took refuge in the sacred places, where neither private vengeance nor public justice could reach them, the law felt the need of regulating the right of asylum and the procedure of internment in places of refuge in such a way that these sometimes came to be places of exile. Thus unpremeditated homicide involving contributory negligence was punished under rabbinical law by exile in a city of refuge; such a penalty was considered too mild for homicide due to grave carelessness. Minute prescriptions determined such matters as the location and the dimensions of the city of refuge and the means of access to it.

The right of asylum had a similar development in England during the Middle Ages. The canon law conceded the protection of the sanctuary to persons guilty of crimes of personal violence, in order that time might be given for the arrangement of compensation (wergild). Here too the procedure was prescribed in the greatest detail. A person accused of felony might flee to the sanctuary; within forty days he had to betake himself to the coroner clad in sackcloth, confess the felony and take an oath to abjure the realm and never to return without the king's

permission. On the basis of this confession he was *ipso facto* convicted of felony, suffered attainder of blood and forfeiture of all his goods but was granted time to fulfil his oath. With the Reformation the right of sanctuary underwent radical restrictions and gradually fell into desuetude.

Far more important is exile as a political device intended to remove from the state dangerous individuals or groups of individuals. In such exile there is usually lacking any criminality in the offense and therefore any penal character; the justification of the institution is based upon reasons of mere expediency which prompt the exclusion of certain individuals in order to restore harmony and unity within the political group. For this very reason recourse to exile presupposes a weakness in the concept of the sovereignty of the state which permits it to evade its inherent responsibility and duty toward its citizens. The expulsion of members is conceivable when the association is of a more or less private nature; and it is not without significance that Rousseau in his Contrat social (1762) contemplates the possibility of exile inasmuch as he conceives the state as arising from a contractual act, having the most private nature from a juridical point of view. Exile further presupposes a limited extent of territory, not only because this makes banishment more practicable but also because in a society so restricted the need for homogeneity is greater. This explains why exile was in great favor in the city-state of antiquity and of the age of communes. A political organization which has not yet progressed much in the means of bringing the opinions of dissidents and dissenters into conformity with constitutional forms experiments with cruder and more immediate means of silencing them, exile and death. Special conditions, such as the disturbances produced by civil wars, increase the tendency to resort to exile, raising it to the rank of a genuine political method.

The historical evolution of the institution shows that it attained its zenith in the period when the city-state flourished and that it then declined and was transformed with the territorial enlargement of the state in the Roman period. In Greece the typical political exile was ostracism, an institution probably created in 508 B.C. by Clisthenes as a constitutional safeguard for the Athenian democracy. Anyone who menaced the harmony and tranquility of the body politic might be ostracized or banished for a period of ten years. In addition to ostracism

there existed in Athens a genuine exile (φυγή), formally pronounced by the law not only for ordinary crimes but for political crimes such as impiety (for which Anaxagoras was exiled), maintaining a culpable neutrality in civil war, sycophancy or attempting to modify any decree of the people. Finally, in a general way exile became a weapon in the hands of the parties to be used to get rid of opponents. Every revolution brought banishments en masse in its wake, as after the overthrow of the Pisistratidae, in the period of the Tyranny of the Four Hundred and of that of the Thirty. This was true in other Greek cities also, especially after the Peloponnesian War. Sparta, Corinth, Thebes expelled their adversaries from conquered or subject cities. Often one of the conditions of peace was that a city should expel the leaders of the vanquished party or recall its own exiles and treat them well. The treaty that Philip of Macedon concluded with the Greek cities forbade them to pronounce political exile. In 324 B.C. Alexander caused the recall of all the exiles of Greek cities to be proclaimed from Olympia. There were more than 20,000 of them at the Olympic games.

Political exile implied as a consequence the loss of citizenship and goods. On his return to the city following an amnesty or a change in the government the exile recovered a part or all of his goods. Such restitutions involved serious juridical difficulties when the confiscated goods had been sold. At Athens the alienation of the property might not be revoked, but the repatriots might obtain a suitable indemnity instead. Exile, which was itself the result of the convulsions of civil wars, served in turn to foment and spread them. It was inevitable that political exiles should take refuge in the cities in which their own party or allied parties were dominant; hence such cities became the centers of conspiracies and new preparations for war. Not infrequently exiles in the ranks of hostile armies warred against their fellow citizens who perhaps had themselves once waged war against their own country.

At Rome in the most ancient times the Roman citizen might evade judgment by a voluntary withdrawal. Upon him was then pronounced the aquae et ignis interdictio, which placed him under the ban of the law, so that, should he ever return to his country, anyone might lawfully kill him. The penal sanctions of the interdict were thus the consequences of the voluntary act of exile. Even when in practise exsilium and interdictio came to be confused with each other,

this distinction persisted in the psychological attitude toward exile to such an extent that Cicero was able to say that there was no Roman law by which an offense was punishable with exile and to affirm that exile is not a penalty (supplicium) but a refuge and a haven, practically a sanctuary ("confugiunt quasi ad aram . . . ," Cicero, Pro Caecina: sect. c). Sallust quotes Caesar (Catilina, L1: 22) as saying that the laws command that exile be permitted to condemned citizens. Places of exile (the word exsilium signified as much the place of residence as the fact of expatriation) were originally the cities of Latium, such as Tibur, Praeneste, Lavinium and Ardea, which were in league with Rome. Reception in the chosen city assured a new citizenship to the exile and implied his renunciation of the Roman. When as a result of the civil war Roman citizenship was extended to all the Italian cities, he had to go outside of Italy, expecially into Gaul, Greece and Asia. Still later when with the extension of the Roman Empire and the absence of independent states in the civilized world it became impossible by acquiring a new citizenship to renounce the Roman, there were substituted for the voluntary exile of the republican period two institutions, deportation (deportatio) and seclusion (relegatio), differing from each other in the gravity of the juridical consequences and differing from the original exile in their coercive and penal nature. When the imperial legislation continued to use the term exile in these new cases, there was posited a coguntur or aguntur in exsilium, differing clearly from the permissio of the republican parlance. In any case seclusion and deportation already bore the character of a "compulsory domicile" or an intraterritorial "sequestration" in the modern sense.

An exile similar to that in force in classic Greece and Rome arose in the period of the communes with the reestablishment of conditions analogous to those of the ancient city-state. It was largely applied by the Italian cities during the civil convulsions to eliminate vanquished parties and insure the homogeneity of the body politic. The history of Florence among others offers conspicuous examples of the expulsion en masse of vast groups of citizens and the confiscation of their property. Thus after the battle of Montaperti in 1260 all the Guelphic leaders were driven out by the victorious Ghibellines, and the latter were forced to leave Florence in their turn when they were vanquished six years later at the battle of Benevento. Davidsohn

Exile 689

puts the number of the expelled Ghibellines at about 1200. As for the rest the less dangerous were allowed to remain in the city; others whom the victors had reason to distrust were confined to certain localities outside the city. In this period too the inevitable political consequences of exile recurred. The expatriated, whether Guelphs or Ghibellines, took refuge in the cities where their party was dominant and from there sowed their intrigues and fomented conspiracies and wars to dethrone their adversaries and wrest from them the control of the city.

With the formation of the great territorial states of modern times and with the affirmation of the principle of state sovereignty, according to which the ties that bind sovereign and subjects are indissoluble, exile is again falling into disuse. But vestiges remain. During the struggle for national unity in the nineteenth century and during the dictatorships following the World War there occurred large movements of citizens from their own countries—emigrations involving the element of voluntary withdrawal to forestall a penalty. What is lacking for exile is action by the authorities to draw juridical consequences from the fact of expatriation and to prohibit return by an aquae et ignis interdictio. Something analogous to the Roman institution of the interdict is present, however, in the recent Fascist legislation in Italy, which threatens expatriates who commit acts injurious to the interests of the government of their country with the loss of citizenship and the confiscation of their property.

But, generally, in contrast with the idea of banishment from one's own country the modern state has developed considerably the Roman institutions of seclusion and deportation. Compulsory sojourn in inaccessible regions-from internment in Siberia to "sequestration" in Italian islands—wears the character of an intraterritorial deportation. In this form and with the political intent of maintaining a united front against every possibility of opposition and disintegration, intraterritorial exile comes to be applied today by dictatorial governments. The exclusion of opponents from the body politic is not so easy a thing today as it was in the past, in view of the size and dense population of the modern states and the scarcity of practically inaccessible lands. It is only Russia that has, in the districts bordering on the White Sea and the vast expanse of its Asiatic possessions, territories capable of receiving deportations en masse. And the Soviet government, following and developing here as elsewhere practises of the czarist regime, makes abundant use of such an opportunity of getting rid of its opponents. Trustworthy statistics on the actual extent of political exile in Russia at the present time are not available. In the period of czarism the average yearly number of exiles rose from about 2000 at the beginning of last century to about 20,000 toward the end of the century. It is probable that these figures have not greatly increased today. The living conditions in the sparse villages of that immense continent were and still are very miserable. Charges of forced labor exacted by the Soviet government from these exiles have resulted in a violent campaign for the boycotting of Siberian products. Russia has also afforded an example of the revival of typical exterritorial exile by the expulsion of Trotsky.

In its psychological and social aspects political exile has never from the remotest antiquity been considered as degrading or as in any way detracting from the repute of the exile. Indeed, the contrary has always been the case, whether for the reason that there is in it a voluntary element, as an act of pride in withdrawing although at the cost of grave personal sacrifice from a degrading judicial submission, or because its determining cause is thought to be not a crime but an ideal dissent regarding the mode of governing the state. Since exile is often the consequence of civil war, during which the decision as to where the legitimate right and authority reside is unsettled, and since the exiles of today may be the rulers of tomorrow, it behooves us to apply to exile the criteria appropriate to a state of war rather than those of ordinary penal law. According to Grote, among the Greeks "ostracism was a compliment." While this judgment may seem rather overdrawn, it is certain that both among the Greeks and among the Romans exile, even if only in a negative way, was an appellation of dignity and prestige. This element of prestige is reflected also in the sentiment of respect with which the exile is usually regarded in the country that shelters him. But still other elements enter into the psychology of the exile to produce a complex of pride, hope, depression, savage love and profound yearning which has made the exile a favorite subject for writers. Life in a new environment, alien to all the partisan passions of the country of origin, carries with it the necessity of readjustments which leave lasting impressions. The exile acquires new habits, new manners of thought, which are sometimes super-

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imposed upon the old so that there is created in him a feeling for the country of adoption that is insensibly superimposed upon that for his native land. Sometimes, on the other hand, the lack of understanding and the indifference of the world around him bring on a profound nostalgia, so that, contrasting it with the world in which he lives, his native land becomes a sort of idyllic Eden. And the distance that separates in his mind those countries, the idealized and the real, often causes him to fail to recognize the one in the other. In Mazzini the ideal Italy was so strong that he knew not how adequately to appreciate the real Italy that had come up out of the process of unification, and preferred to continue to live in exile. Aside from these extreme cases exiles are generally characterized by a certain lack of comprehension of their own country, which in their absence inevitably undergoes changes and transformations without their knowledge; so that returning they continue to be in some manner strangers in their own land. Even the love of country undergoes profound modifications in exile. No longer is it the peaceful and legitimate love of the citizen; but a love censorious and contentious and therefore capable of suggesting even the extreme measure of violence. To take up arms against one's country for the sake of one's country is the extreme and desperate recourse to which this sentiment can lead and to which it often has led.

GUIDO DE RUGGIERO

See: CITIZENSHIP; OSTRACISM; OUTLAWRY; POLITICAL OFFENDERS; MASS EXPULSIONS; DEPORTATION AND EX-PULSION OF ALIENS; ASYLUM; SANCTUARY; FREEDOM OF SPEECH AND OF THE PRESS.

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GOOD ROADS MOVEMENT	See	ROADS
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EXPATRIATION. As used in this article the term means the loss by an individual of citizenship, or nationality, of a state. While expatriation usually connotes permanent departure from the country of which an individual has been a national, and naturalization in another country, these elements may not always be present.

The Oratio pro Balbo indicates that the right of a person to change his nationality without obtaining the express permission of the state was recognized, at least in theory, in Rome in the time of Cicero. The right does not seem to have been recognized generally in the Middle Ages. Under the feudal system it was possible, however, for the subject of a prince to cast off his allegiance upon performing certain ceremonies and departing from the kingdom or principality.

The common law of England concerning nationality denied the right of a person to expatriate himself without obtaining the express permission of the sovereign. In the early history of the United States this strict rule of the common law was applied by the courts in a number of cases, notwithstanding the fact that a large part of the citizenship of the United States was made up of persons who had been naturalized and had been required to forswear their prior allegiance in applying for naturalization. The executive branch of the government took a more liberal position with regard to the matter, especially under the guidance of James Buchanan as secretary of state and later as president, and endeavored to protect naturalized citizens abroad, even when they were in the territories of the foreign states from which they came. In this matter difficulties were experienced, particularly in Germany and Great Britain, whence a large part of the immigration had come. Largely as a result of the protests in the United States over the arrest of Warren and Costello in England, Congress on July 27, 1868, passed an act (Revised Statutes, sects. 1999-2001) which declared that "the right of expatriation" was a "natural and inherent right of all people, indispensable to the enjoyment of the rights of life, liberty and the pursuit of happiness" and that "all naturalized citizens of the United States while in foreign countries,

are entitled to and shall receive from this Government the same protection of persons and property which is accorded to native born citizens." The attitude of the United States doubtless influenced Parliament in the passage of the act of May 12, 1870, which provided that British nationality should be lost through voluntary naturalization in a foreign state.

On February 22, 1868, while the Warren and Costello controversy was still unsettled, George Bancroft, then minister to Germany, signed a naturalization treaty between the United States and the North German Confederation according to which naturalization, coupled with a residence of at least five years in the naturalizing state, was held to determine the prior allegiance. It was further provided that the naturalized citizen should remain liable to punishment in the country of origin for offenses committed before his emigration and that if he should take up a permanent residence in his country of origin he should be held to have renounced his naturalization. A residence of two years in the country of origin raised a presumption of permanence. This excellent treaty was the model for treaties subsequently concluded by the United States with many other countries.

Notwithstanding the position which the United States had taken with regard to the right of expatriation Congress neglected to provide expressly by legislation how American nationality should be lost, until the passage of the Citizenship Act of March 2, 1907 (34 Stat. 1228), section 2 of which provides:

"That any American citizen shall be deemed to have expatriated himself, when he has been naturalized in any foreign state in conformity with its laws, or when he has taken an oath of allegiance to any foreign state.

"When any naturalized citizen shall have resided for two years in the foreign state from which he came, or for five years in any other foreign state it shall be presumed that he has ceased to be an American citizen.... Provided, however, That such presumption may be overcome on the presentation of satisfactory evidence to a diplomatic or consular officer of the United States,

under such rules and regulations as the Department of State may prescribe: And provided also, That no American citizen shall be allowed to expatriate himself when this country is at war."

The consensus of opinion as to the meaning of the second paragraph of section 2 seems to be that the presumption of expatriation arising under it is terminated upon the return of a naturalized citizen to the United States for permanent residence. According to an opinion of Attorney General Wickersham [28 Op. Atty. Gen. 504 (1910)] the principal object of this provision is to furnish a rule to enable the secretary of state to determine when protection should be denied to naturalized citizens residing abroad. For discussions of this provision by the courts see United States v. Gay, 264 U. S. 353 (1924); Miller v. Sinjen, 289 Fed. 388 (1923); and Camardo v. Tillinghast, 29 Fed. (2d) 527 (1928).

The laws of the members of the British Commonwealth of Nations and of the Latin American countries, with the exception of Argentina and the Dominican Republic, provide that their nationality is lost unconditionally through naturalization abroad. Similar provisions are found in the laws of Japan and of a number of European countries, including Austria, Germany, Denmark, Sweden, Rumania. By the treaties of Versailles, St. Germaine-en-Laye and Trianon, Germany, Austria and Hungary agreed to recognize naturalization of their former subjects by the Allied and Associated Powers as terminating their former nationality. The United States obtained the benefit of these provisions through the treaties with the states mentioned dated August 25, 1921, August 24, 1921, and August 29, 1921, respectively. The laws of a number of European states provide that their nationality is lost through naturalization abroad only in case certain requirements of their military service laws have been complied with. The Italian law on the subject is unique in that an Italian loses his Italian nationality by naturalization abroad but nevertheless remains liable for the performance in Italy of unfulfilled military obligations (art. 8, law of June 13, 1912).

The laws of various states contain provisions under which nationality is lost by acts other than voluntary naturalization in foreign countries. Among these may be mentioned permanent departure from the country, residence abroad for a specified period, failure to return in time of war, evasion of military service, acceptance of decorations conferred by foreign countries and marriage of a woman national to an alien. In recent

years there has been an extensive movement toward the repeal of laws under which women became expatriated through marriage to aliens; the movement has been successful in the United States and in some other countries.

The movement toward general acceptance of the doctrine of the right of expatriation has not made great progress in recent years. The provision for "expatriation permits" in article 7 of the Convention on Certain Questions Relating to the Conflict of Nationality Laws adopted at the Conference for the Codification of International Law, which met at The Hague in March-April, 1930, was not acceptable to the United States, which holds to the position that permits should not be required for expatriation. General assent to the doctrine of the right of expatriation will depend upon radical changes in international organization or a general agreement to abandon or greatly reduce armaments. The principal if not the sole cause of the reluctance of states to grant freedom of expatriation is the desire to maintain large standing armies.

Under the laws of a number of states their nationality may be lost without acquisition of the nationality of another state, so that the persons concerned may become stateless (heimatlos). Furthermore, many persons who lost their former nationality as a result of changes in political boundaries following the World War did not acquire a new nationality. Serious national and international problems have resulted from this great increase in the number of stateless persons. These persons are not always welcome in the foreign countries in which they reside and lack of passports or visas makes it difficult for them to go elsewhere. The League of Nations has been instrumental in convening several international conferences in their interest. Thus a number of European states have agreed to issue to certain political refugees within their borders uniform documents of identity, known as Nansen passports. The conference which met at Geneva in August-September, 1927, recommended the issuance of documents of identity to stateless persons in general as well as to persons whose nationality is doubtful or unknown. These documents may be used for identification outside of the country where they are issued if visaed by the proper diplomatic or consular officers, but they do not connote diplomatic protection by the issuing state. Stateless persons must rely for their protection entirely upon the authorities of the countries in which they find themselves.

The 1930 Conference for the Codification of International Law adopted two special agreements concerning statelessness. One provides that a person born in a state of a mother possessing the nationality of that state and a father without nationality or of unknown nationality shall have the nationality of the state of birth. The other provides for deportation, under certain conditions, of expatriates to the countries of which they were formerly nationals. These protocols, while helpful, seem unnecessarily limited.

The number of stateless persons might be reduced greatly by international agreements which would obligate each state to confer its nationality at birth upon all persons who are born within its territory and who do not acquire at birth the nationality of another state jure sangums; and to adopt measures for facilitating the naturalization of stateless persons within their territories, particularly by shortening the period of residence required as a condition to naturalization

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See: CITIZENSHIP; NATIONALITY; ALLEGIANCE; NAT-URALIZATION; DUAL CITIZENSHIP.

Consult: Morse, A. P., Treatise on Citizenship (Boston 1881); Webster, Prentiss, A Treatise on the Law of Citizenship (Albany 1891); Van Dyne, F., Citizenship of the United States (Rochester 1904); Cockburn, A. J. E., Nationality (London 1869); Gey Van Pittius, E. F. W., Nationality within the British Commonwealth of Nations (London 1930); Collection of Nationality Laws, ed. by R. W. Flournoy, Jr., and M. O. Hudson (New York 1929); Moore, J. B., Digest of International Law, 8 vols. (Washington 1906) vol. iii, ch. x, and Principles of American Diplomacy (New York 1918) ch. vii; Hyde, C. C., International Law, 2 vols. (Boston 1922); Cogordan, G., Droit des gens, la nationalité (2nd ed. Paris 1890); Bar, K. L. von, Theorie und Praxis des internationalen Privatrechts, 2 vols. (2nd ed. Hanover 1889), tr. by G. R. Gillespie (2nd ed. Edinburgh 1892); Borchard, E. M., The Diplomatic Protection of Citizens Abroad (New York 1915); La Pradelle, Albert de, De la nationalité d'origine (Paris 1893); United States, Citizenship Board, Report on Citizenship Expatriation and Protection Abroad, 59th Cong., 2nd sess., House Document no. 326 (1906); Flournoy, R. W., Jr., "Naturalization and Expatriation" in Yale Law Journal, vol. xxxi (1921-22) 702-19, 848-68; Fraser, R. S., "Nationality and Allegiance" in International Law Notes, vol. iv (1919) 12-34; Reale, E., Le régime des passeports et la société des nations (Paris 1930); Harvard Law School, Research in International Law, Nationality . . . Drafts . . . in Anticipation of the First Conference for the Codification of International Law (Cambridge, Mass. 1929); Conference for the Codification of International Law, The Hague, March-April, 1930. Official Documents, League of Nations publication, 1930. v. 3 (Geneva 1930); American Journal of International Law, vol. xxiv (1930) no. 3, devoted to the discussion of nationality at the Hague conference.

EXPENDITURES, PUBLIC. The expenditures of all public bodies may functionally be considered public expenditures; but in public finance the term is used to designate the expenditures of governments, national, provincial and local. They are distinguished from the expenditures of private individuals and associations by the fact that they need not pay for themselves or yield a pecuniary profit, although governments may make reproductive expenditures in establishing profit making enterprises or building highways paid for in whole or in part by taxes on gasoline or automobiles.

The development of public expenditures can be traced only through the modern period, because earlier writers in the field of public finance failed to deal with the cost side of governmental budgets. Adam Smith's discussion of "the expenses of the sovereign or commonwealth" in his Wealth of Nations (1776) is one of the first systematic analyses of the trend of public expenditures, but his example was not generally followed by writers on public finance until nearly a century had passed. Ricardo and Mill neglected the subject of public expenditures; even as late as 1877 Leroy-Beaulieu stated in his Traité de la science des finances (2 vols., Paris) that an inquiry into state expenditure did not belong to the science of finance, which he believed should concern itself with revenue only. Few later writers held so extreme a position; the great increase in taxation during the nineteenth century, particularly the increase caused by the assumption of new functions by government, forced theoretical and practical consideration of the character, purposes and limits of public expenditures. The conspicuous increase in taxation after the World War produced renewed discussion of public expenditures and proposals for economy and retrenchment.

The scope of public expenditures is determined primarily by the prevailing economic organization of society, the functions assigned the state and the political pressures of class, group and sectional interests. A primitive economy has neither the complex social organization requiring public expenditures nor the wealth to indulge them. Functions originally of a private character or non-existent may become government functions and increase government costs. Early capitalism insisted on restricting the expenditures of the absolutist state; the contemporary democratic state has increased them beyond the dreams of its predecessors; while the communist state would enormously enlarge the

scope of public expenditures. Class, group and sectional interests clash continuously over the amount and legitimacy of public expenditures, particularly in a democratic society.

In early forms of social organization public life and family life were closely linked, and there was little public expenditure in the sense in which the term is now used. Public expenditures developed with increasing social differentiation and political organization. Ordinarily religious activities were the most expensive social function and that which was most likely to be met from the public purse. Defense, the second costly function of early times, was ordinarily contributed by the citizens in their own persons and with their own arms as a matter of course; when military expenditures assumed large proportions they were paid for by levies on conquered and subject peoples. Monuments and other works of art constituted another important form of public expenditure. Some of the great states of early times developed expenditures which resemble those of the states of today. Athens stood out among the nations of Greece as a society which emphasized public works, maintained a service for the aid of dependent children and adults, and escaped heavy military expenditure on account of the voluntary services rendered by its citizens. Rome developed buildings and roads as actively as a thriving new state or province of the twentieth century and distributed public relief much in the manner of a modern city during periods of unemployment. The expansion of public expenditures in Rome was paralleled by a gradual differentiation of public from private revenue.

Feudalism brought back a simpler organization and a tradition which in many ways resembled that of the ancient patriarchal family, and public expenditures as such tended to disappear. The public purse was merged with the private or feudal purse. The church as it assumed state functions developed its own system of public expenditures. Defense became the duty of the feudal organization itself. The cost of protection, like other costs, was incurred for the benefit of the prince or lord; and it was assumed that whatever activity promoted his welfare served by the same stroke the welfare of his people. With the coming of constitutional government the pendulum swung back. Defense became again a public function, and at the same time the expenses of the crown and government became a public responsibility. This principle has persisted through the modern period, for

the essence of constitutionalism is parliamentary control of public revenue and expenditure.

The expenditures of modern governments differ almost as much from the expenditures of the corresponding units two centuries ago as they do from the great states of ancient times. With the exception of defense the expensive state functions of today owe either their origin or the greater part of their development to the demands of modern industrial society. Certain functions, like that of general education, were formerly unexercised or were carried on by the church or feudal organization. Other duties, such as maintaining public health and sanitation, were performed only irregularly and imperfectly.

When Adam Smith wrote the Wealth of Nations the outlines of modern public expenditures were beginning to emerge. In harmony with the laissez faire philosophy of rising capitalism Smith limited the role of the state, but at the same time he maintained that its duties included not only defense and internal protection but also the erection and maintenance of "those public institutions and those public works, which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature, that the profit could never repay the expense to any individual or small number of individuals" (bk. v, ch. i). The public works which were advocated included chiefly those for facilitating commerce, such as roads, canals and bridges, and institutions for the education of youth and for the instruction of people of all ages. The interests of capitalism simultaneously required limiting the power of the monarchicalfeudal state to permit the free play of new economic forces and increasing the functions and expenditures of the state to encourage industry and commerce.

The period which has passed since Adam Smith's day represents the coming of the industrial age, with its more complex social organization, and the decided growth of state activities. Public expenditures during this time have shown two tendencies which reflect the requirements of the age: the first is to increase considerably faster than population and slightly faster than national income, and the second is to reflect the cost of new government services as well as the traditional costs of defense, protection and administration. Adolf Wagner saw in these trends a "law of the increase of state activities" (Grundlegung der politischen Ökonomie, 2 vols., 1892-94) according to which "the central and

local governments constantly undertake new functions, while they perform both old and new functions more efficiently and completely."

Many series of figures have been offered by students of public finance to show increases in public expenditures by the principal nations since the industrial revolution. Unfortunately, few series take price changes into account and consequently they cannot be used with precision. It may be said that the public expenditures of western nations increased during the nineteenth century from two to twenty times, and the tendency has since continued.

A reliable estimate of the extent to which the passage of a century has expanded public expenditures and altered their distribution was prepared for the British Committee on National Debt and Taxation (the "Colwyn Committee," 1924–27) by W. T. Layton, editor of the London Economist. According to his figures, which are summarized in Table 1, expenditures of the central government absorbed 5 percent more of the British national income in 1923 than in 1818. The ratio of debt services to the national income was almost unchanged, but war pensions and old age pensions absorbed 2.15 percent more in 1923 than they did a century before and other services had also conspicuously increased.

TABLE I

Percentage of National Income Employed in Government Expenditures, Great Britain, 1818 and 1923

OBJECT OF EXPENDITURE	1818	1923
Internal debt service	8.12	7.89
External debt service		1.24
Pensions (war and old age)	.30	2.45
Defense	3.62	2.78
Other services	1.68	4.80
Cost of collection	.97	.29
Total expenditure	14.69	19.45

Source: Great Britain, Treasury, Committee on National Debt and Taxation, Report, Parliamentary Papers by Command, Cmd. 2800 (1927) p. 235.

In the United States, where the central government by the terms of the federal constitution is permitted few functions other than those of defense and the maintenance of the governmental organization and where the social functions, including education, the only fully developed social service, are therefore relegated for the most part to the states and municipalities, a slightly different situation appears. In this case the assumption of new functions by the central government accounts for only a small although gradually rising sector of public expenditure. The remainder of the increase apparent in the

fourfold multiplication of per capita federal expenditures within two decades is ascribable to the influence of wars, which have invariably left distinct and permanent increases in the national budget in the form of debt and pension charges. When such expenditures have once risen it has proved impossible to force them to return to the levels of the preceding periods. In the American states, the political units which correspond to European central governments as far as the responsibility for education and the general social services is concerned, per capita costs show nearly as great increases as with the federal government. This growth has occurred in spite of the fact that the social insurance principle has not been generally adopted in American states. It is apparent that expenditure for public functions in the United States as a whole shows a tendency to increase like that which is found in European budgets in spite of the difference in the form of administration and in the allocation of public duties. According to the calculations of the National Industrial Conference Board combined federal, state and municipal expenditures in the United States were \$855,000,000 in 1890, \$2,919,000,000 in 1913 and \$12,179,000,000 in 1927. Allowing for changes in the value of money, there was an increase of 175 percent in 1913 over 1890, 205 percent in 1927 over 1913, and 740 percent in 1927 over 1890; on a per capita basis the increases respectively were 80 percent, 148 percent and 346 percent.

The services which absorb most of the increase in public expenditures have appeared chiefly since the industrial revolution. As industrialism takes over the manufacture of goods formerly produced in households, so the modern state performs functions formerly of an individual or group character. The scope of these functions is enlarged by social development, which makes education, public health and the construction of highways cumulatively more important. As cities increase in size their overhead costs increase and require larger government services: municipal per capita expenditures are in direct proportion to the size of cities. Industry, commerce and labor insist upon services which increase public expenditures. Many new social problems arise and since late in the nineteenth century there has been a considerable increase in public expenditures on social welfare, such as old age pensions, health and unemployment insurance, workmen's compensation and aid to widows and orphans. In a number of

countries older systems of poor relief persist and extend beyond the boundaries of the specific social services. But while government outlays on social welfare are increasing rapidly they constitute only a small part of public expenditures. The costs of social services, exclusive of education, ranged in 1927 from approximately 9 percent of combined expenditures in the United States to over 20 percent in Germany; many countries spent less than the United States and none (with the possible exception of Soviet Russia) more than Germany.

A study of the objects of public expenditure since the World War shows that debt and war costs are well in the forefront. National debt, defense, pensions and other war charges in 1927 absorbed approximately one quarter of combined public expenditures in the United States and Germany and one half in England and France. The national debts alone are a serious burden; services on these debts in 1930–31 constituted 37 percent of the expenditures of the central government in Great Britain and 30 percent in the United States.

Expenditures in modern states are well above the possible or theoretical minimum which represents the amount required for debt service plus those provisions for defense and administration which satisfy traditions of long standing. Over and above that minimum is an area where conflicting class, group and sectional interests clash most sharply and affect the amount and distribution of public expenditures according to the balance of political power. Within this area a persistent struggle goes on over increasing or reducing public expenditures. The agitation for reduction affects particularly the social services which the state has taken over recently but is by no means limited to that field. Debt reduction and economies in defense and administration are advocated with almost the persistence which marks the constant criticism of the social services.

Criticism of debt payments as a part of public expenditure is reflected in the position of the British public on the debt incurred in the World War. The British dead weight debt increased from £650,000,000 in 1914 to £7,800,000,000 in 1920. About six sevenths of this amount represented the debt which was owed internally and was therefore susceptible of adjustment without jeopardizing the British government's foreign relations. In order to reduce the heavy annual charge for principal and interest on this debt, a charge which was assumed to be paid by the working class through taxes for the bene-

fit of the investing class, a capital levy upon the rich, the proceeds of which were to be used for liquidation of the internal debt, was advocated by the British Labour party throughout the first post-war decade. It was argued that with a few bold strokes the heavy annual burden imposed by these expenditures could be removed or materially reduced. The movement failed of success through the lack of parliamentary support from members of other parties, and the heavy debt charges remained. The debt policy of the United States was similarly attacked about the same time, although much more moderately. It was the policy of the federal government rapidly to decrease the \$26,000,000,000 debt inherited from the World War at the rate of about \$1,000,000,000 a year. The government maintained this policy of reduction in spite of the criticism that it demanded a higher rate of federal taxation than would otherwise have been necessary; but with the arrival of the economic depression of 1929 to 1931 the debt reduction program was temporarily abandoned.

Defense expenditures are also subjected to attack from time to time. In this case, however, sharp differences of opinion arise between those sections of the population which advocate preparedness for war and those which support programs of armament reduction or disarmament from motives of economy or humanitarianism. Military expenditures increase, however, in spite of all efforts to the contrary.

The sharpest criticism of all is directed toward public expenditure for the social services, although they constitute a smaller item than national debt and war charges. These services are modern in character and involve antagonistic class and group interests; for these and other reasons pressure is constantly brought to bear upon legislators for retrenchment. Such protests are frequently based in part upon the fact that public expenditures on the social services effect a considerable redistribution of income. Money is taken from those most able to pay and is distributed to the less fortunate in the form of public services. In Great Britain, for example, according to evidence given before the Unemployment Insurance Commission in 1931, a sum equal to one seventh of the nation's weekly wage bill was being paid out in cash weekly in the six chief social service accounts. Only 18 percent of that amount was estimated to be contributed by the workers; the remainder came for the most part from taxation, the chief element in which was taxation of personal incomes. It might

therefore be said that in Great Britain income was being redistributed through levies upon the income taxpayer and subsidies of a total of \$20,000,000 weekly to the dependent classes. This argument is used in all countries in opposition to public expenditures on social services.

It is also maintained that the effect of heavy taxation for the support of social services is a burden upon industry and economically unjustifiable. This contention opens up the question of productive and unproductive public expenditures. The older conception of what is unproductive is untenable; nevertheless, many public expenditures are clearly unproductive, such as expenditures on war or on graft, waste and bureaucratic inefficiency. Economic services by governments are productive; the construction of highways, for example, is of value to producers of materials and of automobiles. But the social services may be equally productive. Modern business is inconceivable without universal education. Sanitation, training of defectives and social insurance increase productive efficiency by promoting individual well-being. Frequently the same groups which demand retrenchment in some item of public expenditure urge an increase in other items; and while each group may oppose demands of the others, the net result is a further increase in public expenditures.

It has been regarded as an axiom of public finance that public expenditures determine public revenue; while the spending of an individual, in contrast, is cut or measured according to his income. Although the traditional description of public expenditures appears to hold good with respect to the social services it is not necessarily valid for public expenditure in general, as C. C. Plehn has pointed out in his Introduction to Public Finance. Exceptions may occur on account of a legislature's consideration of the taxpayers' existing burden in the instances where unexpectedly fruitful taxation provides surplus revenue or when, as in case of war, expenditures rise so rapidly that it would be unsettling to increase current revenues in proportion.

An understanding of the character and costs of government activities depends upon the adequate classification of public expenditures. Students of public finance differ considerably in their classifications, which are influenced by theories of public spending and by interpretations of state functions. Classifications are fixed while expenditures change. German economists of the seventeenth century classified public expenditures according to the needs of the abso-

lutist state; Adam Smith broadened the classification to include the needs of rising capitalism. But Adam Smith in no wise settled the question, as state functions and expenditures assumed new forms and purposes. Gustav Cohn's fourfold grouping has been provocative for students in later years; he classified expenditures functionally according to benefit-functions performed solely for the benefit of the individual and for which he would naturally be expected to pay; functions which benefit chiefly certain individuals but which society accepts in a larger sense; functions which aid the handicapped; and functions which confer a common benefit upon all members of society. But suggestive as this classification is, it has its limitations and throws no light upon other important problems such as are involved in revenue, administration and the like. Recent discussion has mainly concerned the practicable way of obtaining a functional classification of public expenditures from the departmental accounts which governments publish. The League of Nations uses the following classification: defense, foreign affairs, colonial affairs, supreme organs and general administration, public health, social welfare, education, science and arts, economic administration, financial administration, pensions and debt service. But since classification depends upon purpose, other classifications are necessary for a complete understanding of public expenditures. For ordinary purposes a functional classification is most useful, particularly if the expending organs are organized on a functional basis.

Public expenditures are increasing in all countries. There are considerable variations in amount and distribution determined by the degree of economic development, the prevalence of war and the extent of social services. The best available basis for comparison is the relation of public expenditure to national income, which should be supplemented by figures for public expenditures per capita.

Differences in the forms of political organization considerably affect the distribution of expenditures between central and local governments. In France expenditures of the central governments constituted approximately four fifths of the total, three quarters in Italy, three fifths in Great Britain, one half in Japan and Canada and one third in the United States and Germany. It is apparent that comparisons of national expenditures alone are misleading. Excluding the United States and Canada, there are no considerable variations in public expendi-

tures as percentages of national income, although the percentages must be taken with caution owing to the tentative character of the data on national incomes.

TABLE I1

Public Expenditures in Selected Countries, 1927*

	By CENTRAL	By Ceniral	TOTAL PUBLIC EXPENDITURES		
Country	GOVERN- MENT (IN \$1,000,000)	AND LOCAL GOVERN- MENT (IN \$1,000,000)	PERCENI OF NATIONAL INCOME	Per Capita	
United States	4,069	12,179	16	\$102	
Great Britain	3,815	6,084	29	135	
Germany	1,561	4,093	30	65	
France	1,661	2,102	25	51	
Italy	1,072	1,403	30	35	
Japan	644	1,424	24	23	
Canada	325	701	13	76	

* Operating expenditures of post offices and other state economic enterprises are excluded.

Source: Compiled from the official statistical yearbooks and abstracts for 1030 of Great Britain, Germany, France, Italy and Canada; League of Nations, Memorandum on Public Finance, 1926–1928 (Geneva 1929); National Industrial Conference Board, Cost of Government in the United States, 1927–1928 (New York 1030); Fisk, H. E., "Some New Estimates of National Incomes" in American Economic Review, vol. xx (1030) 20-27.

Public expenditures are ordinarily higher than taxation. The ratio of taxation to public expenditures varies in different years and in different countries; in 1927 the ratio was approximately three fifths in Canada, Japan and Italy, seven tenths in Great Britain and Germany, three fourths in the United States and four fifths in France. The difference was made up by loans, administrative revenues and profits from government economic enterprises such as post offices, railways and monopolies.

Public expenditures and consequently taxation absorb a growing proportion of the national income. In spite of the demands for retrenchment the tendency is for public expenditures to continue to grow as governments absorb more economic and social functions in harmony with the growing complexity of society and the pressure of group and class interests.

Alzada Comstock

See: Public Finance; Revenues, Public; Taxation; Budget; Financial Administration; Local Finance; War Finance; Armaments; Public Debt; Public Works; Agriculture, Government Services for; Business, Government Services for; Labor, Government Services for; Social Insurance; Social Work.

Consult: Standard textbooks on public finance such as those by Paul Leroy-Beaulieu, C. F. Bastable, H. C. Adams, C. C. Plehn, G. Findlay Shirras, H. L. Lutz,

A. C. Pigou; Cohn, Gustav, System der Nationalökonomie, 3 vols. (Stuttgart 1885-98) vol. ii, tr. by T. B. Veblen as The Science of Finance (Chicago 1895); Colm, Gerhard, Volkswirtschaftliche Theorie der Staatsausgaben (Tübingen 1927); Rendu, André, La loi de Wagner et l'accroissement des dépenses dans les budgets modernes (Paris 1910); Chicos, Stéfan, Le contrôle de l'engagement des dépenses publiques (Paris 1929); Kuczynski, Jürgen, Der Staatshaushalt; ein Beitrag zur Erkenntnis der Struktur des kapitalistischen und des kommunistischen Staates (Berlin 1927); Guest, Harold W., Public Expenditure; the Present Ills and the Proposed Remedies (New York 1927); Walker, M. L., Municipal Expenditures (Baltimore 1930); American Academy of Political and Social Science, "Taxation and Public Expenditures," Annals, vol. xcv (1921); National Industrial Conference Board, Cost of Government in the United States, 1928-29 (New York 1931); Great Britain, Treasury, Committee on National Debt and Taxation, Report, Parliamentary Papers by Command, Cmd. 2800 (1927); League of Nations, Memorandum on Public Finance, 1926-28 (Geneva 1929).

EXPERT. The use of the expert in government and social affairs has assumed prominence concurrently with the adoption of a new notion of the function of government itself. This has come to be thought of not as the keeping of the peace and the enforcement of contracts but as the facilitation of the good life and the removal of friction by a technique of social engineering. The novel complexity of modern social conditions has rendered the development of such a technique imperative for efficiency.

The recognition of the need for superior or esoteric knowledge in government is not new. The medicine man or shaman laid claim to such knowledge and it has been the basis of the power of the priest in government as distinct from that of the warrior. The pontiffs of very early Rome, if folk etymology is correct, may have assisted with their knowledge of spells and omens the skill of the engineer. Certainly such priestly assistance was given to military leaders. The first philosophical exponent of the notion of government by the expert was Plato. Plato, however, does not visualize the expert in government as a priest possessed of occult knowledge but rather as a technician, comparable to the physician or the weaver yet possessing not merely practical skill but precise and systematic knowledge of his subject, which was the architectonic one of social or political control. A fusion of these two notions of special grace and of superior technical knowledge underlies the Catholic doctrine of a priesthood entrusted with the spiritual direction of Christian society.

The insistence of Protestantism upon the om-

nicompetence of the private conscience aided by a common sense interpretation of the open Bible, symbolized by the burning by Luther of the book of the canon law, was entirely inimical to the recognition of the expert in religious society. When the modern democratic movement sprang out of the Puritan rebellion there was a like insistence upon the sufficiency of the plain man and of the amateur, which reached its culmination in the political philosophy of Andrew Jackson. Whereas these democratic movements were largely led by lawyers, members of what can claim to be the first secular expert profession, the twentieth century saw an interesting revolt against the tendency of this profession to monopolize legislative posts. As a sign of the turn of the tide it may be noticed that this agitation was conducted, especially under the emergency demands of war, in the name of "business government."

The demand for greater perfection in administrative methods, the enlargement in scope of what are understood to be the functions of government, and the increasing complexity of civilization and its needs, involving division of labor and specialization, have all militated in favor of the use of the expert. In the civil service of Germany, Great Britain and other nations the political appointee has been progressively replaced by those admitted as the result of competitive examination, who are expected to look upon their work as a life profession. The expert knowledge of civil servants, their organization and their power have grown in many countries to such a point that attention is being directed to the question how far the civil service is trespassing upon the proper field of the judiciary and the legislature. The same tendency to increase the power of the governmental expert is apparent in the field of local government, especially in connection with the appointment of city managers to exercise the powers once vested in elected mayors. An interesting corrective to the growth of bureaucracy may be found in the rise, especially in the United States, of expert institutions and research bureaus able to supply technical information and advice, but whose members are not recipients of official salaries and enjoy none of that administrative power which renders bureaucratic esprit de corps dangerous.

The assumption of new and more delicate functions by the legislature and the courts in the modern state has lcd, first, to serious discussion of reform with a view to placing representation upon a functional basis so that legislation might be discussed by persons of appropriate training; and, second, to the appointment of persons of expert knowledge, such as consulting psychiatrists, as advisers to the court. This latter tendency has the merit of securing impartiality and eliminating the presence of experts brought in to give evidence favorable to the rival parties in suits. In connection with the work of the executive a distinction is now being made between advice based upon a technical knowledge of departmental administration, such as the civil service possesses, and advice based upon fundamental research unlimited by any administrative presuppositions. The appointment in 1930 of the British Economic Advisory Council, in succession to the Committee of Civil Research, is a sign of the development and organization of this branch of the public service in the economic field. Such technical study has of course long been recognized as important in military and admiralty matters. Economic planning has been utilized most extensively in Soviet Russia and in Fascist Italy. When governments begin to lay down regulations in the field of hygiene, medical officers are required and an intimate relationship becomes necessary between the government and purely scientific bodies such as the Medical Research Council in Great Britain. The extent to which the economic development of tropical countries depends upon advice from medical, biological and agricultural experts has been recently recognized, as has the importance of ethnologists and anthropologists in dealing with primitive tribes and in other problems of colonial government. The psychologist's competence to advise in the field of education is also recognized.

A higher administrative standard and an expansion of the field of government activities have been sought as the greater complexity of the problems of control in the modern world and the incompetence of lay common sense to deal with them have been recognized. It was inevitable that the increasing use made of the expert adviser in the field of business should have its repercussion upon political and organized social life. Matters hitherto regarded as appropriate for the activities of the politician are now felt to be more wisely handed over to economic or financial experts for investigation, which has frequently compelled the acceptance of conclusions entirely unpalatable to popular taste and unlikely to be reached by unaided lay judgment. Successful work was performed by such experts under the auspices of the League of Nations in connection with the financial reconstruction of Hungary and Austria and the advice given to several countries in currency problems. The most striking instance of the transfer to experts of a question once regarded as preeminently political (in the sense of affecting national security) has been the use of the Dawes and Young commissions on German war reparations. The value of such commissions, as General Smuts has pointed out, is that they enable the politician to protect himself from the pressure of ill informed popular clamor. That the suspicion which has generally fastened upon bureaucracy shall not fasten upon all expertise is one of the matters of prime concern in connection with the future of good government. As General Smuts has said, the chief political problem of the present is "to find for the expert an organic place in the workings of democracy."

Criticism has been directed against the development of expertise upon the grounds that experts are frequently inspired by a caste spirit, are averse to change, are moved by an arrogance which prevents them from judging the importance of their own conclusions in proper perspective, and that they sacrifice the insight of common sense to the intensity of their own experience in a limited field and fail to recognize that demonstrations of fact do not settle issues concerning values.

Admittedly there is a tendency upon the part of civil servants to treat human beings "as statedocuments walking." This trait, however, is probably distinctive of the administrator and man in office, trained or otherwise, rather than of the expert as such. A more serious risk is that experts working under political authorities with whom they are out of sympathy may so use their technical skill as to render the plans of their political chiefs abortive. This risk serves as the justification for the policy, generally identified with the name of President Jackson but having an abundance of precedents in earlier British policy, of making extensive changes in the civil service with each political change in the administration. Especially is this danger of sabotage likely to be real where the experts are drawn from the middle classes and forced to work under a proletarian government, as in Soviet Russia. The situation in Soviet Russia, however, is in many respects peculiar. The revolution has been so extreme that it has alienated the bulk of that trained intelligentsia which in other countries has been highly sympathetic toward reform; it is so recent that time has not yet elapsed for the training of new and politically sound experts

such as the French Revolution was able to utilize, in the military field, in its later phases; and owing to the agricultural character of Russia the body of skilled artisans which might provide suitable material for training has been small. In Great Britain on the whole no difficulty has been found in securing the loyal cooperation of a highly trained upper middle class body of expert administrators with a socialist government.

The expert is surrounded by none of those trappings of power which have hitherto distinguished the rulers of mankind; he is concerned rather with the administration of things than with the rule of men. Nor is it just to attach odium to the expert in the art of ruling, whose chief task is to understand human psychology, because departmental experts in banking or in naval construction often do not understand it at all. Questions which political experts are called upon to decide, although ethical when regarded as ends, may be technical when regarded as means. Professor Charles Beard has pointed out that government constantly faces large questions of choice which cannot be solved by scientific method alone—questions involving intuitive insight, ethical judgment and valuation. The difference between the expert, or Platonic, conception of government and that democratic conception which may be described as Jacksonian is that in the former case the task of the statesman is considered to be that of studying the social problem and after making his diagnosis of applying a remedy at once experimental and scientific, consistent both with the ascertained facts and with the normative ideals or aims of the society in question; while in the latter case the task of the political amateur is to give expression to the will of the sovereign and omnicompetent people on matters in which its conscience may have been stirred and by this fiat and thaumaturgical process to change the social situation in accordance with popular wish and caprice without regard to any natural laws of human psychology, economics or sociology. The disasters attendant upon the latter course are written large upon the pages of history and provide the chief justification for any plausibility which arguments against democracy and on behalf of various forms of benevolent despotism may possess.

GEORGE E. G. CATLIN

See: AUTHORITY; COMMON SENSE; AMATEUR; DEMOCRACY; BUREAUCRACY; CIVIL SERVICE; PROFESSIONS; ENGINEERING; EFFICIENCY; EXPERT TESTIMONY; ALIENIST; INTERNATIONAL ADVISERS.

Consult: Smuts, J. C., Africa and Some World Prob-

lems (Oxford 1930) ch. vi; Zimmern, A. E., Learning and Leadership (Geneva 1927); Lippmann, Walter, The Phantom Public (New York 1925); Follett, M. P., Creative Experience (New York 1924) ch. i; Laski, Harold J., "Limitations of the Expert" in Harper's Magazine, vol. clxii (1930) 101-10; Frankfurter, Felix, Public and its Government (New Haven 1930) chs. iiiiv; Beard, Charles A., "Government by Technologists" in New Republic, vol. lxiii (1930) 115-20; Dickinson, John, "Administrative Law and the Fear of Bureaucracy" in American Bar Journal, vol. xiv (1928) 513-16, 597-602; Port, F. J., Administrative Law (London 1929); Robson, W. A., Justice and Administrative Law (London 1928); Hewart, Gordon, The New Despotism (London 1929); Finer, Herman, Representative Government and a Parliament of Industry (London 1923); White, L. D., Introduction to the Study of Public Administration (New York 1926), and The City Manager (Chicago 1927); Weber, G. A., Organized Efforts for the Improvement of Methods of Administration in the United States (New York 1919).

EXPERT TESTIMONY. The necessity of establishing in litigation points of science, art and technical practise has probably been long recognized. Roman practors on appropriate occasions appointed physicians, midwives, persons skilled in handwriting, surveyors and presumably mathematicians to aid in the performance of judicial functions. At present scarcely any countries lack regulations respecting expert testimony. In the United States widespread reference of factual questions to the average intelligence of juries makes the expert particularly necessary. Popular education can scarcely keep pace with the rapid extension of applied science.

Scientific explanations in the court room face difficulties, some of which are inherent and unavoidable. Litigation may hinge upon matters as to which learned men are honestly at loggerheads. Nor are events giving rise to lawsuits always or even often sufficiently foreseen to be fully observed, let alone controlled. Other difficulties arise from the nature of judicial procedure. These can be best realized by considering the three principal ways for bringing expert knowledge to bear on litigation.

An expert or body of experts may be used as part of the determining tribunal itself. This plan appears early in the history of English law. Bracton mentions the jury of matrons de ventre inspiciendo. During the fourteenth century, probably earlier and certainly for hundreds of years thereafter juries of English tradesmen or merchants tried issues to which their special experience had useful application. Throughout Europe and South and Central America many codes provide elaborately for appointment in civil litigation of experts whose function is to investigate

and report upon specified issues, as, for example, the codes of France, the Argentine Republic, Paraguay and Uruguay and also the federal law of Switzerland. Thus there develops something like a trial within a trial, the necessity of impartial judgment by the experts being strongly emphasized. The weight accorded such experts' reports varies from country to country, in some systems depending upon the subject matter of investigation as well as upon the unanimity or diversity of the reported conclusions. Rather less frequently nations of the civil law group have provisions for somewhat similar handling of technical issues in criminal cases. In English and American courts the use of experts in a judicial capacity is now rarely if ever seen, but such administrative tribunals as railway or commerce commissions and industrial accident boards give litigants the advantage of skilled determination.

A second method of enlisting the services of experts is to employ them as advisers to the court. Alongside the old practise of summoning special juries English courts early developed a usage of consulting surgeons, grammarians and merchants upon technical points. Broad power on these lines still exists in England, although apparently it is sparingly exercised beyond maritime and patent litigation. In the United States most judges would probably hesitate thus to seek advice except so far as permitted under the doctrine of judicial notice or authorized by express statute. Where the civil law prevails, such consultation is much more acceptable, not merely because of code provisions or implications but for lack of the strait laced rules of evidence binding Anglo-American courts.

A third method of dealing with expert testimony, according to which it is presented directly to the jury or other persons trying the facts, has been worked out in Anglo-American law. Case law on the topic began its growth in the seventeenth century, but it was retarded by the concept that it is for the jury and only the jury to draw inferences and form conclusions, witnesses being confined to statements of what they had seen and heard. A definitive English civil case sustaining the admissibility of scientific expert opinion (Folkes v. Chadd, 3 Dougl. 158), that of a well known engineer, came up only as late as 1782. At present the contentious presentation of expert knowledge considerably overshadows other methods of attaining the same end in English courts, and very nearly eclipses them in courts of the United States. It is not to be inferred, however, that the alternative procedures employed under the civil law similarly eclipse the contentious method before tribunals of other foreign countries. On the contrary, in France, Germany and elsewhere experts produced by the parties are heard on occasion with such approximation to common law practise as different trial usage admits.

Every method for the securing of expert testimony is open to some form of criticism. The use of trained minds attached permanently or temporarily to the tribunal for determination of technical questions seems in theory quite ideal. American constitutional provisions, however, guaranteeing "due process of law" or trial by jury may require that the determination be of prima facie or evidential value only, unless the litigants stipulate for finality. Apart from constitutional objections, there is to be considered the added judicial expense of permanent boards of experts. Moreover, it may be doubted that any country could furnish a sufficient number and variety of experts both capable and willing. Furthermore, experts so employed might come to constant deadlocks, and the courts might not be able to handle the complex problem of administration. The limit of practical advance along this line lies perhaps in the establishment of certain technically specialized tribunals or divisions of tribunals, such as the English Commercial Court and some American administrative bodies, as well as in the increasing judicial and legislative recognition of commercial arbitration.

The employment of disinterested experts as advisers to the court seems unworkable where juries are finally responsible for solution of factual issues, nor is this way of acquiring information beyond reproach even where the judge handles fact as well as law. British commentators object to judicial receipt of advice from persons whose exact views and possible errors are not disclosed by open examination. A judge may be far from infallible in his estimates of professional competency unrelated to law. Critical comment has also emanated from continental sources, not disclosing the same ingrained faith in cross examination but emphasizing the risk of unfair surprise to litigants. Yet the principle of this consultative method has been employed in thoroughly commendable fashion. A well known Massachusetts statute—with which may be compared a law of Hungary dating back to 1896 or earlier and a California act of 1929—provides for advisory mental examination of certain criminal defendants before trial. The reports made

are accessible to court, probation officer, prosecutor and defense counsel. Despite imperfect administration the statute has improved Massachusetts practise relating to the common defense of insanity.

At best, however, American courts must long continue to receive most expert evidence through contentious party presentation. The fundamental difficulty here seems largely insurmountable. Ex hypothesi experts testify to matters beyond the training and experience of those who must render the decision of fact. In a clash between experts the triers lack qualification to choose the sounder view. Forensic aptitude and clever manipulation may well oust real learning and solid judgment. Certainly this risk is not lessened by the shallow competency of some "experts" whom the courts tolerate or by the ignorance, haggling and artificial restrictions with which lawyers and judges alike sometimes confuse presentation of specialized information. The so-called hypothetical question is only too often a necessity and a very cumbersome one; it can rob an examination of intelligibility if framed without the firm mental grasp essential to terse description of decisive factors. Moreover, it is frequently charged that partisanship and self-interest fatally depreciate our expert evidence, a criticism directed particularly at the physicians and alienists who are so frequently called in personal injury actions and criminal prosecutions. Doubtless the evils of expert testimony in this respect are exaggerated but the popular view is distinctly cynical, nor are causes for cynicism hard to find. Now and then a notorious case stirs the suspicion that any man with a long enough purse can obtain expert testimony on either side of a question or even on both sides successively. In personal injury actions attending physicians naturally testify for plaintiffs and it is frequently obvious that, as the litigating patients are without means, the physicians' only chance of pay for either testimony or treatment is contingent upon legal victory. Yet many poor men cannot otherwise obtain medical assistance except through charity.

In Germany and many other countries experts are officially listed or approved. It has been urged that American legislatures or courts, without trusting blindly to mere mechanical classifications, might attempt some weeding out of incompetents by this device. As a corollary trial judges would be expected to require much more than perfunctory showings of capacity for the particular business in hand and to prevent the

blocking of scientific elucidation by futile procedural technicalities. Sharper and more frequent limitation of the number of experts to be heard would tend to raise the quality of evidence and to cheapen and expedite proceedings. A rule that each party must disclose his list of experts some time before trial is at least worthy of consideration. To end the subsidizing of experts it is sometimes proposed that they be restricted to the nominal fees payable to lay witnesses. Such an extreme practise would impose too many burdens upon prominent technicians and professional men and would lower the quality of evidence by discouraging adequate preparation before taking the stand. A more workable rule would remove the matter of fees from the realm of private agreement and leave their amounts to judicial determination. Much legislation to this effect already exists outside common law countries. Indeed, in some foreign court systems regular schedules of expert fees prevail. A number of American states have statutes empowering judges to grant special witness fees to experts. At least one state, Michigan, has since 1905 coupled with this a strict provision forbidding additional compensation, and reported decisions indicate that it has not become a dead letter.

Another warmly advocated check on partisanship is judicial appointment of expert witnesses. This is a common expedient the world over and is employed in several American states. But twenty-one years ago the Supreme Court of Michigan held that the due process clause rendered unconstitutional a statute providing for judicially appointed experts in criminal homicide cases (People v. Dickerson, 164 Mich. 148). Although the parties were permitted to call their own experts as well, the opinion argued that the testimony of official experts would receive undue credit and that it was no proper part of the judge's function to select witnesses. Not long thereafter, however, a North Carolina trial judge was sustained by the state Supreme Court when he called an expert witness in a murder case on his own initiative [State v. Horne, 171 N. C. 787 (1916)]. In 1930 the Supreme Court of Wisconsin sustained a statute resembling the earlier Michigan act against claims that it compelled self-incrimination, violated the guaranty of jury trial and entrusted the judge with a non-judicial function (Jessner v. State, 231 N. W. 634).

The Wisconsin decision is likely to shape the future trend of decision and to stimulate legislation. Indeed, even before it was handed down,

California by acts of 1925 and 1929 had joined the states empowering judges to appoint experts. Practical consequences are debatable. Prediction will surely be unreliable if based only on experience with officially appointed experts in foreign countries where the whole tradition of forensic specialists has long been of impartiality as opposed to partisanship. Striking nearer home, judges in one or two of the New England states under statute or by inherent authority have appointed surveyors to run lines and make plans in land litigation. After doing this work the appointed surveyors may be called as witnesses. It is said that in Maine the practise succeeds, the parties rarely attempting to controvert the court expert by evidence from opposing experts. But here the tribunal deals with what lawyers would think of as scientific fact rather than mere opinion. As fast as science removes matters from the field of speculation and controversy to that of accepted certainty, trouble in proving them tends to vanish. Expert evidence, if needed at all, becomes expositive instead of combative. The incentive to call rival witnesses is minimized. In Massachusetts the Industrial Accident Board, passing upon controversial medical questions, has found the reports of officially chosen physicians serving for moderate fees satisfactory to all concerned, but it is to be remembered that the board is really a specialized tribunal capable of detecting medical error and not likely to be unduly moved by any clash of experts. Plaintiffs pressing or defendants meeting similar claims before ordinary courts might deem it advisable to call their own skilled witnesses despite the use of court appointees.

Without denying the wisdom of some legislation to stay obvious abuses, Americans interested in the betterment of expert testimony may find the practise of English courts a basis for significant inference. These tribunals, utilizing little peculiar legislation about experts but maintaining notably high trial standards, have succeeded under the common law in keeping clear of the more notorious American difficulties. Very likely America's most substantial hope lies in a steady lifting of professional attainment and moral tone on the bench, at the bar and in the ranks of experts themselves.

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See: EXPERT; EVIDENCE; PROCEDURE, LEGAL; JURY; ALIENIST; INSANITY.

Consult: Wenger, Leopold, Institutionen des römischen Zivilprozessrechts (Munich 1925) p. 285-86; Wigmore, J. H., A Treatise on the Anglo-American System of

Evidence in Trials at Common Law, 5 vols. (2nd ed. Boston 1923) vol. i, sects. 555-71, and vol. iv, sects. 1917-2027, 2203; Principles of Judicial Proof, comp. by J. H. Wigmore (2nd ed. Boston 1931) p. 605-34; Osborn, A. S., The Problem of Proof (2nd ed. Newark 1926) chs. xi-xii; American Association for the Advancement of Science, Reports on the Use of Expert Testimony in Court Proceedings in Foreign Countries (Washington 1918); Mallard, Louis, Traité complet de l'expertise judiciaire (5th ed. Paris 1927).

EXPLOITATION. The word exploitation is a borrowing from the French and originally meant the working of mines or farms or similar enterprises. Its present use in a larger social sense may be traced to the idea found in all periods of the history of western social thought that some individuals, groups or classes benefit unjustly and unfairly from the labor of or at the expense of others. With the formulations of economic thought by the physiocrats, Adam Smith and Ricardo this idea assumed a modern form in the distinction between productive and unproductive labor and in the analysis of value and of the shares in distribution, although neither Smith nor Ricardo was much concerned with such implications of their value concept, unless in relation to the returns of the landlord class.

English anticapitalist and socialist writers of the third decade of the nineteenth century (Ravenstone, John Gray, Thomas Hodgskin, William Thompson, Robert Owen) formulated on the basis of the Ricardian concept the first theories of exploitation in a definite sense of the term. They regarded all wealth appropriated by the owners of capital and employers as an unjust deduction from the product of the laborer and condemned the procedure in strong terms. Quite independently of Ricardo the concept of exploitation was elaborated about the same time by the Saint-Simonians and later by Proudhon on the basis of an analysis of property as the right to enjoy the fruits of labor without performing any of the tasks of labor. All these writers differed among themselves as to the justness or unjustness of the various rewards of property such as rent, interest and profit. But, unlike social reformers such as Sismondi, who regarded exploitation as a regrettable accident due to individual ignorance or weakness, they agreed that it was an inherent defect of the modern economic system.

From these beginnings the idea of exploitation took a long step toward a large and general theory in the work of Marx, who linked it up with the idea of surplus value. One may say that the entire economic system of Marx is a theory of the exploitative process under capitalism: the first volume of Das Kapital analyzes the origin of surplus value in the process of production or the methods of labor exploitation; the second volume explains how the exploitative process affects the circulation of capital; the third volume traces the laws determining the division of the total product of exploitation among its beneficiaries as profits, rent and interest.

Marx' theory of surplus value or exploitation is based upon the three distinct concepts of value, labor and labor power. Labor is the only source of value. Value is the embodiment of a certain amount of average, simple, socially necessary labor. The worker sells his labor power, whose value is also measured by the amount of labor necessary to reproduce it. The worker, however, can and does use his labor power longer than is necessary for the reproduction of its value and thus creates an increment of value—surplus value—which is appropriated by the employer or by the owner of the means of production. The process of creating surplus value is merely the continuation of the process of producing value beyond a definite point. The various methods by which capital exacts this surplus—prolonging hours of work, improving methods of production, increasing intensity of labor—and the relation of variable to constant capital determine the extent, degree and forms of exploitation. As all value is created by labor, surplus value is the only appropriable surplus available and is the general form of the sum of all the surpluses which are appropriated without any equivalent return by the owners of the means of production in the form of profits, interest and rent. Being not only a social thinker but a revolutionist, Marx did not confine himself to a mere statement of the theory of exploitation. Das Kapital is strongly tinged with moral indignation and satirical denunciations of the exploiting classes and with profound sympathy for exploited labor. Marx' theory of exploitation and his condemnation of it became a marked feature of all socialist arguments and even influenced labor movements which expressly repudiated Marxian philosophy, e.g. the American Federation of Labor during its earlier history.

A large part of the economic and social thinking of the last thirty years may be said to have revolved around the attempt either to strengthen

or to weaken the theory of exploitation. Marginalist economists and productivity theorists have tried hard to deduce the righteousness of the price process. Liberal economists such as John A. Hobson have attempted to pare down the theory of exploitation by drawing a distinction between necessary costs of maintenance and surpluses and between productive and unproductive surpluses. Socialists of the revisionist school dropped the theory of surplus value as inadequate for the explanation of economic facts and as of little use for socialist propaganda. The upshot of all such thinking has been, on the one hand, to offer arguments in justification of the role of direction, management and organization in industry and to emphasize the need for some provisions for saving. On the other hand, the exploitative process under capitalism has been analyzed and distinctions have been drawn between the absolute exploitation of labor at the point of a subsistence minimum and relative exploitation at the point of distributing large social surpluses.

An interesting light has also been thrown upon the concept of exploitation by developments in the Soviet Union. Under Soviet economy wages are in a way fixed and a large part of the national product goes to develop industry, to pay political and other officials, to maintain an army and to support the proletarian dictatorship. The question whether there is surplus value in Russia and who appropriates it has given rise to considerable discussion. Some Soviet economists hold that there are in the Soviet Union a socialist surplus value and socialist exploitation. Others contend that surplus value is a concept historically possible only under capitalism and would designate the surpluses in Russia as surplus product. They deny the existence of exploitation on the ground that the surplus labor of the Soviet worker is used to improve education and social conditions and to maintain the workers' state.

Already in Marx one finds the extension of the idea of exploitation to the relationships between races and especially between the industrially developed and industrially backward countries. The socialist followers of Marx were perhaps the first to clarify that idea by their analysis of imperialism and their attacks upon imperialistic policies. From the Marxian point of view, especially developed by Lenin, imperialistic exploitation is but another form of extracting surplus value related to the process of making surplus value under capitalism and is

inevitable under that system. The non-Marxian theorists of imperialism also imply a process of exploitation of the colonial and semicolonial countries by the advanced industrial countries, by means of an open or disguised appropriation of unpaid labor, but to non-Marxians and liberals imperialist exploitation appears capable of limitation, if not abolition, even under capitalistic conditions.

The other uses of the term exploitation to characterize the status of women, the economic dependence of investors on the uncontrolled practises of corporations, or the losses inflicted on farmers through the processes of finance or trade, may be justified either as analogies or as special forms of the general concept.

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See: Capitalism; Socialism; Imperialism; Value; Distribution; Class Struggle.

Consult: Gide, Charles, and Rist, Charles, Histoire des doctrines économiques (3rd ed. Paris 1920), tr. from 2nd ed. by R. Richards (London 1915); Laidler, Harry W., A History of Socialist Thought (New York 1927); Lowenthal, Esther, The Ricardian Socialists (New York 1911); Tuan, Mao-Lan, Simonde de Sismondi as an Economist (New York 1927); Hobson, John A., The Industrial System (rev. ed. London 1910); Davenport, Herbert J., The Economics of Enterprise (New York 1913); Bukharin, N. I., Mirovoe khozyaistvo i imperialism (Moscow 1918), tr. as Imperialism and World Economy (New York 1929); Lapidus, I. A., and Ostrovityanov, K., Politicheskaya ekonomiya v svyazi s teoricy sovetskogo khozaystva (Moscow 1929), tr. by J. Feinberg as An Outline of Political Economy (New York 1929).

EXPORT ASSOCIATIONS are combinations in trade organized for the purpose of conducting export trade from the United States and specifically exempt from the operation of the antitrust laws by the Webb-Pomerene Act of 1918 (40 Stat. 516). The wave of interest in foreign trade which swept the United States following the outbreak of the World War focused the attention of the country on the necessity of strengthening the competitive position of the American exporter, particularly of the smaller producer, and of placing him on a level of competitive equality with foreign combinations. In 1916 the Federal Trade Commission recommended legislation establishing clearly the "legality of cooperation in export trade." Two years later the recommendations were embodied in the Webb-Pomerene Export Trade Act.

The act grants exemption from the antitrust laws to an association ("any corporation or combination, by contract or otherwise, of two or more persons, partnerships, or corporations") organized for the sole purpose of, and solely engaged in, export trade from the United States to foreign countries, provided such an association shall not restrain the export trade of a domestic competitor, enhance or depress prices or substantially lessen competition within the United States or otherwise restrain trade therein.

Export trade is interpreted strictly; it does not include manufacturing, even in the case of products intended solely for export. Originally it did not apply to sales to export houses for export, but later rulings by the Federal Trade Commission extended the meaning of the term to sales within the United States if the products sold are intended for and actually enter export trade and to arrangements in which an association confines itself to allotting export orders among members and to fixing prices at which members shall sell in export trade. Similarly, the legality of agreements between export associations and foreign combines has been definitely established by a ruling of the commission allowing such cooperation, provided the combination does not extend its operations to the American domestic market and its activities do not reflect unlawfully upon domestic conditions.

Export associations must file with the Federal Trade Commission within thirty days of organization, and annually on January 1, a copy of their charter, by-laws and agreement and the names and addresses of officers and stockholders or members. The commission may require additional information as to their organization or operation. If an association is charged with violating the law, the commission may investigate and recommend readjustments; if these are not complied with, it may refer its findings to the attorney general of the United States for further action.

The legal form of organization of export associations varies; some are incorporated, others operate as ordinary associations by agreement. The looser and more elastic form has been given preference where an agreement on prices, terms of credit, allotment of orders and division of territory constitutes the main function of the association. The corporation form is generally chosen where a centralized sales system and a complicated technical and financial organization are required.

One incorporated association exports the manufactures of six stockholding companies, has a central selling agency, makes shipments and collections and remits the proceeds to the producing members. Another incorporated association distributes orders on a percentage of quota assigned to each stockholder, taking into consideration manufacturing capacity, location, loading facilities and quality of products; operating expenses are covered by a sales commission. A certain unincorporated association, numbering eleven mills, allocates orders according to predetermined percentages and uses one of its members as the sole export agent. Another unincorporated association sells through an "export committee"; overhead expenses are prorated among the members on the basis of actual sales.

The total number of export associations in the period from 1918 to 1930 varied from 43 in 1920 to 57 in 1929 and 1930. There is no clearly marked trend toward an increase in their number, which is due in part to constant reorganization and consolidation. A number of associations have disbanded because of internal dissension, poor management, lack of business, unwillingness to cooperate, preference for dealing through export commission houses or absence of advantages expected under the new form of organization. Some associations, formed to meet temporary needs, dissolved in due time.

In 1931 export associations had a total membership of about 800 concerns, including mining companies, packing houses, mills, refineries, lumber companies and various manufacturing concerns, located throughout the country and with main offices generally at a seaport. The exports, mostly raw materials or semimanufactured products, included lumber, copper, zinc, iron and steel, machinery, railway equipment, sulphur, petroleum, rubber, paper, textiles, chemicals and foodstuffs. The total value of goods exported by the associations reached \$200,000,000 by 1926. Since then the value has been steadily increasing; it amounted in 1929 to \$724,000,000. While the exports handled by the associations do not constitute a very large part of total exports, in certain lines such as copper, zinc, lumber, sulphur, steel, oil and naval stores almost 100 percent of the export trade is under control of associations.

The experience of the past decade has revealed the typical handicaps under which the export associations often operate: unwillingness to abide by price agreements in times of business depression; competition of outsiders unwilling to join the association; disagreements over prices and allotments in an association whose members are of unequal size. Manufac-

turers who produce a variety of styles of goods do not readily lend themselves to collective marketing, and the joint marketing of branded goods frequently proves impracticable.

Despite these difficulties export associations proved helpful in steadily expanding old markets and opening new ones for American producers. Advantages claimed by the various associations include stabilization of prices by preventing underselling; reduction of overhead; standardization of grades, contract terms and sales practises; centralized inspection and consolidation of shipments; joint surveys and development of new markets; collective handling of claims; elimination of too liberal credit terms; provision of facilities for handling large orders, varieties of grades, styles and dimensions; united action against foreign competitors; higher business standards and resulting good will on the part of foreign customers.

Harmful consequences feared by the opponents of the Webb-Pomerene Act, such as dumping, unfair competition, blacklisting, enhancement of domestic prices and similar monopolistic practises, have, with minor exceptions, not developed. It is true that the growing tendencies to bring an entire industry into a single association, to combine large corporations and to act in concert with foreign combines may lead to arrangements injuriously affecting domestic markets and prices. The Federal Trade Commission is vested, however, with sufficient power to invalidate such arrangements and to prevent their recurrence.

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See: TRUSTS; CARTEL; INTERNATIONAL TRADE.

Consult: United States, Federal Trade Commission, Report on Cooperation in American Export Trade, 2 vols. (1910); Notz, W. F., and Harvey, R. S., American Foreign Trade, as Promoted by the Webb-Pomerene and Edge Acts (Indianapolis 1921), containing extensive bibliography, specimen charters and agreements; Notz, W. F., "Ten Years' Operation of the Webb Law" in American Economic Review, vol. xix (1929) 9-19. See also annual reports of the Federal Trade Commission published since 1918.

EXPORT CREDITS. Prior to the World War the financing of foreign trade was left exclusively to private enterprise. The methods employed varied, depending on whether the transaction took place between countries of a homogeneous or heterogeneous economic structure. In the first case sales were financed exactly as in domestic trade, usually by short term notes or trade acceptances without any special financing through

banks. In the latter case, especially in overseas trade, a form of financing was developed by England, followed by Germany, which presented combinations of acceptance and documentary credit. A bank located in the country of shipment undertook through its foreign branch or its correspondents to collect the amount from the importer and on delivery of the documents advanced to the exporter an amount determined by the financial standing of the parties involved; or the bank gave its acceptance to a bill of exchange drawn by the exporter, which made the paper discountable. This form of financing attracted capital seeking short term investment, and London's importance still lies chiefly in the acceptance trade developed by its joint stock banks and private banking houses.

Governments rarely if ever participated directly in financing foreign trade. The cooperation of the government was largely confined to the enactment of legal provisions facilitating transactions of this kind by authorizing the bank of issue to rediscount the paper of the acceptance banks. Of course governments had many indirect ways of stimulating the flow of exports; for instance, by subjecting foreign loans to the approval of some governmental authority and making the assent to the loan contingent upon the placing of substantial orders with the domestic industries, or by so shaping the credit policy of the central banks of issue as to promote certain employments of capital and hinder others, or by the exercise of diplomatic pressure to secure orders from foreign governments. But these measures of government intervention were seldom motivated by purely economic considerations and are bound up with the larger problems of investment policy and imperialist expansion.

The conclusion of the war ushered in a period of increased export activity. It was stimulated by the necessity to dispose of large accumulations of raw materials and manufactured products of military importance, and by the desire to cement new political alliances by economic bonds. The notion then prevalent that speed was essential in securing a large share of the foreign trade of central European countries, whose competition in foreign markets was supposed to have been eliminated, was also a factor of some importance. The resumption of foreign trade, however, presented a credit problem unparalleled before the war. The countries in Europe most in need of large imports were stripped of capital and credit sources. On the other hand, the individual exporters were unable or reluctant to advance credit in view of the rapidly depreciating currencies of the importing countries. And finally the revolutionary developments in Russia and the general political instability of the post-war era resulted in a degree of uncertainty which so magnified the risk involved in foreign trade that private enterprise could no longer carry it. The stimulation of exports by official measures was also prepared for in both its administrative and ideological aspects by the war regulations of economic life and the discussions during the war of new postwar economic alignments, of which the Paris economic conference of 1916 offers perhaps the most characteristic example.

The first country to consider a plan of government export credits was Sweden, in 1917. Four years later Belgium provided a credit of 250,000,000 francs for a period of five years with the purpose of facilitating the export of Belgian goods, although only a fraction of the credit seems ever to have been used. Of wider scope and significance were the measures adopted in Great Britain. By the Trade Facilities Act of November, 1921, repeatedly amended later, the Treasury was empowered to guarantee the payment of interest and repayment of loans used to finance larger investments of capital at home or abroad which would provide business to British industry. The amount, set first at £25,000,000, was finally raised to £75,000,000; and March 31, 1927, was fixed as the ultimate limit for the granting of such credits. Although the greater part of these guaranties were applied to domestic trade, still about £18,000,000 was employed in the financing of exports. Also the schemes of the Unemployment Grants Committee of 1920 reacted favorably upon the export industries. Very important was the Overseas Trade (Credits and Insurance) Act of 1920 which was specially directed to the insurance of export credits. All these measures facilitated the restoration of disturbed trade conditions and above all enabled the banks to grant necessary advances to merchants on better terms.

In Germany the depreciation of currency acted as a powerful stimulus to exportation, and governmental assistance in export finance was resorted to only after the stabilization of Germany's currency. In 1924 the Deutsche Golddiskontbank was established with the special task of placing credits at the disposal of exporters at rates lower than the ordinary market rates. Its capital amounted to £10,000,000 sterling; of its authority to issue notes in English

currency, which was extraordinary for a German bank, it made no use. But it concluded credit agreements with foreign banks; above all, a rediscount credit of at first \$5,000,000 and then \$25,000,000 with the International Acceptance Bank of New York, which was repeatedly increased and in 1928 changed to a revolving credit of \$50,000,000 for a two-year term. Originally under the same management as the Reichsbank, the Golddiskontbank was given an independent existence in 1930. It specializes in intermediate credit. The financing of long term investments abroad is left to bank syndicates in cooperation with the Reichskredit-Gesellschaft, likewise a government undertaking.

The reopening of trade relations with Russia gave rise to increased governmental activity in financing exports. Trade with Russia involves special elements of risk growing out of the fundamentally different legal and political principles which serve as the basis of the Soviet state. In 1926 and similarly in 1931 the German government undertook to guarantee against loss to the amount of 60 percent of the purchase price distributed between the federal government and the member state concerned. Similar measures were taken by Austria and Italy in 1927, the latter hoping to increase her share in Russian orders as a result of the Anglo-Russian trade conflict, and later by France, Japan and other countries.

In the United States with the exception of the operations of the War Finance Corporation, which directly participated in financing foreign sales especially of agricultural commodities up to 1924, the services of the government consist only in having provided the legal framework for the development of new forms of finance under the auspices of the Federal Reserve Board. The Federal Reserve Act of 1913 as amended in 1916 and 1917 authorized member banks to accept drafts and bills of exchange growing out of transactions involving exportation and importation of goods and made provisions for rediscount with the Federal Reserve Banks. A further provision was made by the Edge Act of 1919, an amendment to the Federal Reserve Act, authorizing the formation of commercial banks performing functions relating to foreign trade, such as dealing in drafts, letters of credit, bills of exchange and bullion, and of investment banking houses dealing in foreign securities and issuing their own debentures secured by bonds and stocks of foreign corporations and governments. The Edge Act produced fewer establishments than were at first expected. Also the Webb-Pomerene Act of 1918, which exempts the export trade from the operation of antitrust laws, acts indirectly as a stimulus to export trade by permitting the formation of export associations which in their collective capacity are in a stronger position to secure credit than the small individual entrepreneurs.

The system of export credits is one of the many manifestations of state interventionism in economic matters which followed logically the experiences of war economy. The credits granted by the governments, although amounting to only a fraction of total export credits, undoubtedly stimulate the exporting industries. They are in effect bounties in disguise, and the final report of the World Economic Conference of May, 1927, justly asserted that the indirect character of these subsidies "does not make it any the less necessary to lay stress on the hidden dangers inherent in this means of encouraging production and exportation."

EDUARD ROSENBAUM

See: International Trade; Business, Government Services for; Credit Insurance; Export Associations.

Consult: Mezger, Fritz L., "Finanzierung des Aussenhandels mit Einschluss der Fragen öffentlicher Exportkredite und der Kreditversicherung" in Kapital und Kapitalbildung, ed. by B. Harms, 2 vols. (Berlin 1931); Edwards, G. W., International Trade Finance (New York 1924) ch. xv; Huebner, G. G., and Kramer, R. L., Foreign Trade (New York 1930) ch. xxix. Caillez, Maurice, L'organisation du crédit au commerce extérieur en France et à l'étranger (Paris 1923); Spalding, W. F., The Finance of Foreign Trade (London 1926) ch. xiv; Germany, Ausschuss zur Untersuchung der Erzeugungs- und Absatzbedingungen deutschen Wirtschaft, Unterausschuss v, "Die Reichsbank," and "Der Bankkredit," Verhandlungen und Berichte, vols. i-ii (Berlin 1929-30); "Government Guaranteed Credits for Exports to the U.S.S.R." in Economic Review of the Soviet Union, vol. vi (1931) 32-35; Notz, W. F., and Harvey, R. S., American Foreign Trade (Indianapolis 1921) pt. v.

EXPORT DUTIES are taxes imposed by the state on goods leaving its territory. They existed in ancient Greece and Rome and have been levied in England by prerogative of the crown from very early times. The first English statute to impose export duties was passed in 1275 and applied to wool and hides. From that time they came into rapidly increasing use throughout Europe both as a source of revenue and as a means of preserving the supply of grain and raw materials for internal consumption. By 1660 they had been imposed in England on 212 arti-

cles. In the seventeenth and eighteenth centuries export duties were largely confined to raw materials under the influence of mercantilist policies designed to encourage the export of manufactures. With the rise of free trade and with the increasing pressure of the producers of raw materials in the nineteenth century, export duties virtually disappeared in Europe. In England a century of earlier decline culminated in their complete elimination in 1842. By 1857 they had largely disappeared in France and eight years later in Prussia and Austria. In the United States they had long since been prohibited by the constitution, primarily at the insistence of the south, which feared lest its exportation of agricultural products be hampered.

In industrial countries the few export duties that have survived the nineteenth century and persist to the present time are limited to raw materials; they are intended to preserve the supply of raw material for the domestic producer and thus to give him a competitive advantage over foreign manufacturers. Examples of this type of protective duty are the export duties on cork in Spain and Portugal, on timber in Scandinavian countries and in Rumania and on rags and waste in various continental countries. A similar purpose is served by the tax on timber and pulpwood cut from crown granted lands in British Columbia, which is remitted if the materials are manufactured or used within the province, and by the tax on the export of power in Ontario. Sometimes export duties and export restrictions on raw materials are designed to conserve the natural resources of a country. The Canadian embargoes on pulpwood and the Swedish and Norwegian export duties on timber are said to be partly for this purpose, although the former is undoubtedly intended also to stimulate the development of the Canadian pulp and paper industry.

Some of the duties imposed on exported raw materials in colonies are also intended partly or wholly for the benefit of manufacturers or other business interests in the mother country. The usual procedure in such cases is to remit a part or all of the duty when the raw material is exported to the mother country. If the main purpose is to favor manufacturing the duty is remitted only in the event that the product is further processed in the mother country. Some countries, notably Portugal, impose such discriminatory duties primarily in order to aid national shipping, in which case the protective effect for home manufacturing is apt to be only

incidental. Preferential duties on colonial exports are characteristic of Portugal; they are used to some extent in certain colonies of France, Spain and Italy. British practises of the same character are exemplified in preferential export duties on tin ore in the Malay States and in Nigeria, on hides and skins in India and on palm kernels in British West Africa; the Indian and West African duties were in effect for several years after the World War but were subsequently abandoned. The remission of the Philippine export duties on shipments to the United States, which were abolished with the removal of the duties in 1913, served a similar purpose.

Of much wider application are the export duties levied by non-industrial countries and imposed primarily for revenue purposes. In such countries, particularly when levied on commodities produced largely for export, they are likely to be virtually a substitute for production or land taxes. They are easily collectible, and when imposed on commodities in the production of which there is extensive international competition they must be borne by the producers in much the same manner as any other tax on production. In some countries and colonies they are imposed on virtually all exports. Such is the case in Haiti, Salvador, Argentina, Uruguay, most of the Brazilian states, Peru, Arabia, Egypt, Irak, Syria, Albania, Portugal, Belgian Congo and in certain colonies of France, Portugal and Spain and a few minor British colonies. In general such duties are low, ranging from 1 to 5 percent; but in some instances they run above 10 percent.

More commonly, however, revenue export duties are imposed on certain products selected with a view to their revenue raising possibilities and taxed accordingly. If the commodity is one extensively produced in other countries the duty is apt to be kept low, since the burden cannot be shifted to foreign consumers and becomes a direct handicap to domestic producers in competing for export markets. If, on the other hand, the commodity is one of which the country imposing the duty has a monopoly or a quasi-monopoly, the burden of the duty tends to fall more largely upon foreign consumers. In such cases a high duty on a single commodity may be made to vield a large part of the total revenue of the country imposing it. An outstanding example of export duties of the latter type is the Chilean export tax on sodium nitrate, which for many years furnished something like half the total Chilean revenue.

When a high export duty is imposed on a raw

material produced largely in a single country, it may serve not merely to benefit the national exchequer but also to regulate exports with the object of stabilizing the price in the world market on a higher level to the advantage of the producers. The Chilean nitrate is a case in point. In Brazil the proceeds of the coffee export tax were used to finance the coffee valorization schemes. The export duties on British Malay rubber had only an incidental revenue purpose; they operated primarily as a restriction on rubber exports under the Stevenson plan.

The extent to which the burden of high export duties can be shifted to foreign consumers is generally subject to important limitations even for commodities in which the exporting country enjoys a partial monopoly. Competition from outside sources, either from the product itself or from some form of substitute, is apt sooner or later to administer a distinct check. Nor is the demand for any product likely to be so inelastic that possible reduction in consumption can be wholly ignored. In the case of nitrate the recent rapid growth of international competition from synthetic and by-product nitrogen has greatly curbed the power of the Chilean monopoly; in coffee the increase of production in outside areas has checked the Brazilian control; and in rubber the abandonment of the Stevenson plan in British Malaya in 1928 was due mainly to increased competition from the Dutch.

The termination of the World War was followed by a revival of both protective and fiscal export duties. The causes of this development must be looked for in the resurgence of economic nationalism and the resulting desire to reserve the indispensable raw materials to home industries as well as in the increased needs for revenue to meet the burdens left by the war. For a brief period export taxes were employed in countries with depreciating currencies like Germany, Austria and Poland to prevent these countries from being denuded of supplies, a condition made possible by the fact that the depreciation of their currencies in terms of foreign exchange was more rapid than the decline in their internal purchasing power.

The revival and extension of export duties and other export restrictions have been subjects of widespread international concern. In part this concern has been due to the barriers which along with import restrictions they have placed in the way of restoration of world trade. But in the main it has resulted from their use in connection with national monopolies or quasi-monopolies

of raw materials. As a vehicle for furthering the monopolistic exploitation of consumers in other countries they have been severely condemned both by individual governments and by international bodies. At the World Economic Conference in 1927 a draft Convention for the Abolition of Import and Export Prohibitions and Restrictions, prepared by the Economic Committee of the League of Nations, was endorsed by the conference. This convention subsequently obtained the official sanction of a large number of countries. But it did not cover export duties, was seriously weakened by a multitude of exceptions and was not ratified by a number of European countries where such restrictions were most prevalent. The Economic Conference also passed resolutions recommending that exportation of raw materials should not be "unduly burdened" by export duties or other taxes; that export duties on raw materials should never be imposed for the special purpose of placing foreign countries using such raw materials in a position of "unfair inferiority" as regards production of the finished article; and that whether used for revenue or to meet exceptional circumstances such duties should never discriminate between different foreign destinations. Except, however, for two multilateral conventions removing or reducing export duties on hides, skins and bones in about a dozen countries, no official international action has since been taken in respect to such duties.

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See: International Trade; Customs Duties; Tariff; Corn Laws; Mercantilism; Raw Materials; Valorization; Embargo.

Consult: Gregory, T. E. G., Tariffs, a Study in Method (London 1921) p. 483-87; Grunzel, J., System der Handelspolitik (3rd ed. Vienna 1928), and Economic Protectionism (Oxford 1916) p. 158-63, 315-17; Cunynghame, H., "The Effect of Export and Import Duties" in Economic Journal, vol. xiii (1903) 313-23; United States, Bureau of Foreign and Domestic Commerce, Export Duties of the World, Tariff series, no. 42 (1927); League of Nations, Economic and Financial Section, Export Duties, C.E.I. 23, 1927. II. 14 (Geneva 1927); Wallace, B. B., and Edminster, L. R., International Control of Raw Materials (Washington 1930).

EXPOSITIONS, INDUSTRIAL. See Expositions, International; Fairs.

EXPOSITIONS, INTERNATIONAL. The first international exposition was held in London in 1851, but it had its prototypes in countless similar events of more local significance. Between the middle of the eighteenth century and

the middle of the nineteenth century almost every country in Europe held exhibitions of national products. The factors which led to the increasing importance of regional expositions and which made possible their enlargement to international scope were the increase of materials and manufactured products to display and the development of transportation facilities. The possible advantages of international expositions were not at first apparent, however, and there was no lack of opposition when it was suggested that an exposition be held in London in 1851. It was the prince consort who urged the Society of Arts to sponsor an international exhibition, from which he thought English manufacturers and artisans would learn much. The opposition, vigorous and unrestrained in both houses of Parliament and among the public, held that England would be overrun with foreign rogues and revolutionaries and that the morals of the English and their loyalty to the crown would be endangered and coincidentally their trade secrets stolen. On the continent the reactionary governments back in the saddle after the turmoil of 1848 were reluctant to participate because their subjects might be infected first hand by English radicalism. But the prince and Queen Victoria were determined and even English insularity and obstinacy had to yield. The exposition—a one-building affair—opened on time in the great Crystal Palace built for it in Hyde Park and it was a great success. It did for England and her interests as much as Albert had hoped for, if not more. It closed with a surplus of £213,305, which was used to endow a museum at South Kensington, later called Victoria and Albert Museum. Not only did England learn about the arts and crafts of other peoples but continental visitors saw the superiority of English machine made goods. Lothar Bucher, the German publicist and Bismarck's secretary, has left testimony of what a revelation it was to him to see machines making furniture and other woodwork associated on the continent with slow hand labor. The opposition, which may be reckoned the last major outbreak of English parochialism, was silenced by the results. The necessity and advantage of education for workers, especially in the crafts and in technical fields, became a matter of national importance. The figures for British merchandise exported from the United Kingdom in the years just before and after the Crystal Palace exhibition seem to demonstrate its economic benefits, although other explanations are not wanting. In

millions of pounds these figures are: 1850, 71; 1851, 74; 1852, 78; 1853, 99.

The resounding success of the first world's fair encouraged imitation in many cities and lands. In the next seventy-five years were held over one hundred expositions which claimed to be international in character. Between 1862 and 1926 the United States government alone expended approximately \$30,000,000 as its part in over forty foreign and national expositions.

While the industrial displays remain of primary importance, other interests are also ministered to. The wonders of nature museum; international congresses; educational methods; transportation exhibits; the congress of religions; fine arts, science and agriculture displays—such features as these have been added to the display of present and past mechanical and industrial processes. The occasion for these expositions is usually the commemoration of some date of patriotic significance or perhaps the celebration of some significant achievement. Usually some important national purpose is served, either intentionally or indirectly, as the demonstration of Austria's recovery from the war of 1866 in the Vienna exposition of 1873; or the illustration of the growing economic and political power of the west in the Chicago exposition of 1893; or the post-war attempt to knit the empire together economically in the British Empire Exposition at Wembley in 1924-25; or the illustration of colonization activities at the French colonial exposition at Paris in 1931; or the attempt to exemplify ideals of national unity and achievement in the Chicago exposition in preparation in 1931. The Paris expositions of 1855 and 1867 were largely the result of Napoleon III's desire to strengthen his hold on the French capitalist group, to display the beauties of the Paris that Haussmann had remade and in general to keep Paris what the peace congress at the close of the Crimean War had indicated, the capital of Europe. The next Paris exposition in 1878 was a real proof, and so accepted at the time, that the Third Republic was definitely established and could stage an international exposition as good as the emperor's.

The reasons for such a flood of expositions during the three quarters of a century after 1851 may be found in certain dominant factors in this period. It was an age in which nationalism, national rivalries and national prestige were both realities and shibboleths. Behind them and giving them much of their reality were industrial and commercial development and expansion

and the desire to find more customers and to score new triumphs for local products. From this standpoint a world's fair is but an extension and sublimation of window dressing and display advertising, with its own rules and techniques: the first simple displays of finished products are followed by the better showmanship of machines in action, products being turned out on the spot by model miniature factory units. In addition there was the very considerable factor of metropolitan as well as national rivalries and ambitions. Paris and London, Vienna, Brussels, Amsterdam and Antwerp, Sydney and Melbourne—these cities and many others vied with each other for splendor and attendance. In America the list, and more amply the hearings before congressional committees, would indicate that no self-respecting city with an active chamber of commerce felt that it had arrived without having made a bid for a pretentious exposition of some sort.

In the United States when any given city aspires to exposition status numerous groups appear before congressional committees: the local chambers of commerce and real estate boards; the representatives of the railroads; the governor and the senators and congressmen, as representatives of the state. After the exposition when the reports are made and the returns calculated—since the first exposition in London there has usually been a real if not apparent deficit—the commission in charge considers many indirect gains, such as money spent by the visitors on hotels, food and other incidental expenses, new business that will come to that area and new values that have been added to real estate and factories. These are important factors, for the cities assume millions in obligations to be paid off later by taxes and their citizens contribute individually by buying stock that never pays out. One factor always present in the case of European cities is generally absent in America. The visitor to a European exposition is counted upon to return to see Paris or Vienna or Milan again with its permanent glories and then to see more of France or Austria or Italy. The perennial international tourist invasion has been increased by European expositions. In America only the Pacific coast cities could include such a factor in their gains.

These great expositions have had a strong influence on architecture, especially in America. In Europe too they have their place in architectural history through their introduction or more extended use of new materials and their

adaptation of old forms to new uses and to special settings. The London Crystal Palace of 1851 was planned by Sir Joseph Paxton, a landscape architect who had designed a notable greenhouse on the estate of the duke of Devonshire. The London building was essentially a great greenhouse, but it was a revelation of what could be done with steel and glass. The expositions in Paris, always in the center of a city which had its abiding and historic evidences of great architecture, were necessarily subdued to their surroundings and the limited area available in the center of Paris. Such structures as the Trocadéro built in 1878 and the Eiffel Tower in 1889 were much criticized departures. In the other and later continental expositions the modernists have had a freer hand but the results are seen most often in their influence on great factories and retail magazines, the chief fields in which new and elaborate structures have been required. In America it is hardly too much to say that the Chicago exposition in 1893 began a new epoch in American architecture. Its creation under the leadership of Daniel H. Burnham, with the cooperation of the ten leading architects of America, did much to end the Richardson regime of the Romanesque, already senile and degenerate in the hands of his unlettered imitators. The neoclassic style of the Chicago exposition set models whose influence can be traced in many public buildings and on university campuses. It opened the way for experimentation and the eclecticism that prevailed in American architecture for the next quarter of a century. The Transportation Building of Louis Sullivan on these same grounds was itself in striking contrast to the prevailing style and seemed to foreigners the harbinger of an American architecture of which the keynote was to be form adapted to function, a maxim that has given us the present architecture of the skyscraper. The whole creation in 1893 was a triumph of architects who were professionally trained in the United States and abroad, and their success gave a decided impetus to the establishment of university schools of architecture.

More widespread, more abiding and more significant is the vision of beauty brought to millions of eyes that had scarcely been lifted before from plow and prairie and wheels and whirring belts. America learned the value of beauty at Chicago, where the White City stood in contrast with the Black City (the Chicago of 1893), and again at San Francisco and St.

Louis and Buffalo and San Diego. It is not too much to say that the attempt to translate and preserve some part of these visions is partly responsible not only for the later civic plans of the cities where the expositions were held but also for the parks, boulevards, civic centers, public buildings and homes of the vast hinterlands that contributed the visiting millions.

The rapid development and frequency of international expositions—or of expositions that achieved international standing simply by inducing the national government of the day to extend invitations to other governments and their peoples-produced a problem. They became something of a nuisance. Governments were embarrassed and involved in expenses not in their plans when they conveyed an invitation. Manufacturers and producers were more and more reluctant to upset the orderly procedure of their factories by detaching producing units and granting a standing leave of absence to employees to move at considerable expense to successive exhibitions. The great industrialists who had made their names at earlier expositions and were secure in their leadership became less and less interested. Only the new firms with a name yet to make could be counted on to exhibit and they could not keep it up year after year. A badly managed exposition, a dubious system of making awards, an annoying experience with tariffs, a record of few sales or orders —all these diminished the zest for something that was good if there was not too much of it.

French exhibitors as early as 1884 formed a self-protective association, the Société Amicale des Anciens Membres du Jury de Nice, which was the forerunner of the Comité Français des Expositions à l'Etranger, founded in 1890. The latter was given legal status in 1901 by a law regulating all expositions in France and setting up conditions for French participation in foreign expositions. Similar protective committees were formed in Belgium (1903), Italy (1905), Germany (1906), the Netherlands (1906), Switzerland (1908), Austria (1910) and Japan (1911). In 1907 at the invitation of the French committee, an international federation of exhibitors, the Fédération Internationale des Comités Permanents d'Expositions, was formed in Paris to deal with regulations for making awards, securing safe return of exhibitions, protecting patents and similar matters. A German law adopted in 1904 and modified in 1925 regulates exposition practises so far as Germany's people and expositions are concerned. At the initiative of the

international federation sixteen European states and Japan signed a convention on October 26, 1012, in Berlin regulating the organization of international expositions. This convention was never ratified because of the outbreak of the war, and the international federation was dissolved. After the war, the institution of a series of new international exhibitions to reopen trade channels led to frequent conflict of dates and duplication within short periods of time of types of exhibitions. In 1925 the French committee tried to revive the work of the international federation but failed because almost all the national committees had become extinct. Thereupon the French government summoned an international diplomatic conference to deal with the problems discussed at Berlin in 1912. In 1927 the International Chamber of Commerce established a special Committee on Fairs and Exhibitions to draw up a draft convention. Thirty-eight nations were represented at the conference which met in Paris in November, 1928, to discuss this draft and the proposals of the French government. Of these, twenty-three signed a convention which came into force for a period of five years beginning January 17, 1931, having been ratified by Albania, France, Germany, Great Britain, Italy, Rumania, Sweden and Switzerland. This convention classifies the various types of exhibitions, provides for the avoidance of competition and duplication, establishes the duties of inviting and participating countries, rules for awards and other details of the conduct of exhibitions. An International Exhibitions Office has been established with its seat in Paris to follow up the problems discussed as the conference and to see that the provisions of the convention are carried out. The International Chamber of Commerce acts in an advisory capacity to this office.

Although doubt as to the value of international expositions has been expressed more and more frequently in the last twenty-five years, their significance during the latter half of the nineteenth century is less uncertain. In that period of the rapid development of a civilization in which applied science and technology were dominant factors each exposition could easily mark in some striking way a new stage in the progress of this type of civilization and its wide extension as nation after nation displayed its offerings abroad or arranged an international exposition on its own soil. At London in 1851 machinery took half the highest awards and England the majority of these. The "Virginia

reaper" of McCormick made its first successful bid for world fame at that exposition. In textiles and fine arts the British producer saw the foreigner take three fifths of the prizes. The German representatives of the Zollverein took home material for a three-volume report on the industries of the world, a significant guide for Germany as she began her career as an industrial nation. England found that she had something to learn and improved her technical education; the government spent \$250,000 at Paris in 1855 to help the British exhibitors and to publish for wide distribution the reports on the results. At London in 1862 the Bessemer process was publicly exploited and the possibility of rubber products revealed. At Paris in 1867 Germany taught the world something about the best gas motors and first revealed her leadership in aniline dyes. At Vienna in 1873 Japanese art made a strong impression on European art, to be reenforced three years later at Philadelphia. At the Centennial Exhibition in 1876 the telephone was a promising toy and the whole electrical display could have been put in a modest room. But American machinery, symbolized in the Corliss engine, won world attention at that time and Germany, whose exhibit in the words of their commissioner was "billig und schlecht," awoke to a realization of the market it was missing. Although Germany ignored Paris in 1878 and 1889 it made great displays at Chicago in 1893 and at St. Louis in 1904. As an illustration of how an exposition may found an industry or change it, one may cite the Fleischmann yeast display at Philadelphia as the beginning of a fortune; the introduction of the American public to Vienna bread was the work of a concessionaire. At Paris in 1878 the possibilities of electric lighting, refrigeration and motor vehicles were foreshadowed. By 1900 the automobile had become a display feature. Expositions have visibly operated toward change in social attitudes; e.g. after a nation wide controversy the Chicago exposition in 1893 was opened Sundays although only on condition that machinery should not be operated. In 1926 the need for more money led to the renting of the Philadelphia Sesquicentennial stadium for a great prize fight, with little public disapprobation.

The success of the attempts to make expositions an opportunity for the international exchange of ideas through congresses or conferences is difficult to appraise. Much has been claimed for them as epitomizing world thought

and forecasting social and intellectual trends. These congresses seldom measure up to the claims or the expectations of their promoters. The French expositions give special prominence to them, against backgrounds of exhibits to show progress in the fields of labor, social economy and education, and have in general been more successful than others in this respect. Labor and its conditions have been perhaps the most emphasized. The visit of French laborers to London in 1862 is the alleged basis for the First International of Marx and Engels formed in 1864 and dissolved in 1876 at the time of the Centennial Exhibition in Philadelphia. The chronology of expositions and wars minimizes any claim made for expositions as major contributors to peace.

The day of the international exposition may have passed. Many think that there will be no more in the grand manner and that henceforth they will be specialized along certain lines, such as electricity, automobiles and the graphic arts. This is quite possible, for a true universal exposition which seventy-five years ago could be put under one glass roof in Hyde Park is today an impossibility within the area and resources available in or near any truly metropolitan center. But in post-war Europe there are many new nations and in Africa and Asia new frontiers of civilization that will wish to exhibit to the world their industrial and cultural achievements; new industries and improved products are still seeking markets; despite their experiences of loss older nations may find themselves impelled toward a public stock taking. Perhaps after all it is too early to write finis to international expositions either universal or special.

GUY STANTON FORD

See: Fairs; Industrial Revolution; Nationalism; Invention; Advertising; Museums and Exhibitions; International Trade; Business, Government Services for.

Consult: Berger, H. G., Expositions universelles internationales (Paris 1902); Demy, Adolphe, Essai historique sur les expositions universelles de Paris (Paris 1907); Norton, C. B., World's Fairs from London 1851 to Chicago 1803 (Chicago 1890); Brandt, O., "Zur Geschichte und Würdigung der Weltausstellungen" in Zeitschrift für Sozialwissenschaften, vol. vii (1907) 81-99; Isaac, Maurice, Les expositions en France et dans le régime international (Paris 1928); Gérault, Georges, Les expositions universelles envisagées au point de vue de leurs résultats économiques (Paris 1902); Paquet, Alfons, Das Ausstellungs-Problem in der Volkswirtschaft (Jena 1908); Huber, F. C., Die Ausstellungen und unsere Exportindustrie (Stuttgart 1886); Dorff, Alfred, Les expositions et le droit (Brussels 1910); files of the Allgemeine Ausstellungszeitung, published

monthly in Berlin from 1901 to 1914; Ausstellungs-Jahrbuch, ed. by Heinrich Pudor (Leipsic 1907), with bibliography; Fairs and Exhibitions, published in Paris since 1922 by the International Chamber of Commerce as a semiannual issue of its Digest; Locock, G. H., "The Diplomatic Conference of Paris on International Exhibitions" in World Trade, vol. i (1929) 35–45; Tallmadge, T. E., The Story of American Architecture (New York 1927) p. 195–289. Most national and international expositions are covered by voluminous reports of a government commission.

EX POST FACTO LAWS. See RETROACTIVE LEGISLATION.

EXPOSURE. See INFANTICIDE.

EXPRESS COMPANIES are an economic development peculiar to America. In practically all European countries the railroads or the postal systems, often in conjunction with collection and delivery agencies, cover the field served by express companies in the United States and Canada. That field may be described roughly as transportation of merchandise by railroad or steamboat at passenger traffic speed, together with pick up from the consignor and delivery to the consignee. In contrast to the parcel post, express companies impose no limits on the size or the weight of the merchandise they transport or on the insurance applicable to it. It follows that most articles sent by express are those which go long distances or are highly valuable or have great weight or bulk or cannot readily be conveyed to a post office or by their nature require delicate handling. Express rates are on the whole lower than parcel post rates for the heavier articles and for the longer distances, and occasionally compare favorably with railroad freight rates on very bulky but light weight articles, so that these often go by express rather than by freight.

Express companies also render special forms of service not directly connected with express service as such. They issue their own travelers' checks and money orders, sell goods on commission, transfer money by telegraph or cable, maintain travel offices and perform other banking, tourist and commission functions. In 1929 the gross revenues from these non-transportation operations amounted to \$3,672,626, or slightly more than one percent of the total gross revenues of express companies.

Stagecoach drivers and passengers had for many years carried and delivered packages and executed commissions in an informal way, and almost as soon as railroads were developed in the

United States railroad employees and passengers were importuned to transport small or valuable articles from one city to another. Certain individuals soon began to demand fees for this service, hired assistants, arranged with the railroads for special space on trains and opened offices. Beginning with the late thirties express was developed rapidly over railway routes. Where railroads had not yet penetrated, steamboats often served to carry express; and in the west stagecoaches were used, especially for bullion. During the fifties many consolidations took place, so that most of the express business was deminated by a few companies, and for several decades prior to the entrance of the United States into the World War the bulk of the express service of the country was handled by five companies: the Adams Express and its subsidiary, the Southern Express, operating in the east and middle west and over several western routes; the American Express in the east, middle west and trans-Mississippi region; the United States Express in the east outside of New England and in the middle west and over several western routes; and the Wells, Fargo & Company's Express in the far west and the southwest and over several eastern routes.

According to the first federal census of express companies which was taken in 1890 a total of eighteen companies operated over about 175,000 miles, of which 160,000 were by railroad. 93 percent of this mileage was controlled by the five major sy tems mentioned above and by the Pacific Express Company, which was organized in 1879 by the Gould group of railroads and was absorbed in 1911 by Wells-Fargo express. The total number of express shipments in 1890 was 115,000,000 and the companies' expenditures were \$46,000,000. It is significant of the period's attitude toward public utilities that the companies' receipts were not reported in the 1890 census.

The standard contract between express companies and railroad companies provided that the former were to pay the latter a fixed proportion, usually in the neighborhood of 50 percent, of the gross charges for transporting the express merchandise. There was considerable interlocking of directorates and securities ownership between the express companies and the railroads.

In 1906 the Hepburn Act gave the Interstate Commerce Commission enlarged powers over the railroads, and the express companies were included in the scope of the act. Subject to review by the federal courts the commission was empowered to fix express rates after complaints were made and was given full access to the express companies' books and power to order a uniform accounting system. The Mann-Elkins Act of 1910 shifted the burden of proof as to the fairness of rates to the companies and allowed the commission to act of its own volition in express rate rulings. Soon afterward these rulings were made subject to review only by the Supreme Court after consideration by a special court of three federal judges. Classification of express traffic likewise was entrusted to the commission.

In 1913, in spite of the vigorous opposition of the express companies and other groups, a parcel post was finally made a part of the postal system. Prior to this four pounds had been the upper limit of parcels sent through the mails. The express companies feared the potential competition of the new service, and rather than compete the United States Express Company decided to cease operations and went out of existence in 1914.

An investigation by the Interstate Commerce Commission in 1922 indicated that the parcel post had attracted most of the smaller packages. It was found in that year that the average weight of an express shipment was eighty-two pounds, whereas in the years before 1913 it had been thirty-four pounds. There is frequently, however, more than one package in an express shipment. In 1929 the average weight of an express shipment was probably about the same as in 1922, while the average weight per parcel post package was only slightly more than five pounds. In 1931 the Railway Express Agency reported that in 1929 it had handled 177,505,448 shipments of all classes and weights. This figure may be compared, remembering that express shipments frequently are composed of more than one parcel, with 837,308,320 pieces of parcel post mailed in the fiscal year 1929-30.

It must be added that the cost accounting figures of the Post Office Department show that the parcel post in the fiscal year 1929–30 was conducted at a net loss of \$15,570,731. This was about 10 percent of the gross parcel post revenues for the year. The deficit was ascribed to parcels mailed in the first three zones, covering distances up to three hundred miles. Parcels mailed in the other zones showed slight profits. Accordingly, the postmaster general late in 1930 filed application with the Interstate Commerce Commission for approval of an increase in rates for parcel post packages for the shorter distances and of a decrease for the longer distances. He

requested also approval of an extension of the upper weight and girth limits upon parcel post packages. Execution of the proposed changes would naturally intensify the competition between parcel post and express service.

Slightly more than a year after the United States entered the World War the Wilson administration decided that the express service of the nation could be rendered most effectively by unification. On May 28, 1918, the United States Railroad Administration made public an agreement with the four leading express companies for their amalgamation into the American Railway Express Company, The new company was capitalized for only \$34,640,000, the value of its actual property and cash, and capital stock was issued for that amount. The activities of the company were to be administered by the Railroad Administration, which was to receive 501/4 percent of all gross express operating revenues. The 493 percent remaining to the express company was to cover operating expenses, taxes and a 5 percent dividend on the capital stock. Of any profits remaining, the first 2 percent was to be divided equally between the company and the Railroad Administration; the next 3 percent, one third to the company and two thirds to the Railroad Administration; or all further profits, one fourth to the company and three fourths to the Railroad Administration. On November 18, 1918, President Wilson issued a proclamation establishing federal possession and operation of the American Railway Express Company. It was announced that the action was taken to make the government's control over the company indisputable.

The express service was returned to private hands on March 1, 1920. It continued to be unified in the American Railway Express Company, which became a private agency and was exempted by act of Congress from the scope of the federal antitrust laws. The government guaranteed the company against a deficit for the following six months. At the end of that period an increase in rates was granted by the Interstate Commerce Commission. The company made new contracts with the railroads which changed the basis of payments; operating expenses were made the first charge against operating revenues, and 2½ percent of the resulting net income was to go to the express company. The principal reason for this small percentage is that express collections are considerably greater than the capital invested in the express service. This situation obtains because the most expensive

part of the service is rendered by the railroads. The capital equipment which must be maintained by the express companies consists only of express cars, delivery trucks, depots, land and the like. In recent years the value of this equipment, less depreciation, has been fixed at between \$30,000,000 and \$35,000,000, only slightly more than 10 percent of the average annual express revenues. The 1920 contracts specified further that if the percentage which went to the express company became more than 6 percent of the capital of the company, one half of such excess was to revert to the railroads; and if the percentage became greater than 10 percent of the capital, the railroads were to receive three fourths of that excess.

In 1921 the Southeastern Express Company was organized. It is owned by the Southern Railway system and operates almost exclusively over that system's lines. In 1929 it accounted for about 4 percent of the express mileage of the country and for not quite 3 percent of all express collections.

The business of the American Railway Express Company failed to expand after the period of federal control. Its collections amounted to approximately \$291,000,000 in 1922, \$285,-000,000 in 1927 and \$283,000,000 in 1929. In opposing the proposal for a change in parcel post rates the Railway Express Agency in 1931 estimated its total collections for 1930 at less than \$240,000,000. This lack of expansion is but an index of the decline in importance of the express service which had been going on for some time. As railway systems grew in size, car interchange was developed and service was generally improved, the need for express companies as coordinating agencies for expeditiously carrying certain classes of traffic over a number of small, non-unified railroads declined. The lack of expansion has undoubtedly been due also to the increase in transportation by motor truck. The Interstate Commerce Commission has at present no control over the extensive and rapidly growing motor truck service, and reliable statistics upon it are lacking. Proposals for federal control of interstate busses and trucks were brought forward in the Seventy-first Congress in the Parker-Couzens bill, but federal control was visualized primarily as a court of sanction and as a last resort for cooperative control by the several states. By 1931 the state statutes on motor trucks were still concerned primarily with taxation and with safety, and motor truck rates, especially interstate rates, remained for practical purposes unregulated by legislation.

This transportation of commodities by trucks was meeting, at least partially, one of the weak points in the service rendered by the private express system. That system could tap only territory adjacent to the railroads or to waterways and was not available to the large proportion of the population distant from rail systems and navigable waterways. This fact had been stressed in 1912 by those who urged, unsuccessfully, that the parcel post when established should offer pick up service at a fee and should have no limits, or extremely generous limits, as regards weight, girth and insurance.

The post-war motor truck, however, like the parcel post, has become available to most people who live on or near passable roads. In some instances it provides interstate service on regular schedules; in others, on occasion or by order. It generally also makes available the local haulage of commodities. By 1931 it was known that an increasing amount of milk and farm produce had been diverted from the express service to the motor truck, and the same diversion was apparent in manufactured merchandise.

Express companies were also keenly feeling the competition of fast freight service by rail, which for a number of years was being improved and expanded. Fast freight between certain points was being dispatched on regular schedules; special fast freight trains, although required to yield the right of way to passenger and express trains, were given the right of way over ordinary freight. One effect of this development was to enable shippers to maintain smaller inventories, secure in the knowledge that they could obtain raw materials with less delay and deliver their products more speedily. Merchants likewise could rely upon this new service if they allowed their stocks to become low. Yet it had been for this very purpose of maintaining smaller inventories that many manufacturers and merchants had patronized the express service. After 1920 railroad companies tended to favor shipment by fast freight of such bulky commodities as oysters, milk and fresh fruit, which had formerly been carried as express, and to restrict express traffic to parcels.

The railroads developed fast freight in part to protect their freight tonnage against motor truck competition, and in addition were seriously considering delivery and even pick up of freight. The first diversion of freight to motor truck was mostly of short haul traffic, which the railroads are apt to consider the least profitable freight; but more recent diversion has been of longer haul traffic and has affected rail profits more sharply. Fast freight on regular schedules with delivery and pick up service would compete sharply with express and indeed might be considered a slower express service.

Container freight service also was being rapidly developed. In this service freight cars were fitted to hold uniform steel containers not unlike lockers. The shipper could pack these containers in his own establishment and deliver them locked to a freight depot, where cranes loaded them upon the freight cars waiting for them. This service lent itself readily to the shipment of fragile or valuable articles, which had formerly been considered peculiarly the province of the express service.

Finally, the railroads were complaining that under their contracts of 1920 and 1923 with the American Railway Express Company they were obtaining an insufficient proportion of the express revenues. If the express service remained in private hands, the Interstate Commerce Commission might be successfully appealed to in a move to prevent the development of fast freight to the point of destroying all express profits. If the express service were made part of the railroad systems, the railroads could well afford to develop fast freight at the expense of express, inasmuch as most of the rail revenues came from freight and only a relatively small proportion from express payments.

Under these circumstances the railroads intimated that they would not renew the 1920–23 arrangement when the contracts expired on February 28, 1929. On that date, with the approval of the Interstate Commerce Commission, the American Railway Express Company was taken over by the Railway Express Agency, which was empowered to issue stock to the amount of \$32,000,000, the estimated value of its capital equipment. The stock was bought by the several railroads of the country in proportion to the amount of express traffic which had been hauled by each road during the preceding years. The machinery of express administration remained the same.

In Canada also there has been a marked tendency for express service to be concentrated in a few companies and for its control to pass to the railroad companies. In 1927 Canadian express companies had a gross operating revenue of \$25,736,275 and had 5068 employees. The greatest part of the service was performed by the

Canadian Pacific Express Company (formerly the Dominion Express Company), a subsidiary of the Canadian Pacific Railway, and by the express department of the Canadian National Railway.

In 1929 the interstate express companies of the United States—the American Railway Express for the first two months, the Railway Express Agency for the last ten months and the Southeastern Express Company for the full year—showed a total mileage of 270,800, including 232,003 over railroads, 23,612 by steamboat and 10,314 by airplane. The number of employees on December 31, 1929, was 59,468, with an average daily compensation of \$5.66. Some financial statistics for the same companies in 1929 follow:

Transportation revenues	\$291,326,777
Contract payments for express	
privileges	150,044,944
Interest on funded debt	1,334,000
Net income	474,248
Dividends declared	580.630

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BERTRAM BENEDICT

See: Transportation; Railroads; Motor Vehicle Transportation; Posial Service; Interstate Commerce Commission.

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EXTENSION WORK. See Extension Work, Agricultural; University Extension.

EXTENSION WORK, AGRICULTURAL. Agricultural extension work is a term which may be applied to a variety of forms of extension education in agriculture and home economics. In the United States formal cooperation between the United States Department of Agriculture and the Land Grant colleges in the provision of such extension education on a national scale was inaugurated by the act of Congress of May 8, 1914, commonly known as the Smith-Lever Act. Equally recent has been the expansion on a large scale of organized agricultural extension work by European governments. But the real beginning of informal extension teaching in agriculture may be traced to a much earlier date. The many agricultural societies which were organized in both Europe and the United States after the middle of the eighteenth century as a result of the growing interest in new agricultural techniques were as much concerned with the dissemination of information as with investigation and experimentation. American statesmen such as Washington and Jefferson devoted much time and money to the importation of seed and improved livestock and to the popularization of their use. The agricultural fair, the foundation of which was laid by Elkanah Watson in 1807, was throughout the nineteenth century an important organ for the spread of knowledge in regard to agricultural techniques. During the same period an increasing number of agricultural schools and lyceums were conducting lectures and farm tests.

But although fairly numerous instances of public demonstration lectures conducted by agricultural societies and after 1850 by state boards of agriculture can be found, all such extension work remained sporadic and limited until the third quarter of the nineteenth century. The crude methods of agriculture inherited from previous centuries were adequate to an expanding pioneer system. Moreover, scientific agricultural experimentation did not develop on a large scale until after the middle of the century. The period following the Civil War was one of agricultural depression, in which the attention and efforts of farmers were directed to political agitation and protest. The early militant Grange, the Greenback movement and the free silver question all represented the reactions of the agricultural groups to the pressure of widening markets, the impinging of commercialization and the growing disparity between rural and urban standards of living. With the failure or subsidence of such political movements there

set in a period of renewed and increasingly active interest in agricultural education. The creation of the United States Department of Agriculture in 1862 provided the basis for future work; the organization of state agricultural colleges under the Morrill Land Grant Act of 1862 and the development of experiment and research work in these colleges under the Hatch Act of 1887 assured the rapid growth of a new body of scientific facts relating to agriculture and provided at the same time means for dissemination of such information.

One of the most important methods of extension education fostered by the agricultural colleges and state departments of agriculture was the farmers' institute. The Kansas Agricultural College is generally credited with having held the first such institute in 1868. The movement spread rapidly and soon agricultural colleges and societies throughout the country were organizing such local meetings of farmers, lasting from one to three days, at which professors from the colleges and specialists from the departments and successful farmers lectured on subjects relating to the technique, and sometimes to the business, of agriculture. Occasionally women lecturers carried special messages to the farm women. After 1880 an increasing number of states supported the farmers' institutes with definite appropriations. In 1896 a national body, the American Association of Farmers' Institute Workers, was organized to coordinate the work. After 1901 the Federal Office of Experiment Stations received special appropriations to support the work. In 1914 there were held in the whole country 8861 institutes with an attendance of 3,050,150 persons. Farmers' institutes were undoubtedly of great value in the spreading of knowledge in regard to new and improved methods of agriculture and of home making. Their greatest defect was that they occurred so infrequently, often only once a year, that it was difficult for the farmer to follow up the ideas he received. With the passage of the Smith-Lever Act and the setting up of a national extension system based on the work of the county extension agent the farmers' institute lost much of its importance, and the agricultural colleges and state departments of agriculture gradually transferred their support to the county extension agents. In 1920 there was a marked revival of one-day institutes, but since then the whole movement has gradually declined in importance.

Influenced by the Chautauqua movement and by the British university extension systems, the agricultural colleges shortly after 1890 began to develop a variety of other forms of extension work. Organization of reading and correspondence courses in agriculture and home economics, the publication of bulletins in technical subjects, the holding of field demonstrations and the support of itinerant lecturers and movable schools all became recognized features of extension education.

The development of a body of trained teachers and lecturers increased the enthusiasm among those in touch with the situation for a further and more systematic development of extension work. Moreover, the growth of extension work was placing such a burden on the agricultural colleges that their resident teaching and research tended to suffer; there was therefore a demand for special federal appropriations for extension work. By this time the experiment stations were accumulating new techniques at a rapid pace; the perfection of agricultural machinery presented new problems in the education of the farmer; and the growing dependence of agriculture upon the market was making more evident the inability of the individual farmer or even the individual farm community to handle many of the most pressing problems alone. Increasing attention was given to education in farm management as well as in farm methods, and after 1900 agitation for nationally supported and organized extension work grew rapidly. It was augmented by such factors as the report of President Roosevelt's Country Life Commission calling attention to the need for a more satisfactory rural life.

It was such agitation which resulted in 1914 in the passage of the Smith-Lever Act. But the basic method of extension organization embodied in that act resulted not from the theoretical discussion of needs but from a plan developed to combat a threatened national calamity. About 1898 the cotton boll weevil began its devastation of the cotton fields of Texas. It quickly became apparent that the pest could not be eradicated, and the principal agricultural crop of the southern states was threatened with destruction. Methods of successfully cultivating cotton in spite of the presence of the boll weevil had been developed; the problem was to persuade a large number of farmers to adopt them. In 1904 Dr. Seaman A. Knapp, who had been cooperating with the United States Department of Agriculture in experimenting with the demonstration farm plan in Louisiana, was called into conference with Secretary of Agriculture Wilson

and other department officials who visited the devastated cotton fields of Texas. To this group Dr. Knapp explained his conception of adult education, which involved not simply teaching by object lesson but having the farmer himself make the demonstration rather than merely witness it. He was immediately put in charge of such demonstration work for the department; in February, 1904, the first extension agents were appointed, but their work was not at first confined to a single county. The first county extension agent was appointed in 1906. With this organization Dr. Knapp began by directing his efforts to combating the devastation of the cotton boll weevil, to the growing of substitute crops and to the use of fertilizers and improved tillage.

In 1906 this work attracted the attention of the General Education Board established by John D. Rockefeller in 1902, which was at the time operating in the southern states. Arrangements were effected whereby the work of the Board was coordinated with that developed by Dr. Knapp under the Bureau of Plant Industry. At first the work was directed exclusively toward education of the adult farmer, but soon boys' clubs, particularly corn clubs, were organized and demonstrations carried on through them. Somewhat later similar work was started with girls; the first woman county home demonstration agent was appointed in 1910. The success of these activities in the south attracted national attention and within a few years the method spread into the northern states, notably into Illinois, Missouri, New York, New Jersey, North Dakota, Ohio and Utah. The first county extension agent outside of the southern states was appointed for Uintah County, Utah, March 1, 1911. In the same month work was started in New York in a district comprising parts of several counties adjacent to Binghamton. By 1914 county extension agents to the number of 1138 were at work in the southern states and about 200 had been appointed in the states outside of the cotton belt.

The essential feature of the county extension agent system is the permanent location in a definite territory of a trained agriculturist converned with organizing programs and devising methods for improving conditions in that district. Appointed at first by state boards of agriculture and agricultural colleges, the county agent maintained close relations with both agencies, using all their facilities of special lectures and courses to supplement his personal work.

From the beginning the county extension agents sought the cooperation of local committees and local farmers' organizations. Especially in the northeast and north central states the county agent method as it developed relied upon county farmers' associations for support and used them to give a community aspect to the work. These associations were organized on a variety of bases and with various names, such as soil and crop improvement associations or farmers' clubs, but gradually the general name for all of them came to be Farm Bureau. Many of the states, by act of the state legislature, made the organization of such a farm bureau a condition precedent to the establishment of extension work in a county. It was these county farm bureaus which after the World War formed the basis of a new national farmers' organization, the American Farm Bureau Federation.

The agricultural extension act (Smith-Lever Act) of May 8, 1914, made this system of county agents and their supporting organizations the basis of a national system of extension education in agricultural and home economics. The act provides a legal basis for cooperation between the United States Department of Agriculture and the Land Grant colleges in the establishment and support of the system; to this end it appropriated \$10,000 to each state and provided for the granting of additional sums contingent upon appropriations from within the state. The amount of funds available has been increased by supplemental legislation of succeeding congresses; the Capper-Ketcham Act of 1928 allotted \$20,000 to each state and also provided for additional funds to be offset by state appropriations. In 1930 the total funds available for agricultural extension work in the United States amounted to \$24,257,800, of which \$9,251,760 was provided by the federal government, \$6,-948,450 by state legislatures and \$8,057,591 by county and other sources. Before 1914 private sources, foundations or local organizations provided considerable sums for extension work; in a few middle western states this is still the case, but the tendency is toward complete public support. The Smith-Lever and other extension acts were made applicable to the territory of Hawaii July 1, 1928; and the Smith-Lever Act, to the amount of \$10,000 only, to Alaska on July 1, 1930. The extension acts are effective for Porto Rico beginning July 1, 1932.

In order to insure coordination of extension work on a national scale the Smith-Lever Act provided that the agricultural colleges receiving

funds should submit to the secretary of agriculture plans for their work and a proposed budget. The effective operation of the act required a more definite formulation of relations between the United States Department of Agriculture and the agricultural colleges. Within the United States Department of Agriculture itself the administration of extension work was centralized under the States Relations Service. to which were transferred the office of Experiment Stations (except irrigation and drainage investigations) and the farmers' cooperative demonstration work previously in the Bureau of Plant Industry. An agreement was reached with the states that one state agricultural college in each would receive all the benefits from the act and that this college should establish a separate division of extension work, the director of which, selected by the college and acceptable to the Department of Agriculture, should plan the extension activities for the entire state. County and home demonstration agents became federal civil service employees.

With the entrance of the United States into the World War a new importance attached to the work of the extension service. It was called upon by the Food Administration to direct the work of increasing and mobilizing food supplies; home demonstration agents carried the burden of fostering food conservation. With the use of special emergency appropriations additional extension workers were appointed in great numbers. At the end of the war there was a period of difficulty as local cooperating organizations were disbanded and it was uncertain how large a force of extension workers could be maintained. But the extension service was too firmly established and too urgently needed in the disturbed post-war years to suffer any real loss of importance. Certain administrative reorganizations within the Department of Agriculture further unified the work and extended its scope. On June 30, 1930, a total of 6113 men and women were employed in agricultural extension work. Of these, 191 were in the department in Washington and 488 in administrative or supervisory positions in the states; there were 2580 regular county agricultural agents and assistant agents, 1225 county home demonstration agents and assistants and 246 county boys' and girls' club agents. In addition there were 172 Negro county agricultural agents and 127 Negro county home demonstration agents. County workers thus comprise about two thirds of all cooperative extension workers. One connecting link

between the research institutions and the county extension agents is the state extension specialist. In 1930 there were 1100 such state specialists in dairying, poultry, soils, horticulture, agronomy, nutrition, clothing, home management, farm management, forestry and other similar subjects.

This growing organization has continued to make use of all the devices developed in earlier years—demonstration work, circulars and bulletins, lectures and more recently moving pictures and the radio. The Department of Agriculture decided that Smith-Lever funds could not be used to support farmers' institutes, short courses at colleges or correspondence courses; in some of the states, however, state funds have been used to continue such work through the agricultural colleges.

A phase of extension work deserving particular mention is the work with boys and girls, usually called 4-H Club work. Young people between the ages of 10 and 20 are admitted to such clubs and the majority of the members, who totaled approximately 800,000 in 1930, are under 14 years of age. Organized by the county agents and directed by adult leaders, these clubs engage in poultry raising, gardening, dairying, food preparation and projects for home improvement. Through contests with awards of prizes and trips and through special camps an effort is made not only to give the children scientific information in regard to agriculture and home economics but also to develop an appreciation of country living under proper conditions. The work of the home demonstration agents with farm women has also been of growing importance in this direction.

In the work of the county agricultural agents the emphasis has been upon improvement of crop and livestock production, primarily because the great mass of research work carried on by the experiment stations, the agricultural colleges and the United States Department of Agriculture has been in that field. Educational work in relation to the farmer's business life was contemplated by the Smith-Lever Act and was approved by Secretary of Agriculture Houston in the first year of its operation. There was little research in this field, however, and consequently little in the way of accepted principles to guide extension procedure. An office of Farm Management was organized in the Bureau of Plant Industry in 1906, but its activities developed slowly. From the beginning, however, many county extension agents gave advice in

regard to business conditions. Since the war there has been an increasing demand from farmers for such service. In addition to teaching methods of farm management the extension service has attempted to develop a basis of farm accounting and secure its widespread adoption. The agricultural outlook reports of the Department of Agriculture furnish a possible basis on which farmers can readjust farm production. The passage of the Agricultural Marketing Act of 1929 creating the Federal Farm Boards stimulated work in the field of cooperative marketing. Increasing emphasis has been laid by extension workers on the encouragement of cooperative marketing associations. There is evident in the service an attempt to coordinate extension work in production, distribution, farm management and ways of living.

Agricultural extension work in other countries has developed along slightly different lines. Except in England it is ordinarily undertaken directly by government departments or by farmers' organizations subsidized by the government rather than by the agricultural schools and colleges. Although agricultural colleges and secondary schools have existed in most European countries since the eighteenth century and experiment stations have been established in large numbers, it is only since the World War that extension work has developed on a large scale. The pressure of food supply problems during the war and the subsequent dislocations of international trade led to a marked expansion of all forms of agricultural education and particularly of extension work throughout Europe. While the basis of organization of such work differs in each country, there is considerable similarity in the methods employed. In general there is more emphasis on movable schools, short courses, lectures and demonstration farms and less on demonstrations by farmers themselves than in the United States. The motion picture and the radio have been brought into use to spread agricultural information, and the specialist in every branch of agriculture plays an important part in the extension work of most governments. In the majority of the countries the government works through farmers' organizations and definitely encourages the formation of cooperative and other associations.

Special features of extension work in certain countries may be noted. In England there is a system of county agricultural organizers, who give lectures and organize conferences. In many cases they are supported by farmers' discussion

societies. The work of the women's institutes is closely allied to extension work, and young people's clubs are multiplying in number. Much use is made of scholarships. These activities are coordinated by the National Council of Social Service, a central board for all rural councils, which includes representatives of the Ministry of Agriculture. In Sweden and Norway too extension work is organized through county agricultural societies and definitely tied up with other work for small holders. In Italy itinerant schools are organized by the central government and provincial authorities. In Germany experiment clubs have been organized and extension work fostered by the chambers of agriculture. In France an important feature of extension work is its definite use to check the emigration of the rural population to the cities. In Denmark the Royal Agricultural Society centralizes extension as well as all other agricultural education; the work has long been developed to a high degree of specialization throughout the country Extension work is well developed in the British dominions, especially in Canada, South Africa and Australia. Most of the South American countries have governmental systems of itinerant agricultural advisers. There is a small amount of extension work in China but in Japan it is highly developed. In 1922 it was estimated that 1,190,000 individuals in Japan received extension instruction. Soviet Russia is carrying on agricultural extension work on an unprecedented scale. All the ordinary methods of instruction in improved agricultural methodslectures, demonstrations, motion pictures, radio —are supplemented by the most ambitious demonstration of the nature of modern socialized agriculture.

The world wide growth of extension teaching, supplementing scientific experimentation, has revolutionized the technical basis of agriculture. Over wide areas primitive methods are being supplanted by improved methods of tillage. The standards of living of rural communities have also felt the effect of this new educational method. But the larger task of giving to agriculture its place in a balanced economic system still remains a challenge to the extension workers of all countries.

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See: AGRICULTURE; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL EDUCATION; AGRICULTURAL SOCIETIES; AGRICULTURAL FAIRS; AGRICULTURAL Experiment Stations; Farm Management; Agricultural Economics; Farmers' Organizations; Farm

BUREAU FEDERATION, AMERICAN; BOYS' AND GIRLS' CLUBS; COUNTRY LIFE MOVEMENT; RURAL SOCIETY; CHAUTAUQUA; UNIVERSITY EXTENSION.

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EXTERRITORIALITY

GENERAL. Exterritoriality (extraterritoriality) is a legal fiction or metaphor serving to explain the special immunities attaching to the persons and to the habitations of diplomatic agents, who are not subject to the jurisdiction of the country of official residence and thus in a sense are to be regarded as outside the territory: extra territorium. This fiction was originally suggested by Grotius in De jure belli ac pacis (bk. ii, ch. xviii, sects. 4-5) and the term exterritorialitas, or exterritorialité, was first employed by Wolff and von Martens in the eighteenth century. It is also applied to troops in peaceful transit over foreign territory and to public vessels in foreign ports.

The term exterritoriality has become identified specifically with the status of foreigners enjoying special immunities from local jurisdiction. Phoenicians possessed exterritorial privileges in Memphis as early as the thirteenth century B.C. Foreign merchants in Spain were allowed to have their own magistrates in the fifth century A.D. Special privileges were accorded to Arabs in Canton, China, in the ninth century, to Russians and to Venetians in Con-

stantinople (where they are known as Capitulations) in the tenth century, to Genoese in the same city in the thirteenth century, to French i Egypt in the thirteenth century, to Italians in London as late as the fifteenth century and to the Dutch and British trading "factories" in Japan in the seventeenth century. In some places, such as the Venetian and Genoese suburbs of Constantinople, foreigners were permitted to have separate autonomous communities. Treaties signed with leading western powers by Turkey, China, Japan, Siam and Persia during the nineteenth century set up systems of exterritoriality in each of these countries.

The origin of these extraordinary privileges, which were as a rule granted freely, is to be found in the early concept of law as being personal rather than territorial in nature. It was held to follow a man wherever he went. Inasmuch as this personal law was rooted in diverse legal, religious, social and moral usages, no universal principles of jurisprudence could be applied readily to all alike. It was therefore more logical, practical and conducive to harmonious intercourse to permit foreigners domiciled in the midst of alien peoples to be judged according to their own laws. Originally exterritoriality was a subject of municipal law and the system was not regarded as a limitation on territorial sovereignty.

This fiction or metaphor of exterritoriality is inaccurate and misleading. Foreigners enjoying these privileges, even if residing in separate communities, cannot actually claim the same rights as if they were residing extra territorium within their own national territory. It is obvious that the title to land, the interchange of goods and other property, inheritance, marriage, divorce and many other matters are subject to the lex loci. The United States Supreme Court has weakened the fiction by holding that American consular courts are created by special legislation and administer justice according to executive regulations. The Constitution of the United States does not extend extra territorium and there is no right of trial by jury before such tribunals [in re Ross, 140 U. S. 453 (1891)]. Foreigners enjoying so-called exterritorial rights are subject to restrictions which vary according to the treaties or special grants giving these rights. It would therefore be more accurate to define their status as being the enjoyment of certain immunities of jurisdiction. The term exterritoriality, however, has become consecrated by long usage.

The term exterritorial is also used in the sense either of the exterritorial effect of legislation over nationals abroad or of the right of jurisdiction over acts committed outside the territory by nationals or foreigners. The right of a state to legislate concerning its nationals abroad, notably in such matters as taxation, military service and jurisdiction over privately owned merchant vessels flying its flag on the high seas, has been generally recognized. The right of a state to jurisdiction over acts committed outside its territory either by its own nationals or by aliens has by no means been recognized, except in such cases as conspiracy against the safety and sovereignty of the state or serious crimes where the constructive presence of the accused on its territory at the time of the criminal act is assumed, e.g. shooting across the boundary. The decision of the Permanent Court of International Justice in the Lotus case, however, which concerned the loss of the lives of Turkish nationals on the high seas by reason of a collision with the French vessel Lotus, would seem to have gone very far in conceding a right of jurisdiction over crimes and offenses committed exterritorially.

The system of exterritoriality worked well until comparatively recent times, when there grew up a number of abuses. Political espionage became rife and culminated in national interventions of a political character. Such activities as the maintenance of saloons, gambling houses and brothels in Constantinople by foreigners constituted a defiance of Turkish authority which virtually left these places subject to no law. Foreign commercial enterprises operated to the disadvantage of natives, and immunities were abused to further foreign economic interests. The extension of privileges and immunities to natives known as protégés, who thus escaped the full control of their national government, was an abuse particularly resented. The demands of nationalism, along with gradual adoption of judicial standards acceptable to the western powers, led to the abolition of exterritorial rights in one country after another. Where the system had been embodied in international treaties, thus ceasing to be a purely municipal subject, its abolition was complicated, although it today remains a real problem only in China.

Legal reform, the adoption of a constitution and the codification of laws between 1889 and 1891 were a prelude to the abolition of exterritoriality in Japan. The rights of Portugal were ended in 1892, of Great Britain in 1894 and of other powers within the next few years. At the Versailles Peace Conference the powers refused to forego their rights in Persia, but Russia in 1921 abandoned its rights by treaty. Siam's demand for the abolition of exterritoriality at the Versailles Peace Conference was denied, but in 1919-20 Germany, Austria and Hungary abandoned their rights there and the United States led the other powers in signing treaties abolishing the international courts in Siam, reserving only the right of evocation for a limited period. Turkey abolished exterritoriality by unilateral action in 1914 and all signatories to the Treaty of Lausanne of 1923 accepted this action. The United States, because of the failure of the Senate to ratify the treaty, was left in the situation of being unable to give its formal consent to the abrogation of exterritorial rights by the unilateral act of Turkey in 1914. The United States did not insist, however, on the exercise of these rights.

The United States lays claims to rights of exterritoriality in Abyssinia, China, Egypt, Irak, Morocco, Muscat, Siam and Turkey. With reference to territorics formerly attached to Turkey, the United States might claim certain theoretical rights of exterritoriality in Bulgaria by reason of article 175 of the Treaty of Neuilly signed November 27, 1919, and in Egypt American nationals still enjoy extensive privileges under the old Turkish Capitulations. Mixed courts on which American judges sit also exist in Egypt for the trial of cases involving foreigners and natives with respect to civil and commercial litigations as well as to minor offenses against police regulations.

PHILIP MARSHALL BROWN

CHINA. Special privileges and immunities for foreigners on Chinese soil have long formed one of the principal subjects of contention between China and foreign powers. The Russo-Chinese treaty of 1689 permitted merchants of each nationality to carry the laws of their country with them on visits to the other country. This impairment of the authority of the law of the two countries was bilateral and justified by mutual convenience. The first of the "unequal" treaties, to which the Chinese have recently objected so strongly, was signed in 1842 when the British, following their victory in the "opium" war, secured the benefits of exterritoriality in China without granting the same privileges to Chinese subjects on British soil. In 1844 the United States and France negotiated similar treaties and eventually unequal treaties were concluded between China and nincteen foreign states.

Originally the Chinese seem not to have been offended by the impairment of their authority over foreigners within their gates and were apparently even happy to be relieved of the task of controlling foreign seamen and traders. But in the course of time they grew resentful at the one-sided character of the system and made the following leading objections to it. First, the multiplicity of jurisdictions in the treaty ports, especially where there were foreign concessions or settlements, confused the administration of justice. Second, the negligence of some powers resulted in the lack of any law governing foreigners in certain classes of cases. Third, fereign judicial officials seemed unduly favorable to their own nationals at the expense of the Chinese. Fourth, foreigners who refused to submit to Chinese law sometimes seemed unwilling to observe their own. Fifth, Chinese could evade their own law by collusion with foreigners operating under the protection of exterritoriality. Sixth, fugitives from Chinese justice, especially political offenders, could too easily take refuge in places under foreign jurisdiction and abuse their privilege to the grave injury of China. Seventh, the Chinese possessed no effective power to deport offensive foreigners protected by exterritoriality. Finally, the system threatened to lead to dangerous political penetration of Chinese territory. An illustration of this danger was afforded by the heavy immigration of Koreans into Manchuria, where they or the Japanese government for them could claim the protection of Japanese law.

In defense of their special privileges and immunities foreigners brought forward several arguments. They denounced the "oddness" of Chinese law, e.g. Chinese indifference to the distinction between accidental and wilful homicide, which resulted in holding physicians and surgeons responsible for the disability or death of patients. They objected to the methods employed to secure confessions from criminals, political and especially military interference with the course of justice and what seemed to them the excessive corruption of Chinese judges.

The efforts of the Chinese to bring the system of exterritoriality to an end have been hampered by the disorders accompanying the revolution and the delay in reconstructing the national government. In 1902 the British government agreed to abandon the system when the condition of the country should seem to warrant it and in 1903

the American and Japanese governments followed suit, but conditions in China have not yet been such as to induce these governments to carry out the agreements. When China entered the World War she denounced the treaties which granted special privileges and immunities to the Central Powers. The Soviet government has abandoned Russian privileges. The Chinese attempted to end the system at the Paris Peace Conference and the Washington Conference and by invoking their rights under article 10 of the Covenant of the League of Nations, but without success. In December, 1929, the Chinese government announced that the system would terminate on January 1, 1930, but presently added that, while the gradual abolition of exterritoriality would be deemed to begin as of that date, no further steps would be taken actually to end remaining special privileges and immunities without the consent of the powers. Seventeen powers still claim exterritorial rights in China. All but the United States, France, Great Britain, Japan, the Netherlands and Brazil have agreed to relinquish them when such action shall have become unanimous.

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See: Capitulations; Consular Service; Diplomacy; Commercial Treaties; Jurisdiction; Sovereignty; Nationalism; Chinese Problem.

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EXTORTION. When Blackstone wrote his Commentaries, the English common law limited extortion to the act of an officer in "unlawfully taking, by color of his office, from any man any money or thing of value that is not due to him, or more than is due, or before it is due" (vol. iv, p. 141). As the law of England now stands, the narrower definition is still observed; extortion is limited to the acts of officials. The same narrow definition is used, by constitutional necessity, in the federal criminal law of the United States. In the American states, partly by judicial decisions but largely through statutory development, this original definition of the crime of extortion was enlarged to include others than public officers and threats more extensive than those involving the "color of official right." In this sense it was in many jurisdictions so broadened as to include "the obtaining of property from another, with his consent, induced by a wrongful use of force or fear, under circumstances not amounting to robbery" (8 Ruling Case Law 315). Thus enlarged, extortion includes blackmail. The penal law of New York state provides a good example of the broader statutory use of the term. It is there defined as "the obtaining of property from another, or obtaining the property of a corporation from an officer, agent or employee thereof, with his consent, induced by a wrongful use of force or fear, or under color of official right" (sect. 850). American states have moreover provided a number of other crimes, variously defined, to meet the general question implied in the act of extortion. They have also supplemented the general definition with definitions of extortion by specifically defined officers.

Blackmail in history and meaning is closely related to extortion. In mediaeval England it meant rent paid in labor, grain or money of a baser sort (other than sterling) as distinguished from rent paid in silver, or "white," money. In Scotland and in the northern counties of England it signified a tribute in money, corn, cattle or other property exacted from farmers by free-booters in return for certain kinds of immunity.

The derivation of the word from these sources seems possible, but it may also have come from the old French maille, which meant a "small coin," a "certain rent," paid to men of influence on the border for protection against brigands with whom they were allied; or from the Gaelic mal, a rent; or the German Mahl, a tribute (8 Corpus juris 1114, note 2). The term blackmail is not expressly used in English law. The nearest definition apparently is the crime of "demanding with menaces" (6-7 Geo. v, c. 50, sect. 29, sub. sect. 1), which apparently covers both extortion and blackmail as used in the statutes of American states. Blackmail does not exist as a separate offense in all of the states but sometimes comes under the general head of extortion or some other offense (8 Ruling Case Law 373). Where separate definitions exist they differ in language but are as a rule similar in purport.

Although blackmail and extortion are closely related they differ in general in that extortion is not complete unless property is actually obtained, whereas blackmail depends on the intent to extort. Moreover, the threat in blackmail must be in writing, while in extortion it may be written or verbal. Both differ from the crime of robbery under threat of violence, although in early English statutes the attempt to extort money under threat of charging one with crime or threats of violence or such other threats as a man of ordinary firmness could not withstand were called robbery. The distinction now made between robbery and extortion or blackmail is that in the former the taking is without the consent of the person robbed by force of fear, while in the latter the taking is with his consent [McKeown v. State (1926) 246 Pac. 659].

In Athens laws permitting any citizen of good standing to prosecute a criminal were responsible for the growth of a class of "sycophants" who not only extorted money from guilty persons whom they threatened to accuse of a crime but from the innocent as well. The sycophants were, it appears from the frequent references made to them in literature, both numerous and formidable. Wealthy and prominent citizens even went into exile to escape their exactions. In the Symposium of Xenophon, Charmides congratulates himself that he has lost all his money and is no longer compelled to live in the fear of these extortioners. The Athenians had special laws against sycophants, but their enforcement was left to voluntary accusers. The victims were not likely, for reasons of expediency, to bring the matter into the courts. Furthermore, while

theoretically the law reached those who actually initiated a vexatious or unwarranted prosecution, it was silent on the subject of blackmail as such unless accompanied by violence.

In Rome delators engaged in the same practises. The laws of Augustus which permitted any person to accuse another of lacking respect for Rome or the emperor and laws regulating marriage and celibacy became instruments in the hands of the unscrupulous, who by threatening to accuse their victims of violation of these laws extorted tribute. On the other hand, the extortions of Roman officials, especially the provincial governors, were notorious, These governors would by threat of imposing some hardship, such as the quartering of troops, upon the provincials extort money, estates and works of art from them. In an attempt to meet both situations a series of laws was enacted. The lex julia repetundarum, replacing five earlier enactments, punished every sort of extortion under color of office. Some forms of crimen vis, or falsi, reached certain cases of private extortion. An actio quod metus causa was available to a person forced by threats to complete a legal transaction or, in later law, other damaging act. Other actions, such as the actio doli, the condictiones ob turpem causam or ex injusta causa, under certain circumstances furnished the possibility of punishing extortion. The last great act on the subject is De concussione, enacted in the second century of the empire. This act differentiated between concussiones publicas, in which the doer through the misuse of the powers of a public office extorts something of profit or advantage, and concussiones privatas, in which the doer through threat of a suit at law reaches the same end.

Both French and German law were to a great extent influenced by the Roman law, but the development of the law on this subject differed in the two countries. In early French law only the crime of concussio publica existed; it signified extortion by a public official. Extortion by private persons was met only indirectly in provisions relating to other crimes, such as robbery. In the penal code of 1791 the crime of extortion by a private person appeared for the first time (art. 40, sect. 2), but its definition here was narrowly limited to the extortion of the signature or the giving of a writing, a document, a title or the creation of or freeing from a legal obligation by force, violence or constraint. This was embodied in effect in the changed penal code of 1810. It was, of course, found highly unsatisfactory. It did not punish the extortion of

money. It did not cover extortion by means other than physical power. What was popularly known as chantage—extortion by means of some sort of moral compulsion, threats of the revela tion of a true or a false fact—was not punished. Finally, in the law of May 13, 1863, an article was added which read: "Whoever, by means of a written or verbal threat of defamatory revelations or imputations, extorts or attempts to extort the giving of money or valuables, or the signature of the documents enumerated above, will be punished by imprisonment from 1 to 5 years and a fine of from 50 to 3000 francs" (art. 400). This was the first time that chantage, or the extortion of money or something of value by written or verbal threat of a defamatory revelation, appeared in the law on the continent. The law has since been expanded. The same penalty attaches to a false claim of descent as to the crime of extortion.

In Germany, on the other hand, extortion both by public officials and private persons was legally recognized. The definition of the offense when committed by a private person was, however, for long years a subject of dispute by jurists. The French provision of 1810 undoubtedly influenced the German conception, for the crime was narrowly defined by the code of Prussia of 1851, for example, to read: "Whoever, in order to obtain for himself or a third person an unlawful pecuniary advantage, forces or attempts to force another person, by written or verbal threat of a felony or misdemeanor, to commit or forbear an act, is guilty of extortion." This limited definition, however, like that in France, was found unsatisfactory. By article 253 of the imperial code of criminal law the definition was vastly broadened to read: "Anyone who in order to procure for himself or for a third person, an unlawful advantage in property, compels another by violence or threat to commit, suffer or forbear an act, must be punished for extortion by imprisonment with labor for not less than one month. The attempt to commit this offense is punishable." This law has not been changed since, in spite of the fact that on account of its extraordinary breadth it has provoked much criticism. Cases are reported to indicate that it has been invoked in connection with demands on the part of labor which in American practise would be quite innocent of legal wrongdoing.

In the administration of the criminal law extortion particularly and blackmail to some degree constitute the most difficult of crimes to

prosecute successfully. Extortion is very difficult to prove. The threat may be very subtly stated. It may be verbal. Those who are guilty are careful not to commit the act before witnesses. When evidence can be gathered, as in certain "racket" prosecutions in recent years, witnesses are frequently intimidated and juries are fearful of the consequences of a verdict unfavorable to the extortioner. Consequently the statistics of criminal prosecutions show only a meager number of convictions for the crime. Likewise prosecutions for blackmail are exceedingly difficult, even though in blackmail, unlike ordinary cases of extortion, the threat must be written. The source of the threat is usually anonymous. The person threatened cannot afford to make known the existence of the threat. particularly when the threat is to expose a moral dereliction. The prosecuting witness is therefore as anxious as the malefactor to keep the transaction secret.

Extortion reaches far into the fabric of modern civilization and assumes an infinite variety of forms. In economic life business associations have been known to practise extortionate methods against non-members and to join in extortion with labor leaders, who in turn sell protection against strikes and boycotts. In one well known instance a farmers' cooperative engaged in such activities. In political life the "shakedown" practises of unscrupulous legislators are common; some party organizations frequently sell immunities of various sorts for campaign contributions. There are innumerable forms of extortion practised by some administrative officers in the enforcement of certain legal regulations and penal statutes. Whenever these practises are common, bands of professional criminals spring up outside the groups concerned to do the rough direct work of violence.

Forms of blackmail are more easily identifiable but are equally varied. Society provides so extensive a variation between social conventions and commonly practised private conduct that the opportunities for this crime are exceedingly extensive. Any increase in the severity of penal laws increases the danger. Perhaps the most frequent manifestations relate to matters affecting sex relations, and the multiplicity of new laws affecting morals accentuates this form of blackmail. The various local regulations concerning prostitution, often loosely drawn, can be and have been extensively used. Prohibition laws likewise provide the means for blackmail. The many outlets for published materials, particu-

larly newspapers with a spicy turn, increase the means for blackmail. The well known "scandal sheet" type of publication exists for and by blackmail.

Extortion and blackmail are especially frequent whenever social, economic and political organization is weak and corrupt. "Racketeering," for example, flourishes where city government is unable or unwilling to provide protection and where the economic conflict is ruthless and primitive. But in every society the presence of these forms of coercion is symptomatic of a larger problem. Much of normal social life depends upon coercion of one kind or another; a detailed study of the social structure would show how extensively these forms of pressure, at first casual and regarded as wrongful, come ultimately to be brought within the law and accepted as normal and justifiable.

RAYMOND MOLEY KEITH CARTER

See: RACKETEERING; GANGS; BRIGANDAGE; CORRUPTION, POLITICAL; UNFAIR COMPITITION; LABOR DISPUTES; ALIMONY; DETECTIVE AGENCIES, PRIVATE.

Consult: Stephen, J. F., A History of the Criminal Law of England, 3 vols. (London 1883); Bonner, R. J., Lawyers and Litigants in Ancient Athens (Chicago 1927) ch. iv; Frank, Reinhard von, Das Strafgesetzbuch für das Deutsche Reich (18th ed. Tübingen 1930) p. 554-63; Klauke, Max, Der Tatbestand der Erpressung im geltenden und kunftigen deutschen Strafrecht (Greifswald 1920); Garraud, René, Traité théoretique et pratique du droit pénal français (2nd ed. Paris 1900) vol. iv. sect. ccxlvi; Kochs, Paul, Chantage (Essen 1920); Menard, Michel, De l'évolution juridique du délit de chantage (Paris 1914); Frank, Reinhard von, "Raub und Erpressung" in Germany, Reichs-Justizamt, Vergleichende Darstellung des deutschen und ausländischen Strafrechts, Besonderer Teil, vol. vi (Berlin 1907) p. 1-142; Krückmann, Paul, Der Boykott im Lohnkampf, Zugleich eine Untersuchung über den Erpressungsbegriff (Leipsic 1918); Osborne, J. W., "Blackmail and Extortion" in Bench and Bar, vol. iv (1906) 51-59, 90-104.

EXTRADITION, or the mutual rendition of fugitives from justice, is of comparatively modern origin. In ancient and mediaeval times the practise appears to have been sporadic; it was invoked generally in the case of political rather than common offenders. The notion was widely held that fugitive offenders should be given asylum. With the rise of the modern state system, however, and the development of means of travel and communication cooperation in the suppression of crime became a matter of international concern. It became evident that states

must either find a way to administer the penal laws of other states, develop a cosmopolitan system of criminal jurisprudence or provide for the surrender of fugitives. The first alternative presented the gravest practical difficulties; the second was obviously utopian; the third was developed extensively through the conclusion of bilateral treaties.

While the obligation to extradite in the absence of treaty was supported by reputable opinion as late as the early nineteenth century it never became established in international law. France concluded an extradition treaty of the modern type with Württemberg in 1759. The first extradition provision in a treaty of the United States was incorporated in article twenty-seven of the Jay Treaty of 1794 with Great Britain. Among states whose systems of penal law and procedure had at least basic similarities bilateral extradition conventions multiplied rapidly in the nineteenth century, until the world came to be covered by a network of such agreements. General extradition statutes were enacted in many states to govern procedure, and in a few states provision was made for surrender in the absence of treaty. In 1902 seventeen American countries, including the United States, signed a multilateral extradition convention; but this agreement was never ratified.

Under the treaty system the request for extradition is usually made through diplomatic channels, although some conventions allow more informal demands; and it is common to provide for provisional detention of the fugitive pending a formal demand. In the United States, except under article nine of the treaty of 1899 with Mexico permitting requisitions through the authorities of frontier territories in certain cases, extradition is regarded as exclusively a national function. The procedure for determining whether a request for extradition shall be granted varies. In many states evidence establishing the identity of the accused, the nature of the offense charged and the accusation at the place where the offense is alleged to have been committed is sufficient. In Great Britain and the United States, on the other hand, extradition is regarded as essentially similar to committal for trial, and it is necessary to produce evidence which would justify bringing the fugitive to trial at the place of asylum if he were charged with a similar crime committed in that country. While "competent evidence to establish reasonable grounds is not necessarily evidence competent

to convict," the Anglo-American practise makes extradition substantially more difficult.

There is also a diversity in treaty provisions and in practise with respect to the extradition of nationals of the asylum state. In Great Britain and the United States the jurisdiction of crime is regarded as essentially territorial, and consequently these countries are prepared to surrender their nationals for trial at the place where the alleged offense was committed. Most countries, on the other hand, refuse to surrender their nationals, chiefly on the ground that their own criminal codes provide adequately for the punishment of crimes committed by nationals abroad. From the Anglo-American point of view the justification is insufficient, since crime should be tried and punished whenever possible at the place where it was committed and since a fugitive convicted abroad before taking refuge in the country of his allegiance must either be extradited, tried twice for the same offense or permitted to escape punishment. The exception has nevertheless been recognized in a number of the treaties concluded by Great Britain and the United States.

The treaty usually enumerates the offenses for which extradition will be granted. Early treaties enumerated only a few major crimes; in the later conventions the list of extraditable crimes has been considerably expanded. Thus the treaty of 1794 between Great Britain and the United States provided for the surrender only of fugitives charged with murder or forgery, while the conventions now in force between these countries enumerate more than a score of extraditable offenses. The list of extraditable crimes depends of course upon the importance of extradition to the countries concerned. Between Canada and the United States, for example, extradition for some of the less serious crimes is of relatively much greater importance than it would be between Norway and New Zealand. Since the process is cumbersome and expensive at best, the list is usually not expanded beyond actual needs. It is generally confined to those crimes which are similarly defined in the laws of the two countries. Between countries having quite different systems of penal law the scope of extradition is necessarily limited. The treaties generally require that the act for which surrender is demanded shall be punishable by the laws of both countries and exclude prosecution for offenses other than those for which extradition is granted. In some of the more recent treaties there is included in lieu of the usual list

Extradition

of extraditable crimes an agreement to surrender fugitives charged with any act punishable with a certain minimum penalty. It has been suggested that such stipulations may provide the prototype for a general international convention.

Practically all modern extradition treaties exclude the surrender of political offenders and forbid the prosecution or punishment of an extradited person for a political offense. There is no generally accepted definition of a political offense. Obviously it includes more than treason, sedition and the like, since these offenses are not included in the treaty lists of extraditable crimes. On the other hand, it seems clear that a mere political purpose or motive should not make a political offense out of a common crime. A political offense in the treaty sense can perhaps best be described as a crime, otherwise extraditable, which is excluded because incidental to and in furtherance of a political disturbance in the demanding state. In practise the decision is left to the state of asylum.

A unique case was presented when at the end of the World War the German emperor abdicated and took refuge in Holland. The Treaty of Versailles (art. 227) charged the emperor with "a supreme offence against international morality and the sanctity of treaties," provided that he should be tried before a special tribunal of five judges, one to be appointed by each of the principal allied and associated powers, and directed the allied and associated powers to request his surrender by Holland. The tribunal was to be guided in its decision by "the highest motives of international policy, with a view to vindicating the solemn obligations of international undertakings and the validity of international morality." Since there was no law, national or international, covering the case, since the alleged offense was of a political nature and since Holland was not a party to the Treaty of Versailles, the Dutch government very properly refused the request for extradition.

The extradition of fugitives as a matter of comity, in the absence of treaty or outside the provisions of an existing treaty, is practised in many countries. Usually it is conditioned on reciprocity. In Great Britain and the United States, however, the opinion prevails that there is no authority to extradite apart from treaty or statute. In one case, that of Arguelles, surrendered to Cuba in 1864, the United States granted such a request; but the authority of the executive to extradite in such circumstances is at least doubtful. Since the United States does not grant

extradition in the absence of treaty it refrains from requesting extradition either in the absence of treaty or in cases not covered by a treaty in force. It has occasionally in exceptional circumstances sought the surrender of a fugitive as an act of courtesy, while explaining that it is not in a position to reciprocate, and has on numerous occasions accepted the surrender of fugitive criminals which the state of asylum was willing to return. It has also prosecuted and punished fugitives recovered in an irregular way on the principle that the fugitive is in no position to object to such irregularities. The kidnaping of a fugitive may give rise to an international reclamation by the state of asylum and to a private reclamation against the kidnapers; but the state recovering the fugitive may proceed neverthe. less to prosecute and punish. In 1911 in the case of Savarkar it was decided by a tribunal of the Permanent Court of Arbitration that irregular rendition by authorities of the state of asylum under mistake of fact was not ground for requiring the fugitive's return.

Within a federal state or a confederation of states provision is always made for the rendition of fugitives from justice, but except among the members of a loose confederation this is not to be regarded as extradition in the international sense. In the United States the federal constitution contains the following provision: "A person charged in any state with treason, felony, or other crime, who shall flee from justice, and be found in another State, shall, on demand of the executive authority of the State from which he fled, be delivered up, to be removed to the State having jurisdiction of the crime" (art. 4, sect. 2, clause 2). Legislation enacted in 1793 for giving effect to this provision is now incorporated in the United States Revised Statutes (§§ 5278-79). As compared with international extradition interstate rendition in the United States rests upon a somewhat narrower definition of fugitive than is commonly found in international treaties; requires only that the fugitive shall be properly charged with a crime committed in the demanding state; requires only that the offense charged shall be a crime by the laws of the demanding state; includes "every offence against the laws of the demanding state, without exception as to the nature of the crime"; permits prosecution of the fugitive for other offenses than those for which he was extradited; makes no exception of fugitives who are citizens of the state of asylum; and makes no exception of political offenses.

Existing diversities in international rule and practise under the hundreds of bilateral extradition treaties now in force have encouraged jurists to advocate a single multilateral treaty, but the movement has made little progress. The divergencies of practise with respect to the surrender of nationals are deeply rooted. Differences in procedure are not easily reconciled. It would be difficult to secure agreement on a list of extraditable crimes. Since a general convention at the present time would probably be incomplete or would incorporate a number of optional clauses, it has been doubted whether it would achieve the end desired. The League of Nations Committee of Experts for the Progressive Codification of International Law has recently pronounced against the feasibility of such a convention.

EDWIN D. DICKINSON

See: CRIMINAL LAW; SOVEREIGNTY; JURISDICTION; STATES' RIGHTS; POLITICAL OFFENDERS; ASYLUM; COMITY; INTERNATIONAL LAW.

Consult: Bernard, Paul, Traité théorique et pratique de l'extradition, 2 vols. (2nd ed. Paris 1890); Lammasch, Heinrich, Auslieferungspflicht und Asylrecht (Leipsic 1887); Fauchille, Paul, Traité de droit international public, 2 vols. (8th ed. Paris 1921-26) vol. i, pt. i, p. 987-1044 for bibliography; Travers, Maurice, Le droit pénal international, 5 vols. (Paris 1920-22) vol. iv, p. 288-733, vol. v, p. 1-463; Martitz, F. von, Internationale Rechtshilfe in Strafsachen, 2 vols. (Leipsic 1887-97); Moore, John Bassett, A Treatise on Extradition and Interstate Rendition, 2 vols. (Boston 1891); Clarke, Edward, A Treatise upon the Law of Extradition (4th ed. London 1903); Piggott, Francis T., Extradition (London 1910); Puente, J. I., "Principles of International Extradition in Latin America" in Michigan Law Review, vol. xxviii (1930) 665-722; Scott, J. A., The Law of Interstate Rendition (Chicago 1917); Africa, Bernabe, Political Offences in Extradition (Manila 1926); Scott, James Brown, "The Trial of the Kaiser" in What Really Happened at Paris, ed. by E. M. House and C. Seymour (New York 1921) p. 231-58; Mettgenberg, Wolfgang, "The Extradition of the Assassins of the Spanish Premier Dato by the German Reich" in American Journal of International Law, vol. xvi (1922) 542-60; League of Nations, Committee of Experts for the Progressive Codification of International Law, Report on Extradition, V. Legal 1926, vol. viii, Council Document C51 (Geneva 1926).

EYTH, MAX (1836–1906), German agricultural organizer. After studying in the technical college at Stuttgart, Eyth was trained as a locksmith, worked in a foundry and traveled abroad. In 1861 he went to Leeds, where he entered the employ of John Fowler, the inventor of the steam plow. He made several valuable inventions and soon became Fowler's technical and scientific adviser. He worked with steam plows

in Egypt from 1862 to 1866 and in 1868 again in Fowler's employ introduced the plow into the southern United States. After further travels in all parts of the world Eyth returned to Germany in 1882 and began his important work for German agriculture. He admired the work of the English Royal Agricultural Society and after a hard struggle to convince the farmers of the necessity of such an institution established in 1883 the Deutsche Landwirtschafts-Gesellschaft, which in 1886 held the first great German agricultural exhibition. Since then, except during the World War, such exhibitions have taken place almost annually, traveling throughout Germany, and have been a strong influence in the development of scientific agriculture. Special sections of the society are concerned with tilling, raising seed, fertilizers, breeding of animals and farm management. It has now over 40,000 members, including many in foreign countries. The last ten years of Eyth's life were devoted to writing several volumes, which include his memoirs and a number of essays on the development of the machine system in agriculture.

WILHELM SEEDORF

Consult: Heege, Rudolf, Max von Eyth, ein Dichter und Philosoph in Wort und Tat (Berlin 1928).

EZPELETA, PEDRO AINGO DE, Spanish theologian and economist. Aingo de Ezpeleta was born near the end of the sixteenth century. He became professor of philosophy and theology at the University of Valladolid. In his chief work, Resoluciones prácticas, morales y doctrinales de dudas ocasionadas de la baja de moneda de vellón en los reinos de Castilla y de León, antes y despues de la ley y premática de ella publicada en 15 de Setiembre 1642 . . . (Madrid 1643, enlarged ed. 1654), following Aristotle he ascribed the origin of money to the inconvenience of barter. He championed the quantity theory of money, which he held to be generally accepted, but occasionally expressed views inconsistent with it. Unlike most of his contemporaries he saw in expediency sufficient cause for monetary alteration by the prince. Colmeiro places him among the arbitristas, the group of writers who for some two centuries offered supposedly infallible and painless remedies for the ills of Spanish public finance; yet few books on economics have had a more constructive aim or met a more immediate practical need than the Resoluciones. As the title indicates, its purpose was to formulate rules for the settlement, juridically or privately, of disputes occasioned by the continuous debasement of the coinage by Philip IV. These rules show that Aingo de Ezpeleta under the influence of Aristotle and Thomas Aquinas was largely able to free himself from ecclesiastical preconceptions, although he was a priest in the darkest days of Spanish Catholicism.

Earl J. Hamilton

FABBRONI, GIOVANNI (1752-1822), Italian scientist and economist. A man of comprehensive scientific knowledge and an ingenious technologist, Fabbroni early won the esteem of Grand Duke Peter Leopold and later of Napoleon, who appointed him to many public offices including a post in the Council of State in 1810. He belongs to the group of Tuscan economists whose influence on their government during the eighteenth century and subsequently placed it in the vanguard of liberalism. The complete freedom which Peter Leopold had granted to the grain trade in 1775 would have been extended by Fabbroni to all commerce. This policy he defended in Della prosperità nazionale, dell' equilibrio del commercio e istituzione delle dogane, published in two sections in 1789. But Peter Leopold's departure from Tuscany the following year not only rendered further progress impossible but gave rise during the nineties to a series of reactionary movements manifested in temporary experiments with price fixing and customs duties on all commodities. To voice his protest Fabbroni wrote Gli ozi della villeggiatura (1800), in which a group of interlocutors representative of various Tuscan estates discovered after protracted discussion that free trade was the sole remedy for famine and the only source of public tranquillity and welfare. This not uncommon device among the Leopoldine reformers for educating public opinion was followed, after the foundation of the kingdom of Etruria, by Fabbroni's most systematic treatise, Dei provvedimenti annonarj (Florence 1804, 2nd ed. 1817). In this acute analysis of the grain policies of his time he set forth the doctrine that national welfare consists in the harmonious activity of agriculture, commerce and industry and showed that the prosperity of industry depended upon free competition, which alone could preserve a balance between prices and wages. The work did much to halt the restrictive policy contemplated by the queen of Etruria. Fabbroni was an enlightened monetary theorist. In a report addressed to the Accademia de'Georgofili in 1785 and in various

later pamphlets he showed that coinage was an industry undifferentiated from other industries, that the melting and exportation of coins should arouse no solicitude, that governments should be concerned only with maintaining an adequate supply of fine metal and that in view of the absurdity of a legal ratio between gold and silver a monometallic system must be the solution. Entirely emancipated from mercantilism and retaining from physiocracy only a belief in the primary importance of agriculture, he was distinguished among the Tuscan reformers by his theoretical rather than merely practical endorsement of economic liberalism and among the advocates of laissez faire by his lack of undue optimism.

MARIO MARSILI LIBELLI

Works: Fabbroni's economic works were collected in Raccolta degli economisti toscani, 4 vols. (Florence 1847-49) vols. ini-iv.

Consult: Cuvier, V., in Recueil des éloges historiques, 3 vols. (Paris 1819-27) vol. iii, p. 405-34; Morena, A., "Le riforme e le dottrine economiche in Toscana" in Rassegna nazionale, vols. xxvii-xxxiii (1886-87), especially vol. xxxii, p. 78-119 and 505-99.

FABER FAMILY, German newspaper publishers. From the year 1730, when Gabriel G. Faber (1697-1771), the proprietor of a Magdeburg printing house, became the publisher of the Magdeburgische Zeitung, the second oldest German newspaper, the Fabers exercised a formative influence upon the German press, especially the provincial political home journal. Under Friedrich A. H. Faber (1778-1847) and Gustav Carl Faber (1811-96) the Magdeburgische Zeitung was moderately liberal although it opened its columns to Bismarck, Entenburg and other conservatives. The Fabers won wide acclaim by adding special supplements to the editorial part of the paper as early as 1740, by their constant struggle to break the official gazettes' monopoly of the right to publish advertisements and by their opposition to the Prussian censors power to bar sales through the mails. They led the way in simplifying the selling of newspapers and in printing stock quotations and weather charts and in 1878 introduced the first newspaper rotary press in Germany. On the establishment of the Verein Deutscher Zeitungsverleger in 1894 F. G. Robert Faber (1869-1924) became its first president. He emphasized the importance of political journals as contrasted with general newspapers and became the chairman of the publishers' representation in the Reichsarbeitsgemeinschaft of the press, which

is a joint organization of newspaper publishers and editors.

HANS TRAUB

Consult: Faber, Alexander, Die Fabersche Buchdruckerei (Magdeburg 1897); Salomon, L., Geschichte des deutschen Zeitungswesens, 3 vols. (Oldenburg 1900-06).

FABIANISM is the doctrine of the Fabian Society, a small but influential group of British socialists. This society grew out of the Fellowship of the New Life, founded in 1883 under the influence of Professor Thomas Davidson, which looked to ethical reform and utopian community making, rather than to political action, for the regeneration of society. A group which included Frank Podmore and Edward R. Pease broke away from the Fellowship to found the Fabian Society in 1883. George Bernard Shaw joined in 1884, Sidney Webb in 1885. With the advent of these two Fabianism began to assume its distinctive character and the society became definitely socialist in 1887 with the adoption of its "basis," or statement of policy. The society first became famous with the publication of the Fabian Essays in 1889 by Shaw, Webb, Annie Besant, Graham Wallas and others. This volume was followed up by a series of over two hundred Fabian Tracts designed for popular consumption and the application of Fabian doctrines in a practical way to particular questions of immediate policy. The Fabian Society at first set out largely to present an alternative to the then dominant Marxist Social Democratic Federation. Fabian socialism was and has remained essentially evolutionary and gradualist (hence its name, from the tactics of Fabius Cunctator), expecting socialism to come as the sequel to the full realization of universal suffrage and representative government.

The essence of Fabian doctrine lay in Sidney Webb's theory of the continuity of development from capitalism to socialism. Whereas Marxism looked to the creation of socialism by revolution based on the increasing misery of the working class and the breakdown of capitalism through its inability to solve the problem of distribution, Webb argued that the economic position of the workers had improved in the nineteenth century, was still improving and might be expected to continue to improve. He regarded the social reforms of the nineteenth century (e.g. factory acts, mines acts, housing acts, education acts) as the beginnings of socialism within the framework of capitalist society. He saw legislation about wages, hours and conditions of labor, and

progressive taxation of capitalist incomes as means for the more equitable distribution of wealth; and he envisaged the next steps toward socialism in terms of such social reforms as public ownership and administration of industries and services. There was no room in Webb's ideas either for a theory of increasing misery or for revolution; he saw no reason why, if men would but behave sensibly, the world-or at least Great Britain, for the Fabians at this state had thought little about other countries—should not move gently into socialism by a series of steps no one of which need involve any sharp or dramatic break with the past. Webb supported his view with illustrations drawn from the history of the nineteenth century, showing that side by side with the growth of laissez faire there had been a parallel growth of state intervention in the interests of the worker or at least for the improvement of the quality and conditions of life.

George Bernard Shaw decisively repudiated Marxism in the economic field, and the corner stone of Fabian economic theory became the Ricardian law of rent. Ricardo had demonstrated that the wealth of landlords arose from their monopoly of the soil and from the differences in the productive value of different pieces of land which enabled the landlord to skim off as rent the difference between the yield of his piece of land and that of the least productive piece in cultivation or use. The Fabians, following up hints in earlier writers, developed this theory of rent to apply not to land only but also to capital and to personal ability. They considered large incomes to be chiefly rents arising from the possession of differential monopolies and maintained that these rents belonged properly not to the monopolists but to the community as a whole. The economic problem was thus presented as a question of the socialization of monopoly incomes through social ownership of the monopolics.

This view fitted in admirably with Webb's doctrine of continuity and gradualism. It made the theory of industrial socialization a natural and logical development of the already familiar thesis that the land ought to belong to the people or at least that the rents arising from its differential qualities ought to be socially appropriated. This doctrine, which as a demand for the "single tax" had received tremendous impetus from Henry George's work, had been preached from the eighteenth century. It had been broadly endorsed by the great authority of John Stuart Mill and had been the subject of constant agitation

by land and labor leagues, land reform associations and similar bodies for decades before the revival of British socialism in the 1880's. Shaw and the Fabians were thus in effect appealing to the radicals, who were already land reformers, to recognize socialism as the logical outcome of their ideas. Hence the stress which the Fabians always laid on their contention that there was no fundamental difference between land and capital or in the incomes derived from them. Both were mainly the results of differential monopoly.

The Fabians were no less emphatic in repudiating the Marxian theory of value, as they understood it, and in preferring to base their economic theory on Jevons and the orthodox English economic tradition. They saw the source and measure of value not, with Marx, in labor but, with Jevons and his follower Alfred Marshall, in utility. This fitted in with their general tone of mind, for the Fabians were above all utilitarians, seeking to adapt the doctrines of Jeremy Bentham and his successors to the changed economic conditions of the later nineteenth century. Bentham had used his principle of "the greatest happiness of the greatest number" chiefly to justify the abolition of bad forms of state intervention. The Fabians now applied it to justify good forms, looking back on the early Benthamite work of destruction as admirable, but desiring to complement it by construction. John Stuart Mill they recognized as standing at the point of transition between the two interpretations of utilitarianism. Although he sympathized with the socialism of his day, he was too deeply rooted in old traditions for a complete conversion. The Fabians regarded themselves as completing the work which he had begun and thus found further cause to emphasize their continuity with older liberal thought.

Fabian socialism differed from the current Marxian socialism not only in doctrine but still more in spirit and in its conception of the influences making for socialism. At bottom what matters in Marx is not his theory of value but his emphasis on the class struggle as the sole effective instrument of progress. Marx believes that socialism will come not only because it is a better system than capitalism but because there is behind it a rising class led by economic conditions to achieve it. Fabian literature, on the other hand, seems often to be unconscious of the relevance of class distinctions and shows no belief at all in a class struggle as the instrument of change. The Fabians are essentially rationalists, seeking to convince men by logical argument that socialism is desirable and offering their arguments to all men without regard to the classes to which they belong. They seem to believe that if only they can demonstrate that socialism will make for greater efficiency and a greater sum of human happiness the demonstration is bound to prevail.

With this rationalism there went in early Fabianism a singular blindness to the importance or relevance of working class organization. The early Fabians, as they themselves recognized later on, often seemed never to have heard of trade unions or cooperative societies, or at all events to take no interest in them. But their awakening came with the big movement of labor unrest that culminated in the famous strike of the London dockers in 1880. Trade revival now brought a host of new workers into the trade union movement and caused a big movement of organization among the less skilled workers. New leaders came to the front armed with socialist ideas and demands for protective industrial legislation. Battle was joined between the liberal leaders of the older trade unionism and the socialist leaders of the new. Fabians were influenced like the rest of the public to reckon with the unions, the more so because a few of them, headed by Annie Besant, had taken an active part in the struggle.

Moreover, the Fabian Society now obtained a most important new recruit in Beatrice Potter, later Mrs. Sidney Webb, who had worked with Charles Booth on his great survey of *Life and* Labour of the People in London (17 vols., London 1903). Under the influence of her more realistic attitude toward the social problem Webb collaborated with her in a detailed study of the actual organization of the working class; and the fruits were seen in her book on The Cooperative Movement (London 1899) and in their joint works on The History of Trade Unionism (London 1894, rev. ed. 1920) and Industrial Democracy (2 vols., London 1897; rev. ed., 1 vol., 1920) which fully recognized the vital part which working class organization was bound to play in the making of socialism. Although these writings made a profound impression, it is doubtful if the Fabian Society as a whole fully absorbed their lessons. It began, indeed, to woo the working class movement on behalf of socialism, but its endeavors, like those of the Independent Labour party, were directed rather toward drawing the trade unions into socialist politics than toward working out an industrial socialist policy. Fabianism remained predominantly rationalist and collectivist, merely adding an appeal to trade

unions to its appeal to the general public. In no sense or degree did it adopt at any stage a class point of view.

The reform of English local government in 1888 and 1894 called the attention of Fabian leaders to the possibilities of the local authorities as agents both of social reform and of constructive socialization. They began to work for the return of socialists as members of local authorities and for the development of municipal trading as the complement to nationalization, thus winning great prestige and influence in the municipal field and making their policy widely known among local working class leaders. Again the Webbs were the leaders; and their history of English Local Government (9 vols., London 1906-29) marked their sense of the importance of a realistic and scientific approach to every practical problem.

When the Fabian Society began its work, the only important socialist body was the Marxian Social Democratic Federation, led by Henry Mayers Hyndman, which held aloof from the new trade union movement. In 1893 the Independent Labour party was created as a predominantly working class socialist body to build up an independent party on a class basis and to detach the older trade unions from Liberalism. The new body had at the outset no very clear policy, and the Fabians set out to provide it with one. Their doctrines fitted in well with the immediate demands of the new movement, and their ably written *Tracts* enabled them to exert great influence.

From the first the Independent Labour party regarded itself as only the forerunner of an inclusive working class party in which trade unions as such should directly participate. The Fabians helped in the effort to create such a party, which came to fruition in the Labour Representation Committee in 1900. They were from the outset a constituent body of the Labour Representation Committee and the Labour party. Thus while Fabianism was not a working class movement it helped to bring an independent working class party into being and gave that party its collective support. But, characteristically, the society continued to include members who sat in Parliament or on other public bodies as Liberals, and saw no inconsistency in encouraging its members to work inside the older parties even after it had helped to bring the new one into being. In London the Fabians, headed by Webb, largely supplied the brains of the Progressive party which for a period controlled the London County

Council. Fabianism was inclined to regard the Labour party rather as the working class wing of the political socialist movement than as coextensive with that movement, an attitude not wholly extinct today.

In international politics the Fabians have always been on the Right wing of the socialist movement. At the time of the South African War they alienated much support by refusing to join the opposition and contending that it was in the interest of civilization that the South African republics should be annexed to the British Empire. Bernard Shaw was the chief exponent of this view, as he has been on principle opposed to nationalist movements and in favor of the unification of the world into larger economic and political units. Similarly in 1914 the majority of the Fabians, unlike the Independent Labour party, followed the Labour party in its support of British participation in the war. Repudiating the class war, the Fabians have usually recognized their loyalty to their own state as coming before any loyalty to the international working class movement. This, however, did not prevent them from working out detailed plans for the prevention of war and the evolution of international economic and political cooperation. L. S. Woolf's International Government (Westminster 1916), proposed in the Fabian Research Department, was one of the most important documents leading up to the creation of the League of Nations.

In every field the characteristic Fabian policy has been that of permeation. In accordance with their doctrine of continuity the Fabians set out to develop existing institutions by permeating with this or that element of their doctrine those who had power to influence policy, e.g. the civil service, the political parties, the professions, the administration of business, and local government. It was part of their creed that no sharp line could be drawn between socialists and nonsocialists and that many who would not call themselves socialists could be persuaded to help with particular reforms making for socialism. This policy was most successful in the campaign which followed the Reports of the Royal Commission on the Poor Laws of 1909. Mrs. Webb embodied in the minority report a host of semisocialistic schemes, and a great national campaign of propaganda was organized by the National Committee for the Prevention of Destitution, a special Fabian body.

During the first decade of the twentieth century the Fabian Society grew rapidly. Between

1906 and 1915 it went through four serious crises. A group of members headed by S. G. Hobson, later prominent as a guild socialist, tried to lead the Fabians into a socialist party which would be more militant than the Labour party, which was at that time inclined to work as the Liberals' subordinate ally. Later a considerable body of younger members desired to expel all members who were not supporters of the Labour party and to commit the society to working wholly in and through the Labour party. Both these movements were heavily defeated by the "Old Gang," led by Shaw and the Webbs. A similar fate befell H. G. Wells' program of enlarging the society's membership and setting up a network of branches throughout the country. The failure in 1914-15 of a group which included G. D. H. Cole to induce the society to abandon active politics was followed by the secession of the Fabian Research Department and its reorganization as a Labour Research Department based mainly on trade union support. This department, both before and after the secession, was the leading research organization of the Labour movement. Out of it arose indirectly the research departments subsequently set up by the Labour party and the Trades Union Congress. In 1931 the New Fabian Research Department was constituted.

From 1915 onward the history of the Fabian Society was for the most part tranquil. The old leaders continued at the head, and the old activities were pursued. Relations with the Labour party became much closer after 1918, when the party adopted its new constitution and accepted an essentially Fabian policy drafted by Webb under the title Labour and the New Social Order (London 1918). Indeed, the Fabian policy and attitude were adopted almost in their entirety by Labour after the war; and the recent comparative inactivity of the society is largely due to the fact that the Labour party is a larger reincarnation of Fabianism. The society thus no longer stands for a distinct or clearly defined policy of its own and its members no longer use it as the chief agent for the expression of their policy. It now functions as a home for intellectual discussion of socialism, a research and propaganda publication agency and a body through which membership in the Labour party can be secured by socialists, chiefly of the middle classes, who do not wish to connect themselves actively with the Independent Labour party.

G. D. H. COLE

See: Socialism; Liberalism; Labor Parties, British;

GOVERNMENT OWNERSHIP; SOCIALIZATION; REFORM-ISM.

Consult: Pease, E. R., History of the Fabian Society (2nd ed. London 1925); Fabian Essays (new ed. by G. B. Shaw, London 1931); Shaw, G. B., The Fabian Society, Its Early History, Fabian Tract no. 41 (London 1892); Arnot, R. Page, History of the Labour Research Department (London 1926); Beer, Max, History of British Socialism, 2 vols. (London 1919-20) vol. ii, ch. xiv; Laidler, H. W., History of Socialist Thought (New York 1920) ch. xviii; R. P. D. (R. Palme Dutt), "Notes of the Month" in Labour Monthly, vol. x (1928) 387-411; Trotsky, L. D., Whither England's (New York 1925) ch. iv.

FACTION. The term faction is commonly used to designate any constituent group of a larger unit which works for the advancement of particular persons or policies. The faction arises in the struggle for power and represents a division on details of application and not on principles. The position of the faction is that of the qualified dissenter who embraces collective goals subject to reservations upon the tactics appropriate for their realization. Thus a faction presupposes some measure of unity in fundamentals. The term itself drops out of usage when certain lines of cleavage have become rather permanent features of the political life of a group; these divisions are accepted as parties.

The struggle for power within a group exhibits itself in the struggle for office or for unofficial influence. Unless the controlling personnel is selected by lot or by some fixed principle of succession, rival ambitions furnish the foci about which factional alignments arise. Not all individuals participate in asserting their own claims to political power. Political power has no significance for some. Others consider their chances for success to be entirely unfavorable. Some of those who do not press their own claims spontaneously identify themselves with the aspirations of their friends. This primitive alignment rests on no deep calculation of personal interests. Emotional relations of varying degrees of intimacy are already established, and the crisis of personnel selection provides but a special occasion for their expression. Differences among those who make active bids for power often grow out of elementary antagonisms, although such factors are occasionally nullified by an individual who maintains an unquestioned ascendancy over his fellows. Divisions frequently occur for other than personal reasons, perhaps over divergent interpretations of the common goal or the efficacious strategy.

The possibility of factionalism is increased

when large changes occur in the life situations of members of the group. Even when changes are welcomed they may produce strains within the personalities of those affected. A sudden increase of wealth creates difficulties no less than sudden poverty. New calculations of interests arise, new objects may be chosen for sentimentalization, and factional movements are one result.

Divisions within the group are profoundly affected by the external relations of the group. When it has an assured supremacy, divergent interests and sentiments are no longer held in check by the external threat to the whole value scale. The southern Democrats and the Philadelphia Republicans are sorely rent by intraparty difficulties, since they face no effective opposition. There is also a type of factionalism which appears when the group has no chance of power in the immediate future. Such radical minority movements as have sprung up in the United States have been notably fissured by dissension. Intellectual radicals gain part of their notoriety by distinguishing themselves from others, and the field is open for the elaboration of dialectical differences when decisive thrusts for power are out of the question. The intensive study of individual case histories has demonstrated that when aggressiveness toward the outside world is thwarted it is turned back against the self or against external objects more closely associated with the self. When the opportunities open to the group with which the individual has identified himself are limited, the person may direct some of his aggressiveness against other members of the group. This is one of the deeper psychological bases for dissension among the unsuccessful. Whenever effective opposition appears or an opportunity arises for immediate success, factional strife subsides spontaneously, compromises are made and active measures for the suppression of persistent dissenters are put into effect.

In periods of acute crisis, when revolutionary changes are in progress, the integration and disintegration of political factions may occur with baffling rapidity. The first break with the established order may be ushered in under the united blows of all its antagonists. The collapse of the old fabric may bring into prominence those factions which remain loyal to a circumscribed program, and even the more aggressive elements may temporarily concur in the presence of a strong counter-revolutionary danger. But once the moorings of old loyalties are swept

aside, anti-authoritarian drives are released and factions champion more drastic measures, as they did during the French and the Russian revolutions. The old authority reenforced the individual's conscience, which forbade him to violate the conventional and moral standards of the society. When the outer evidences of authority perish, the conscience is no longer supported from without, and the asocial impulses within the personality may assert themselves with decisive strength and lead to wrecking expeditions against the whole social order.

Viewed in the perspective of history factions were the predecessors of the modern parties. When authority was in a few hands and active politics was the private affair of a limited circle, factional cleavages occurred over the advisers of the sovereign. As rivalry for power widened the proportion of the community which actively participated in political life and electoral practises developed, self-conscious groups undertook to maintain their organization from one electoral crisis to the next and to present candidates in their own names for the available posts. Under such conditions the factions became parties. Within each party new factions appeared occasionally breaking away and forming new parties. In some states a two or three-party system became the rule. Whenever a change of the effective executive, as distinguished from the ceremonial or formal executive, involves a direct popular vote or a new parliamentary election, a premium is placed upon the maintenance of the two or three-party system, which involves the subordination of factionalism to party unity. In the United States it requires a tremendous electoral organization to win a presidential election, and the hope of a majority or a substantial plurality keeps the factions from secession. The importance of the machine lies in the fact that active popular interest is essentially episodic and that the winning of an election depends on stimulating apathetic voters to participate, except in those rare moments when a sense of crisis prevails. During the intercrises the prestige and the machinery of the old parties are enough to deter factions from carrying their divergences to the point of separation. Even under the multiple-party system, where effective executive authority can usually be changed without running the risk of a parliamentary dissolution or of a direct popular vote, minute parties labor under many handicaps and show a high mortality rate.

A superior international organization like the

Communist International or the Catholic church can discourage factionalism by conferring a sense of importance upon national units and by utilizing various weapons of inducement and coercion. Wherever the state creates a monopoly of legality for one party, which is the present position of the communists in the U.S.S.R. and of the Fascists in Italy, an unusual deterrent exists from carrying factional struggles to the point of withdrawal, although internal tension may be acute.

The term faction has been employed as an opprobrious epithet in the political field since Roman days: the word arose from the name given to the divisions into which Roman charioteers were separated. A ruling group finds it convenient to stigmatize its rivals within the organization, and the epithets which are most effective convey the innuendo of wilful selfseeking. Those who are in power have the benefit of the assumption that they represent the collective interests in substance as well as in form. A faction seems to subordinate the public good to private gain, and thus the term takes its place in the dialectic of the political struggle, especially as a means of defense and counterattack by those in power. The epithet is quickly taken up by those who concur in the established policies or who are loyal to the ruling personnel, and hurled against the dissenters. The intensive study of individuals has repeatedly demonstrated the ambivalent attitudes which characterize so many human relationships. 'Those who acquiesce in any authoritarian regime repress more or less successfully their own hostility against that regime. If authority is challenged from without it tends to reactivate a struggle within the personalities of the loyal, who seek to protect themselves from this struggle by attacking the dissenter. Casting opprobrium on the challenger is a protective reaction which externalizes the individual conflict and hastens the removal of the disturber from the environment.

HAROLD D. LASSWELL

See: POWER, POLITICAL; PARTIES, POLITICAL; INTRANSIGENCE; COMPROMISE; REVOLUTION; GROUP; SECTS; DUAL UNIONISM.

FACTORY LAWS. See LABOR LEGISLATION.

FACTORY SYSTEM. Most persons would describe the factory system as a modern form of production which developed in western Europe in the eighteenth century and has since spread over the world. This description is true of the

factory system, but it is not true of the factory. Little is known of the organization of textile production in ancient Egypt, Assyria and Phoenicia, but it is clear that in those early civilizations textile production was not merely a domestic industry. The term factory is applied to three different kinds of establishment which existed before the eighteenth century. Princes and rich men at different times and in different places set up great establishments in order to provide for their own needs and those of their courts and households. Well known examples are the factories in Constantinople which supplied Justinian's palaces with silk and the factories of Louis XIV which supplied Versailles, St. Germain and Marly with tapestry and other decorations. Side by side with such establishments and sometimes developing from them there existed factories producing not for a domestic estate or household, but for sale. There were such factories in the Roman Empire producing glass, pottery, articles of bronze and other commodities for export. In the Middle Ages Antioch and Tyre had great silk factories, and when silk production was acclimatized in Europe factories were set up at Genoa and other places. In England factories were not quite unknown in the days of Henry VII; a rich cloth merchant, John Winchcomb of Newbury, who collected workmen carding, spinning and weaving wool in a large establishment, made so strong an impression on the imagination of his time that his exploits were described in a popular poem. France had factories created and fostered by Colbert, but they were dependent on the support of the state and declined under Louis xv. In the third place the term factory was applied to establishments of a kind differing from both of those already mentioned: to the houses and settlements built by European companies in the seventeenth century for the protection and convenience of traders with Persia, Japan, India and the islands. The commercial rivalry between the European peoples took the form of a struggle over these factories. In the Spice Islands the Dutch got the better of the British; in India the British gained the advantage, and their few factories on the coast of Hindustan marked the beginning of their eastern empire.

Thus there were factories before the factory system. What is more, there were factories using water power to economize and supplement human labor. In the fourteenth century there were spinning mills in Bologna and paper mills in Nuremberg driven by water power. If capital

had been more plentiful and markets larger and easier of access, a factory system in the modern sense might have grown up at that time. But these conditions were not fulfilled until after the discovery of the Atlantic routes. That discovery brought fresh markets within the reach of Europe; it led to a great increase of wealth; it stimulated invention and organization. Hence it created the conditions under which the factory ceased to be a rare and interesting example of human ingenuity and became a normal feature of social life. The factory in the modern sense was the response of industry to the new demands made by commerce. It was the organization of effort on a plan which applied the principle of the division of labor in such a way as to make the fullest use of the resources of science.

The new opportunities of industry and the general spirit of the time had given invention a great stimulus, and it was natural that the early observers of the factory system should regard the use of machinery as its distinguishing feature. "The Factory System," says Ure in his *Philosophy of Manufactures* (London 1835), "designates the combined operations of many orders of work-people, adult and young, in tending with assiduous skill, a series of productive machines, continuously impelled by a central power."

On the other hand, a definition was given by Carroll D. Wright in his report on the factory system of the United States in 1883, which concentrates on the economical organization of effort without reference to machinery. "A factory is an establishment where several workmen are collected for the purpose of obtaining greater and cheaper conveniences for labor than they could procure individually at their homes; for producing results by their combined efforts which they could not accomplish separately, and for preventing the loss occasioned by carrying articles from place to place during the several processes necessary to complete their manufacture." But the economies described by Wright were of course immensely aided by machinery. Although factories which were essentially assembling plants using little machinery were not uncommon at one stage, the history of factory development is largely the history of progressive economies rendered possible by the development of machine production.

The earliest English factory in the modern sense is believed to have been a silk mill set up in Derbyshire about 1718 by a merchant named Lombe who had secured employment in a mill in Italy and brought back its secrets. But the

significant history of factory development begins with the inventions that revolutionized the cotton industry half a century later. When Arkwright patented a water frame in 1760, the decisive step in making the spinning of cotton a factory process was taken. In 1785 Watt's steam engine was used for the first time in a cotton mill, and as steam power gradually replaced water power all the spinning processes passed into the mill. The change in weaving was slower. But although these first steps were all taken in England, the first factory in which all the processes involved in the manufacture of goods were carried on by power in one establishment was set up in the United States. This was the factory at Waltham, Massachusetts, built in 1814.

The story of the spread of the factory system throughout Europe and the East belongs to the history of the industrial revolution (q.v.). With the introduction of railways the factory system developed on the continent of Europe. Toward the end of the nineteenth century it spread to the East, and the World War gave a great stimulus to its expansion in Japan, China, India and the countries of South America. The construction on a large scale of factories grouped in federations occupies an important place in the economic plans of the Soviet Union.

The factory system spread not only from country to country, but from industry to industry. During most of the nineteenth century the textiles, especially cotton, were the characteristic factory products. Gradually leather goods, metal goods, machinery, furniture, food and most of the other products of modern society have been drawn within the orbit of the factory system. Moreover, methods of work and principles of organization and management developed in the factory are being widely adapted to the extractive industries and even to agriculture.

Concurrently there have been changes in the nature of the factory itself. Thus the improvement of the early factories led first to a great increase in their size. Between 1860 and 1890, for instance, the number of cotton factories in the United States declined from 1091 to 905, but the value of their products increased by 179 percent and the number of spindles per mill by 227 percent. Such growth depended, however, on local conditions. Thus in Germany, where the domestic worker held his ground much longer than in Great Britain, as late as 1882 only 38 percent of the factory workers were in

factorics employing more than 50 persons and 42 percent of all textile workers were in establishments employing less than five persons. In general the trend has been toward increasing size of plants especially in industries using heavy machinery, but smaller units have persisted in many types of operation. Concentration has gone furthest in the United States, where in 1923 one half of the wage earners in the country were employed by less than 4 percent of all the industrial establishments.

What is perhaps the most characteristic feature of modern factory production also had its beginning and has had its greatest development in the United States. In 1851 visitors to the great exhibition in London were struck by the exhibits from the United States, and two years later a report on American factory methods was drawn up for the British government by commissioners who made a tour of the industrial districts. The commissioners noted as a novelty the production in large numbers of standardized articles on a basis of repetition in factories characterized by ample workshop room and admirable system. Mass production of standardized articles, so conspicuous a feature of modern industry, had already begun. The World War stimulated the development of new methods of factory organization both in the United States and elsewhere. The introduction of automatic machinery had already made possible the elimination of many processes and many workers. War demands encouraged the further development of the production of standardized articles or parts. This was accompanied by a widespread development of the principles of scientific management (q.v.), a new attention to the importance of cost accounting systems and further study of the technical efficiency of the factory set up.

In earlier days there was a movement toward concentration of all processes under one roof, but in many industries today it is found to be more economical to separate processes and to employ different factories for the production of different parts. Thus the factory tends more and more to be a unit in vast organizations, the unit representing all that science and method can accomplish toward making one particular process as efficient and economical as it can be made.

The early British factories using water power were built beside streams in country places. These country factories, like the collieries and ironworks of the time, were the center of the social life of the district. The capitalist often

housed his workpeople, kept shops for their needs and provided apprentice houses for the pauper children who worked in his mill. The extreme example of this type of community in the modern world is the mill village in the southern states of America, where the mill owner owns the village, the dry goods store and the cinema and pays not only the parson, the doctor and the school teacher, but the policeman. Many of the factories in China, Japan and India, especially those owned by foreign capital, have been and are the center of similar mill villages. Such a system provides opportunities both for oppression and benevolence. One of the evils of factory life has been the frauds practised by employers in paying their workpeople not in money but in goods from their shops in spite of laws forbidding such practises. It has been still more difficult to restrain the power which the employer wields as a result of owning the houses where his workpeople live. On the other hand, this power was used sometimes for benevolent purposes even in the early days of the system. Robert Owen, the Ashtons, the Strutts and other early Lancashire families were able to raise the standard of social life in their neighborhood by providing schools, libraries, playgrounds and other amenities. When the factory passed into the town it ceased to be a selfcontained society, but to some extent this tradition survived. Factory owners have often been pioneers in the provision of services later supplied by the public authorities. The extension of welfare activities was greatly stimulated by most governments during the World War, both in establishments, such as those of the British munition industry, which had been taken over by the government and in those still in private hands. The use of the factory as a center of social life has been developed most fully in Soviet Russia, where the government uses all its powers of organization and discipline to create a particular type of community.

Certain other social consequences of the factory system can be indicated only briefly. The factory system may be said to have abolished the problem of famine and to have substituted for it the problem of unemployment. Under the factory system as it exists in capitalist countries production is frequently ahead of consumption, and man's facility in making boots or window frames or motor cars has created a problem that human ingenuity has not mastered or even explained. The factory has brought with it changes in the nature of work: some agreeable, others

the reverse. Critics of the factory system point to the loss of pleasure in work consequent upon the change from handicraft to mechanical routine. The individual worker puts less of himself, his taste and his character into his task. This has given a special force and importance to the demand for shorter hours. The shorter working day has led in turn to greater attention to the amusements of life and the organization of leisure. A peasant people works long hours and finds its interest in its farm work, enjoying saints' days and festivals as diversions. A factory population works short hours and finds its interests in the occupations of its leisure. The factory then begins to provide for those occupations; gramophones and wireless sets are produced by mass production; and leisure, like work, becomes standardized.

The rise of the factory system and the dissolution of older forms of social regulation created a number of problems calling for new types of national and international regulation. Women and children were ruthlessly exploited in the early factories. But public opinion was more easily drawn to abuses in factories than to abuses in domestic workshops and hence parliaments and governments were persuaded to intervene. The first effective, although not the earliest, factory act in any country was that passed by the British Parliament in 1833, which provided for factory inspection. All industrial countries have followed the example of Great Britain. Even a late comer like Japan has a factory act for all factories employing more than fifteen persons or engaged in dangerous and unhealthy industry. A factory code has spread from country to country, much as the Code Napoléon spread a century ago. The establishment of the International Labour Office under the League of Nations made it easier to watch, record and stimulate this progress. It is less difficult to regulate conditions of employment inside factories than outside; the factory thus introduced new opportunities for improvement. Factory legislation, which began a century ago for the protection of women and children, has developed into a system of law for the protection of all factory workers, and it has been followed in recent years in certain countries by legislation for the protection of workers in agriculture and domestic industry.

All observers have pointed out that the factory system made combination among workmen much easier and thus led to a great development of trade unions. In a highly organized industry at the present day the whole industry may be covered by organizations of employers and employed. In recent years there have grown out of the relations of these originally hostile bodies methods of consultation and even of self-government, which bring employers and employed together in the conduct of industry.

Not the least important of the changes created by the factory system is the change in the position of women, for whom it has provided employment on a large scale. Critics of the system in its early days denounced the employment of women as one of its chief evils, laying stress on their ill treatment but arguing also that such employment took them away from their homes and their natural occupations. When the worst abuses of the early factories were suppressed by law a different view began to prevail. Women gained in independence, they earned higher wages than in other occupations, and in time they took their place by the side of men workers in the trade unions.

In the western world there has been a partial adjustment to the dissolution of the older family ties involved in this change. In the East, where the family basis of social organization has been more essential, the factory system remains a disruptive element and its possible future social effects can hardly be estimated.

JOHN LAWRENCE HAMMOND

See: Industrial Revolution; Industrialism; Organization, Economic; Putting Out System; Handicraft; Homework, Industrial; Capitalism; Machines and Tools; Power; Electric Power; Large Scale Production; Standardization; Rationalization; Scientific Management; Labor; Industrial Relations; Company Housing; Company Towns; Welfare Work, Industrial, Labor Ligislation and Law; Hours of Labor; Social Insurance; Women in Industry; Child Labor; Trade Unions; Labor Movement.

Consult: Mantoux, P. J., La révolution industrielle au XVIIIº siècle (Paris 1906), tr. by Marjorie Vernon (rev. ed. London 1928); Weber, Max, Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte (Tübingen 1924), tr. by F. H. Knight (New York 1927) chs. xii, xxvii; Sombart, Werner, Der moderne Kapitalismus, 3 vols. (6th ed. Munich 1927) vol. i, p. 785-836; Hammond, J. L. and B., The Town Labourer, 1760-1832 (London 1917); Ure, Andrew, The Philosophy of Manufactures (3rd ed. London 1861); "Report on the Factory System of the United States" by Carroll D. Wright, in United States, Census Office, Tenth Census 1880, vol. ii, p. 527-610; Taylor, R. W. C., The Modern Factory System (London 1891); Held, Adolf, Zwei Bücher zur sozialen Geschichte Englands (Leipsic 1881) p. 536-686; Unwin, George, "The Transition to the Factory System" in English Historical Review, vol. xxxvii (1922) 206-18, 383-97; Lincoln, Jonathan

Thayer, The Factory (Boston 1912); Clarke, Allen, The Effects of the Factory System (3rd ed. London 1913); Price, G. M., The Modern Factory (New York 1914); Meakin, Budgett, Model Factories and Villages (London 1905).

FAHLBECK, PONTUS ERLAND (1850–1923), Swedish political scientist, sociologist and statistician. Fahlbeck studied at the University of Lund, where he subsequently taught history, political science and statistics. From 1903 to 1911 he served as a conservative member of the Riksdag. In 1897 he founded the Statsvetenskaplig tidskrift (Journal of political science), which he edited from 1900 to 1918. In 1918 he established the Fahlbeck Foundation for the study of political science, statistics and economics.

Fahlbeck began his scientific work with a historical study of the social and political structure of the earliest Frankish kingdom. In subsequent studies in political science he used the historical and typological methods to discover the realities in the various types of constitutional government. In Sveriges författning och den moderna parlamentarismen (Lund 1904; tr. into French as La constitution suédoise et le parlementarisme moderne, Paris 1905) he pointed out contrasts between the Swedish and English systems and some interesting analogies between the constitutions of Sweden and the United States. Falhbeck introduced modern statistics as an independent science in Sweden. His most important work was a study of the noble families of Sweden and Finland, Sveriges adel (2 vols., Lund 1897-1902; German ed. Jena 1903). His first contribution to sociology was Stånd och klasser (Orders and classes) (Lund 1892), in which he criticized socialist doctrines and advocated a positive program of social reform similar to that of German socialism of the chair. His last and unfinished work, Klasserna och samhället ('The classes and society) (Stockholm 1920; German ed. Jena 1922), maintains that social differentiation accompanies and is a product of the development of culture. Fahlbeck's writings exhibit a wealth of ideas and a brilliant style.

GUNNAR ASPELIN

Consult: Wallengren, Sigfrid, in Statsvetenskaplig tidskrift, vol. xxvi (1923) 211-28; Widell, Louis, in Institut International de Statistique, Bulletin, vol. xxii, pt. i (1926) 318-20.

FAIDHERBE, LOUIS LÉON CÉSAR (1818-89), French colonial administrator. Faidherbe was made a lieutenant in the engineers in 1842,

and after discharging duties at Guadeloupe and in Algeria that fitted him for a colonial career he went to Senegal in 1852 and was made governor at the request of the colonists. He became governor of Senegal in 1854, serving until July, 1865, except for an interval of eighteen months. When he reached Senegal European occupation of tropical Africa was still largely confined to declining trading posts on the coasts. Colonial policy was dominated by a spirit of indifference or even retreat. The French possessions on the west coast comprised the city of St. Louis at the mouth of the Senegal and the iste of Gorée, near Cape Verde. For the right to trade with the natives of the interior France paid a tribute called custom (coutume) to a certain number of chiefs, who failed to maintain the peaceful obligations they had undertaken under an ineffective treaty making policy adopted by France. Faidherbe determined to put a stop to this situation and to establish French authority throughout Senegambia. By force of arms or negotiations he subjugated the left bank of the Senegal River, a key to the continent, as far as Medina, the head of navigation. He subjugated similarly Cayor, a region that extends along the coast from St. Louis to Cape Verde. Visualizing a French empire in the interior he made preparations for linking the upper Niger with the Senegal and for acquiring the Sudan. The extent of the subject territories when he left Senegal almost equaled that of France. The foundations of French West Africa, a vast territory whose coast line France shares with other powers, had been laid. He put into effect a broad program of colonial improvements, transformed the city of St. Louis, established a port at Dakar and village settlements for liberated slaves, endowed the colony with schools to train natives to aid the French in governing, with post and telegraph offices, hospitals and even a museum. He urged the policy of native proprietorship which France has adopted in west Africa. He accomplished this work with the aid of but few troops: there were never more than a thousand white soldiers at his disposition. In 1865 he returned to Algeria for five years. He was commander of the army of the north in 1870-71. Faidherbe became a deputy in 1871 and in 1879 a senator. He is the author of numerous books on geography, ethnology, colonization and military technique. CHARLES DE LANNOY

Consult: Brunel, I. M., Le Général Faidherhe (2nd ed. Paris 1897); Delafosse, Maurice, Histoire de l'Afrique occidentale française, ed. by J. L. Monod (Paris 1926)

p. 197-217; Girault, A., Principes de colonisation et de législation coloniale, 4 vols. (5th ed. Paris 1927-30) vol. i, p. 274-76, 298-304; Roberts, S. H., History of French Colonial Policy (1870-1925), 2 vols. (London 1929) vol. i, p. 302-07, 319-20, 329; Homberg, Octave, L'école des colonies (Paris 1929) p. 178-99.

FAIR RETURN. The concept of fair return on property is a compound of two variables, the value of the property and the rate of interest or profit. The first is the rate base; the second is the rate of return on that base.

In all the regulative opinions regarding either the rate base or the rate of return there is in the background a concept which in law is the principle of "a willing buyer and a willing seller" and in economics is the concept of a "normal" competitive price. The courts or commissions set up the ideal of mutuality, absence of duress and stability of expectations, which is substantially the individualistic ideal assumed by the classical and hedonic economists in their notions of natural law, liberty of the individual, private property, marginal utility and normality. When this normality is disturbed by the substitution of corporations for individuals or by the expansion of "natural" monopolies or by the extraordinary circumstances of war or by the general inflation or deflation of prices, then not only do the public or the property owners demand but legislatures, commissions and courts attempt to enforce some kind of standard of fair return. Such a standard is at first sought in the precepts of the common law, derived from the customs of the time or from the ideals of free competition among equals on which economists based their theories. But with the modern concepts of "going value," "going concern value" and the bargaining power of concerted action, along with the controversial testimony of engineers and accountants, the wide and fluctuating differences between prices, risks, rates of interest, and between bonds, common stocks, preferred stocks and "watered" stock as well as the extremely long term periods of investment, the simpler ideas of the common law and free competition call for revision in the midst of nationally conflicting interests and the urgency of fitting the early ideas to the high complexity of the new capitalism.

One of the first encounters of the old simplicity with the new complexity appeared in the decision of the Supreme Court in the case of Smyth v. Ames [169 U. S. 466 (1898)] relative to the rate base. That decision, notwithstanding its ambiguity and contradictory economic prin-

ciples, served to declare confiscatory and unconstitutional an act of the Nebraska legislature reducing freight rates on a certain railway. The court declared that a "fair return upon the value of that which [the company] employs for the public convenience" should take into consideration such matters as original cost, cost of improvements, market value of stocks and bonds, cost of reproduction, probable earning capacity under the prescribed rates, operating expenses, all of them "to be given such weight as may be just and right in each case." The problem of determining the rate base in accordance with the ambiguous rule laid down in this case still remains (see Valuation).

Besides the difficulty of determining the rate base in the face of inflation and deflation of prices there is another complexity in the concept of fair return introduced by the methods of financing corporations. If the rate of return allowed by a commission is 7 or 8 percent on the rate base and if in a hypothetical financial structure one half of the money is represented by bonds paying 5 percent and one quarter by preferred stock paying 6 percent, then the rate of return allowed on the risk bearing common stock is 12 or 16 percent.

This indicates the importance of certainty of return in reducing the rate of return. This is especially true of public utilities where the investment is large compared with sales income and where therefore interest is a large part of the cost of service. It is for this reason that in providing for fair return in public utilities both the states and the federal government have endeavored to reduce or eliminate competition and to give to the companies a legal monopoly free from competition or even threats of competition. It is altogether unlikely that the idea of a fair return can be reduced to administrative measurability if actual or potential competition is allowed to interfere in the calculations. Because of the complexity of corporate securities and the ups and downs of business cycles there is nothing that can be said to be a fair return in normal circumstances in a competitive business. Something can be said of changing averages but nothing of norms. Of approximately 70,000 manufacturing corporations in the United States the average net income for common stockholders as calculated by the writer from the Internal Revenue Statistics on Corporate Taxable Incomes has ranged from about 7 percent profit on sales in 1919 to 3 percent loss on sales in 1921. This includes individual corporations whose rate of

profit may have been 50 or more percent. There is evidently no possibility of figuring out a normal rate of return in competitive business to be used as a standard for fair return in the regulation of public utilities. Yet by eliminating competition and by the investigation of each utility on its own merits something of an approach to the idea of a fair return may be calculated.

The first principle developed in these investigations is the "capital inducement" principle. A rate of return is fair if it will induce investors to transfer their capital from other enterprises to the particular utility in sufficient quantities to serve the public convenience. With security for bondholders the rate of inducement on that class of capital may be reduced. So with the rate of inducement on preferred stock. There remain for common stock, when relieved of the risks of competition, only the risks of efficient or inefficient management.

Here the problem of a fair return slips into the realm of immeasurable opinion, for the capital inducement principle becomes also a principle of managerial inducement requiring the prospects of a return adequate to reward efficient management and discriminating against inefficient management. To the extent to which common stock is found on investigation to represent actual investment the capital inducement principle may be applied by reference to the rate of yield on the market value of bonds; but to the extent to which common stock represents management the highly variable and fluctuating managerial inducement is a matter of opinion.

To meet this uncertainty a sliding scale has been adopted in a few cases, the principle being that a given reduction in price to consumers shall be accompanied by a specified increase in dividends to stockholders. Under such arrangements the fair return to managerial capital (the voting stock) is calculated in advance as a precise sharing of increased efficiency between management and the public.

The sliding scale has not been adopted generally, although it might be further extended where competition is wholly eliminated. But in many cases competition cannot be eliminated owing to alternative inventions. These are evident in the increasing competition of the motor bus and the automobile with railways and street cars. A fair return on the capital invested in railways and street cars cannot usually be maintained if the public is to have the advantage of the new inventions. The reasons here, however, are partly historical, going back to the financial

structure of the past, which failed to take into account obsolescence as a factor in the rate base. thereby reducing the amount of capital instead of maintaining it on the books. Or, if cost of reproduction is used as the measure of the rate base, the same factor of obsolescence is not adequately considered in reducing the estimate of capital required to the point where a fair return upon it can be maintained. Barring this factor of obsolescence, the method of writing down capital in a competitive economy is the method of bankruptcy or reorganization; but including this factor, the method of writing down capital in a regulated economy is an administrative process of controlling the accounts, the sales of stock, the allowances for depreciation and obsolescence and the like.

In whatever way the rate base is calculated there emerge the concepts not only of fair return but also of excess return and inadequate return. Three methods of dealing with excess returns have been adopted in the United States, depending upon the social interest involved. If the excess return derives from ordinary competitive business under exceptional circumstances, such as war, then the "excess profits tax" is adopted as a means of distributing to all taxpayers the excess in the form of lower taxes on the others. If the excess return derives from a natural or legal monopoly then it is distributed to consumers in a reduction of prices. But if the excess return develops from the public policy of fixing uniform rates for a small number of competing companies, as in the case of competing railways, then the excess is loaned from a revolving fund to the companies whose returns are inadequate at the rates fixed by law.

The latter method is exemplified in the "recapture clause" of the Transportation Act of 1920. Evidently the amount of excess recaptured depends on the rate base; and the O'Fallon case turned on this point, the Interstate Commerce Commission adopting the split inventory appraisal, or modified prudent investment theory, which at that time yielded a larger excess profit than the reproduction cost theory adopted by the Supreme Court [124 I. C. C. 3 (1927); 279 U. S. 461 (1929); I. C. C., Finance Docket 3898, Richmond, Fredericksburg and Potomac R. R. Co. (1931)].

Evidently the intricacy of the problem of fair return has emerged in the change of the constitutional meaning of property which the United States Supreme Court introduced in 1890 (C. M. and St. P. Ry. Co. v. Minn., 134 U. S. 418).

and which gave the Supreme Court jurisdiction over the issue. Confiscation of property after that date became the "taking" of property by reducing prices; and since fair return depends partly on prices charged, the Supreme Court in Smyth v. Ames included as one of the factors in its definition of fair return "the probable earning capacity of the property under particular rates prescribed by statute."

On account of the judicial supremacy in the United States the practises of countries having legislative supremacy include little or nothing which is parallel to the American effort to ascertain a fair return on capital. The legislatures adjust the rates of public utilities according to other principles of public policy; or, as in the case of cartels, the matter of obtaining a rate of return is left to the concerted action of private parties. Fair return is not a major issue.

Nor is it in the various schemes proposed or practised for the nationalization or socialization of public utilities. At the one extreme is the public policy of distributing the benefits to the wage earners or consumers (as in the form of post offices or free highways) with no return whatever to the taxpayers as investors who furnish the funds. At the other extreme is the policy of using the public monopoly as a profit making enterprise to relieve the taxpayers at the expense of consumers. In neither case does the issue of fair return arise.

JOHN R. COMMONS

See: Valuation; Rate Regulation; Public Utilities; Railroads; Profit; Interest; Property; Confiscation.

Consult: Glaeser, M. G., Outlines of Public Utility Economics (New York 1927) ch. xix; Bauer, John, Effective Regulation of Public Utilities (New York 1925) ch. x; Lyndon, Lamar, Rate-Making for Public Utilities (New York 1923) ch. vii; Wu, Shao-Tseng, Railroad Valuation and Fair Return (Philadelphia 1930) pt. ii; Vanderblue, H. B., Railroad Valuation (Boston 1917) ch. vii; Whitten, R. H., and Wilcox, D. F., Valuation of Public Service Corporations, 2 vols. (2nd ed. New York 1928), especially vol. ii, ch. xxxiv; Brandeis, Louis D., "How Boston Solved the Gas Problem" in American Review of Reviews, vol. xxxvi (1907) 594-98, reprinted in Business—A Profession (Boston 1914) p. 93-108; New York (State), Commission on Revision of the Public Service Commissions Law, Report, Legislative Document (1930), no. lxxv (Albany 1930) pt. iii.

FAIR VALUE. See VALUATION.

FAIRS are institutions established to centralize supply and demand of merchandise at a particular place and a particular time. The main

differences between fairs and ordinary daily or weekly markets are that fairs take place at much greater intervals and last for longer periods, that they are of importance to buyers and sellers over a far greater area and that, although retail trade is by no means excluded from them, they mainly serve for wholesale trade. They are considerable events in the life of the districts where they take place, for people come to them from remote regions to buy and sell and to visit the various side shows which accompany them. Fairs differ from the modern produce exchanges in that they are occasional rather than daily and in that the goods to be sold are brought to fairs and acquired there after preliminary inspection to ascertain quantity and quality, whereas on exchanges goods are dealt in on a basis of samples or defined grades of given wares usually set in conformity with established standards. In the course of time, however, transactions at fairs have also come to be effected on the basis of samples, so that goods need no longer be transported to the fair. Trading at fairs, however, has never come to be based on standards, since the goods dealt in are chiefly finished products to which the standard system cannot readily be

Fairs also have some points in common with expositions and sometimes expositions are called fairs. The main distinctions between them are that expositions generally take place at far greater intervals than fairs, last longer and are intended more as a mode of advertisement to acquaint people with the latest technical achievements and industrial progress rather than for immediate trading. In recent times special sales of individual business concerns in Europe have been called fairs, but properly speaking a fair is a large scale enterprise involving numerous interests and under some form of public or group regulation. The American or English county fair is not a fair in the technical sense but rather a produce and livestock exposition combined with public amusements.

Fairs arose not only because they offered special facilities for trading but also because trade when still little developed could not be carried on continuously but only at such times as quantities of goods had accumulated. Although the origin of fairs goes back to remote times, it is difficult to use the term to characterize the exchange of property in primitive society, which usually took place incidentally on festive occasions to which neighboring tribes came with their goods. Borderland markets were adopted

by some North American Indian tribes and were sometimes comparable to fairs.

In the ancient world annual fairs as well as boundary markets were held at neutral sites, in or near temples at a time of religious feasts and under the control of priests, chiefs or officials in order to guarantee security of exchange. Many of the religious feasts of Syria, Palestine, the Mesopotamian valley, Egypt and Arabia were visited by caravans of Phoenician merchants. In ancient Greece, besides the daily, weekly or monthly boundary markets mentioned by Demosthenes and sacred because they were under the protection of market gods, there were held once or twice a year fairs closely connected with the feasts celebrated in honor of the principal gods. Merchants coming to them were regarded as protected by these gods and thus security was guaranteed them during travel and for the duration of the fair. Pausanias describes the spring and autumn fairs held at Tithorea during the feasts in honor of Isis. On the second day of the feast merchants opened their wooden booths and stalls and on the third traded in slaves, cattle, garments, gold and silver. The Olympian and Isthmian feasts were similar. In the Roman era fairs connected with feasts and multitudinous gatherings took place on the Aventine hill, near the temple of Voltumna in Etruria and in the holy grove of Feronia.

Among the ancient Germans trade seems to have been largely an exchange of gifts by kings, popes, bishops and abbots. Before the eleventh century in so far as trade went on it was effected by the wandering merchant or peddler (mercator cursorius) and presented the characteristic features of boundary trade (commercium in ripa). Under Charlemagne markets were held on the limes. Denizens seldom took to trade, and originally the bulk of the trade of these countries was in the hands of Arabs, Jews, Saxons and other foreign merchants. Exchanges were effected either in or before churches (ecclesia forensis, ecclesia mercatorum), under the protection of the peace of God (pax Dei) or the king's peace (pax regis), at particular times (constituta mercata) when the usual animosity toward aliens did not display itself, as on days when divine service was celebrated, especially Sundays, or on days when merchant caravans (manus negotiatorum) arrived. This practise found symbolic expression in the cross (or some other object, as a sword, a flag or a glove) displayed on the opening of the market (mercatus) and left there till its close to indicate that it was under royal or divine protection. Bargains were concluded in the presence of a royal official and of witnesses, as ordered by the capitularies of Charlemagne. To those who traded in these places the protection of the king and of the church (hence "king's merchants") was vouchsafed anywhere within a mile of the market place (the so-called *Bannmeile*) and on the road to the market ("king's roads") as long as the market lasted and for a fixed time, usually forty days, after its close. Every infraction of the rules was immediately and severely punished by the judge there present.

Fairs came into existence at some local markets—those, for instance, situated in places where merchant caravans had to halt to change their means of transportation or those where multitudes of people assembled at particular times, as for religious feasts. The very terms employed (fair and foire from feriae, Messe from missa, dult from indultum) bear evidence of the close connection between fairs and the Christian church. Similarly, in the Arabian world pilgrimages and commercial traveling were closely connected; such places as Mecca to which people flocked for the sake of relics there preserved became centers for fairs.

The fair of St. Denis near Paris was chartered in 629 and soon became important; in the eleventh century the Easter fairs of Cologne flourished. The oldest Italian fair was that of Ferrara.

Fairs of merely local significance (the German Jahrmarkt) at which trade was to a large extent retail must be distinguished from those where trade was chiefly wholesale (the German Messen). The latter concentrated the trade of large areas and sometimes were of international significance. Some fairs, while mainly for wholesale trade, served a small area like retail fairs. This type, however, differed from both other groups in that merchandise of only one or two types was dealt in, as at the English cloth fairs in Leeds, Exeter, Halifax, Bradford and Wakefield. In England and France the same term (foires) was used to designate all types.

From the middle of the twelfth until about the middle of the fourteenth century the most important fairs were those of Champagne. In the county of Champagne, situated on the borders of Germany, France and Italy, converged the main roads leading from the Mediterranean up the Rhone valley to Germany and England. Still more important, Champagne was politically neutral, being independent of France, and did not suffer from the prevalent and devastating wars. In this neutral zone six annual fairs were

held, two at Troyes and the others at Brie, Provins, Bar-sur-Aube and Lagny. Here merchants from Italy and southern France offered to those of northern Europe the drugs, spices and perfumes of the Orient in exchange for Flemish and, later, English cloths, the linen of south Germany, the furs and other raw products of Russia. The prosperity of the Champagne fairs was largely due to the policy of the counts of Champagne, who did much to regulate trade, to assure the merchants security and to guarantee the rapid settlement of commercial disputes by a special court. The latter, composed of the custodes nundinarum (gardes des foires) recruited by the counts' officials among the heads of the merchant corporations at the fairs, was highly respected and its judgments on the payments of debts concluded at the fairs did not, as was frequently the case in that day, remain on paper but were strictly enforced. Towns whose merchants did not yield to these judgments were officially banned from visiting the fairs; such proud and mighty towns as Florence, Lucca and Cologne had at times to submit to this measure From the beginning of the fourteenth century the Champagne fairs began to decline. Champagne, now a part of the French kingdom, shared in the devastations of the wars with the Flemish dukes and with England. These wars also prevented Italian (Lombard) and German merchants from visiting the Champagne fairs as regularly as before. Moreover, the royal tolls and dues imposed on foreign, especially Italian, merchants were much heavier than those levied previously by the counts of Champagne, and the Italians were now repeatedly banished or expropriated. Trade between northern and southern Europe therefore largely shifted to the sea route leading from Italy through the Straits of Gibraltar. In 1314 the first Venetian galley safely arrived at Antwerp, and soon regular voyages were made between Italy and Flanders. Antwerp, Bergen op Zoom and Bruges all became important centers of trade and held fairs.

In the fourteenth and the early fifteenth centuries the Geneva fair, first mentioned in 1234, partly replaced those of Champagne. Geneva benefited from its favorable geographical situation near the borders of France, Italy and Germany where the routes from Basel, Constance, northern Italy and England converged. In 1420 a fair was established at Lyons which soon began to compete sharply with Geneva. Any privilege which the French king granted to the Lyons fair was balanced by some favor given by the

duke of Savoy to the Geneva fair, but by the close of the fifteenth century Lyons had the upper hand.

Although the bulk of the trade formerly effected at the Champagne fairs was thus distributed among many places and merchants now traveled much more than formerly, most fairs still had but local significance. In France the most important after that of Lyons were those of Rouen, Châlons-sur-Marne, Nîmes, Toulouse and, particularly, Beaucaire at the mouth of the Rhone. The most important local Flemish fairs were those of Messines, Lille and Ypres. The largest German fairs were at Frankfort, Nördlingen, Strasbourg and Bozen. In Italy the fair of Ferrara was declining and the great fairs were those of Piacenza, Pavia and Milan. One of the chief Swiss fairs was held at Zurzach. The most important English fair, that of Stourbridge, attracted Italian, Spanish and Flemish merchants; other large fairs were those of Westminster and Winchester.

Since the essential features of a fair—the periodic accumulation of wares, the temporary gathering of merchants and the granting of special privileges to them—were withheld by Venice and the Hanseatic towns, which wanted to play an active trading role, these towns cannot be said to have had fairs, although trade went on and merchants were assembled in them throughout the year.

The main grants given to foreign and native merchants at fairs consisted in permission to deal among themselves (von Gast zu Gast) and to sell at retail, practises strictly forbidden at ordinary times. In the course of time a code of international merchant law gradually adopted by all fairs grew up. According to this law fairs were an asylum where no one was liable to prosecution for offenses committed elsewhere. Hence debtors could not be arrested at fairs nor their merchandise be seized. Moreover, the so-called right of reprisals was abolished at fairs; i.e. merchants at fairs were not responsible for debts contracted or offenses committed by their countrymen elsewhere. The most important privilege granted merchants was that their disputes were expeditiously settled by a special court without observance of the usual complicated procedure. In England this court was called the court of Piepowder (cour des pieds poudrés, curia pedis pulverizati) from the dusty feet of traveling merchants.

As merchants met at fairs regularly, the payment of debts even if contracted elsewhere was

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usually set for fair time. Money changers and bankers (cambiatores, campsores, bancherii, tabularii), mostly Italians, gathered there to conduct a business as lucrative as it was difficult and intricate because of the chaotic state of currency, the repeated debasement of money, the variety of coins circulating and the quantity of false money issued. Frequently exchange did not take place on the spot (cambium manuale), but payment was effected at another time and in another place (cambium per litteras). The fairs thus stimulated the use of the bill of exchange as an important currency instrument in interlocal trade. At the Champagne fairs strict rules were set up for the presentation, acceptance and payment of bills of exchange. In the sixteenth century credit operations became prevalent at Lyons, Medina del Campo in Castile and some other fairs. They formed the bulk of business at the "Genoese fairs" (so named because they were mainly visited by Genoese bankers) held four times a year from the beginning of the sixteenth century at Besançon and Chambéry (Savoy), later at Rivoli and Asti and finally at Piacenza and Novi. The credit operations effected at these and at the Castilian fairs were chiefly concerned with Spanish royal finances. Large sums were paid out by the kings' bankers, who were repaid in Spain when the silver flotillas arrived from America. In dealings among themselves the bankers made use of "clearing" or riscontro (scontro) by simply making book transfers, a method already used in Champagne.

By the close of the eighteenth century permanent, non-periodical trading centers (shops and markets) especially in manufactured wares rapidly increased, chiefly through the development of canals, regular posts and other improvements in communications. Nevertheless, periodical concentration of trade in particular places and at fixed times remained necessary, as only thus could supply and demand be concentrated on a large scale, the situation of the general market be investigated and prices fixed in accordance with it. Besides, such mediaeval restrictions as those on the carrying on of trade by aliens, by craftsmen not belonging to local guilds and by peddlers were still enforced except at fair times. Thus the fairs, where everyone, denizen or stranger, might sell wares of any kind and origin, at wholesale or retail, appeared as supports of freedom of trade and in every town of importance were held once or twice a year.

During the seventeenth and eighteenth centuries most European countries had from ten to

fifteen wholesale fairs of national importance, the principal of them being held at Stourbridge and Bristol in England, at Beaucaire, Bordeaux, Rouen and Lyons in France, at Leipsic, Frankfort on the Main, Frankfort on the Oder and Bozen in Germany, at Novi and Senigaglia in Italy. The fairs of Antwerp and Geneva still prospered and important fairs were held at Puerto Bello, Vera Cruz and Havana whenever ships arrived from Spain. The local, retail fairs were much more numerous.

Of all fairs held during the seventeenth and eighteenth centuries the most important were those of Stourbridge and Leipsic. The latter were established in 1507 and held three times a year. At Leipsic the main roads of central Europe converged; Hungarian, Russian and Polish merchants came there to meet Italians. Dutch, English and Greeks. In the eighteenth century even Frankfort on the Main, an important fair center since the thirteenth century, was eclipsed by Leipsic, chiefly because of the realization of principles of freedom of trade and equal treatment for natives and aliens, who were even allowed to trade in the intervals between the three annual fairs. An annual fair trade of between 5,000,000 and 8,000,000 thaler was done. At Leipsic credit operations were but an auxiliary of merchandise dealings, while at Frankfort they were the chief item.

Especially in the eighteenth century much business formerly done at fairs was diverted from them by the increase of peddling through the countryside; the rise of settled urban retail trade; the growth of new forms of wholesale trade, such as the purchase of raw and manufactured goods direct from the producer's storehouses; and by the establishment of auctions. The latter were similar to fairs in that they took place at fixed times and in regular places but differed from them in that the time was not set long in advance but according to the arrival of goods for sale. Moreover, late in the eighteenth century commercial travelers began to visit towns and villages carrying samples with them and offering to deliver wares to the home or shop of the buyer, thus making a trip to a fair unnecessary. With the development of modern industry, modern roads and railroad systems the purchase of goods after a preliminary examination was more and more replaced by contracts based on the examination of samples of standard goods to be delivered by railroads. With the development of postal communication, telegraph and telephone fairs declined more and

more. Moreover, in the course of the nineteenth century the restrictions which made fairs appear as asylums of freedom of trade were abolished and free competition became universal.

Fairs soon lost importance for credit operations, which began to be performed at stock exchanges, banks, clearing houses and post offices. A rapid decrease in merchandise trading followed and many fairs ceased to exist, until by the end of the nineteenth century the only important fairs of the traditional type were to be found at Hardwar in India, Tanta in Egypt, Mecca in Arabia and in Russia.

In Russia, which had a slow economic development, the numerous fairs remained important longer than in other European countries. In the seventeenth century important fairs were held at Archangel, when English and Dutch vessels arrived to exchange their cargoes for Russian products. The ancient fair originally held at the cloister of St. Makariev and transferred to Nizhni Novgorod in 1817 became the center of Russian internal trade as well as of trade between Russia and Asia. Originally and for a long period tea brought by caravans from Kiakhta on the Siberian highway appears to have been the principal object of trade at this fair. Later textiles became prevalent. Moscow manufactures were sold at wholesale and retail and large transactions were made by dealers in flax, hemp, wool, leather, feathers, horsehair and the products of artisans working on the "domestic system." At the close of the nineteenth century these fairs were still prospering, the bulk of business being in textiles, furs, cotton, silk, leather and wool. With the first development of railroads the volume of Russian fair trade increased and the fair of Nizhni Novgorod continued to be the "fair of fairs," supplying local fairs. Gradually, however, the development of the railroad system and the rise of commercial travelers brought about steady trade of the modern type and the fairs of Nizhni Novgorod began to dwindle. Dealings began to be effected on the basis of samples, and goods were purchased at the place of production or at the center of trade, Moscow. Nevertheless, the reluctance of provincial merchants to give credit to new customers enabled numerous small local fairs to grow up and preserved for the fairs of Nizhni Novgorod some importance as a center where buyers and sellers met to cement existing commercial relations and to establish new ones. Moreover, the fair remained a center for the delivery of goods and the clearing of accounts. But by 1914 it had entirely lost its former importance for the cotton, sugar and iron trades, while dealings in tea, silk and tobacco were rapidly decreasing. The average general turnover of this fair dropped from 220,000,000 rubles between 1875 and 1880 to 204,000,000 between 1906 and 1910. Of the other Russian fairs those of Irbit, Orenburg, Kiev, Kharkov, Poltava and of Ishim and Tyumen in Siberia were important. At the Irbit fair, established in 1643, the bulk of the business was in tea, metals, leather, wool and furs; for the last named ware it remained important even after the building of the Trans-Siberian Railway, and Leipsic and London obtained their fur supplies there.

During the nineteenth century the fair in western Europe underwent a change. The wholesale division became increasingly important and the practise of bringing to the fair samples rather than a store of goods for immediate sale became general. Only the Leipsic fair remained important and this only for a limited number of wares (chiefly furs and leather) requiring preliminary examination and as a sort of permanent exposition of vast collections of samples, drawings and models where orders might be placed. As such it was an important instrument of German commercial expansion, drawing several hundred thousand visitors, many from abroad, each year. In 1804 the Leipsic fair became definitely an international sample fair (Mustermesse) During and just after the World War a renaissance of fairs occurred throughout Europe because of the wartime goods shortage and the difficulties of communication. The Leipsic fairs, suspended in the first years of the war, recovered their former prosperity and smaller fairs were held at Kiel and other German cities. To fight Germany on the economic front and to foster new industries, mainly those for which the Entente states formerly depended on Germany, fairs were established during the war in London, Birmingham, Glasgow, Lyons, Paris, Bordeaux (largely for colonial trade) and elsewhere. Thus the World War among other ways compelled a return to the economic system of bygone days by resuscitating the once typical fairs, which again appeared as asylums of free trade due to the relaxing of the innumerable wartime prohibitions and restrictions imposed on trade, the right of residence of foreigners and the like. All these fairs were chiefly sample expositions. For dealings in such standardized, half finished and finished products as could be sold on a sample basis they replaced or supplemented

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traveling salesmen. The prolonging of many trade restrictions after the war, the fact that until 1924 or later commercial treaties were concluded for short periods only and the necessity for renewing old commercial connections broken by the war as well as establishing new ones led to the continuation of these fairs; during or just after the war there were three such fairs in England, six in France, three in Italy, seven in Germany, seven in Austria-Hungary and others in Sweden, Belgium, Switzerland, Holland, Poland, Czechoslovakia, Finland, Spain and Rumania. In 1920 the French industries held a sample fair in Basel to attract foreign trade. Some fairs have been transformed into expositions limited to particular merchandises and accessible only to visitors concerned with the given industry. There are today about 160 such fairs in Europe, of which that in Leipsic remains the most important. The German Ostmesse established in Königsberg in 1920 has the special aim of building up German trade in eastern Europe and of helping to maintain German control of East Prussia. Outside Europe few fairs, in any strict sense of the word, are held, although special trade fairs (for tobacco products, automobiles, radio materials, textiles and the like) are common in the United States. The Royal Easter Show of Sydney, Australia, and the Canadian National Exhibition of Toronto, both annual events, are in part sample fairs. Fairs are held annually at Bandung, Batavia and Surabaya in the Dutch East Indies.

As a result of the revival of fairs there arose a number of pressing problems concerning the application of tariff regulations to international shipment of fair samples, the conflict of fair dates and an overabundance of fairs, which was threatening to become a burden on trade. In order to rationalize exhibition practises an agreement was drawn up by an international conference in 1928, ratified by Albania, France, Germany, Great Britain, Italy, Rumania, Sweden and Switzerland and put into force on January 17, 1931. While this agreement does not regulate fairs, because of the attitude of the International Chamber of Commerce, which opposes government interference with what it regards as purely economic markets, the International Committee for Exhibitions and Fairs has made proposals for regulation and the chamber is attempting to facilitate voluntary international action to rationalize the holding of fairs. In 1924 and 1925 Latvia, Lithuania, Finland and Poland undertook to fix fair dates in such a way as to avoid conflicts, and to facilitate and reduce rates on shipments of goods to fairs.

In Soviet Russia after a three-year interval (from 1919 to 1921) fairs, especially that of Nizhni Novgorod, were again held; but their utility was slight in a system in which private trade plays a small part in comparison with state trade, and in 1930 all Russian fairs were abolished.

In most European countries today fairs are managed by a bureau of public or semipublic character. The Leipsic fair, for example, is recognized by law, governed by an official bureau and financed by contributions from the federal and state governments and the Leipsic Chamber of Commerce and by fees paid by exhibitors. In addition to providing technical management for the fairs such bureaus undertake publicity campaigns to attract both exhibitors and visitors. The publicity of the Leipsic fair is perhaps the most extensive. In addition to issuing several publications the fair bureau utilizes all the forms of modern advertising in every important communication center both in Germany and abroad. Several foreign offices are maintained to distribute publicity and assist foreign manufacturers in making arrangements to send exhibitions to the fair. These offices are supplemented by the services of honorary officials throughout the world. The latter are business men of standing in their communities, generally persons in the employ of a German business firm or engaged in exporting to Germany, who volunteer to push the interests of the fair.

National governments have recently lent their assistance to the development of fairs. Whereas the English Fairs acts passed between 1868 and 1871 provided machinery through which useless fairs might be abolished, the Department of Overseas Trade now contains an Exhibitions and Fairs Division which is interested in promoting fairs wherever possible. Similarly the German government has established the Reichskommissariat für das Ausstellungs- und Messewesen and in 1020 it cooperated in a conference of fair officials and representatives of chambers of commerce which endeavored to systematize fair practises. Numerous other countries have either official fair bureaus or national associations established by commercial interests to promote and regulate fairs.

Joseph Kulischer

See: Market; Marketing; Commerce; Commercial Routes; Truce of God; Law Merchant; Courts, Commercial; Transit Duties; Banking, CommerCIAL; BILL OF EXCHANGE; AGRICULTURAL FAIRS; AUCTIONS; EXPOSITIONS, INTERNATIONAL.

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FALLMERAYER, JACOB PHILIP (1790-1861), German historian. Fallmerayer traveled extensively in the Orient and devoted himself chiefly to the study of the history of the Near East. His Geschichte des Kaiserthums Trapezunt (Munich 1827) laid a firm foundation for the study of the Trebizond empire and revealed many interesting social problems which have not yet been satisfactorily solved. His famous Fragmente aus dem Orient (2 vols., Stuttgart 1845; new ed., 1 vol., 1877) presents a charming picture of the life, customs and manners of many countries of the Near East. The most important work of Fallmerayer is his Geschichte der Halbinsel Morea während des Mittelalters (2 vols., Stuttgart 1830–36). In this work he advanced the astounding theory of the complete extermination of the ancient Greeks in the Middle Ages and their replacement by new and alien ethnographic elements chiefly of Slavic and Albanian origin. He stated that "the Hellenic race in Europe is completely exterminated" and that "not a single drop of pure Hellenic blood flows in the veins of the Christian population of modern Greece." Fallmerayer's work aroused a storm of discussion chiefly because it was published at a time when all Europe was watching, with a sympathy which was largely a result of the belief in the racial identity of the Greeks with the ancient Hellenic peoples, the struggle of the modern Greeks to maintain their independence. Fallmerayer's theory as a whole cannot be accepted. Its importance rests on the fact that it called the attention of many scholars for the first time to the Slavic penetration as well as to the later vast Albanian immigration into Greece. These new ethnographic non-Greek elements in Greece have considerably affected the local conditions and created new problems concerning the social and economic intercourse between the ancient local population and the newcomers.

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FAMILY

PRIMITIVE. The organization of the family among primitive peoples has usually been studied with the primary objective of reconstructing forms which are antecedent to existing types. Hypothetical sequences have been developed by the use of three principal lines of inquiry; the Christian monogamous family has been regarded as the end product and ideal type and other existing types of family organization have been scaled and dated chronologically according to the degree to which they differ from this ideal; analogues from the animal kingdom have been made with special reference to the mating behavior of the anthropoids; and by the use of peculiar and anomalous aspects of contemporary primitive social organization as clues reconstructions have been attempted of early stages of family organization which are without existing representative examples. Lewis Henry Morgan, with the theoretical naïveté of the early evolutionists, constructed an evolutionary scheme according to which promiscuity was followed by group marriage, group marriage modified into polygamy in which matriliny preceded patriliny, and monogamy was the final stage. Westermarck in refuting Morgan's position argued that man was originally monogamous, relying for proof upon selected examples of monogamy among the anthropoids and the fact that hunting and food gathering peoples, whom the social evolutionists consider most primitive economically, were prevailingly monogamous. Briffault, who has recently revived the discussion, uses all three methods of inquiry to produce a scheme less crudely evolutionary than Morgan's but open to the same fundamental objections. He utilizes the evidence of survivals, arguing that such institutions as the sororate, the levirate, sex hospitality and the exchange of wives point to an early stage of group marriage upon which matriarchal institutions were superimposed, that due to the exigencies of property rights patriarchal institutions followed and that finally monogamy was established as a matter of religiously sanctioned morality. He dismisses monogamic institutions found among economically simpler peoples as different in kind by explaining them as economically, not morally, determined. As Westermarck selected evidence of monogamy

from among the anthropoids, Briffault draws heavily in support of his thesis from conflicting data on anthropoid behavior which supplied evidence for the existence of horde life and no permanent unions.

All of these attempts to reconstruct the earlier forms of organization of the family remain at best only elaborate hypotheses. Contemporary refutations of these hypotheses rest upon criticisms of the evolutionary position with its arbitrary postulation of stages and upon a methodological refusal to admit the discussion of a question upon which there is not and cannot be any valid evidence. Customs previously considered survivals are not interpreted as evidence of previous and vanished states of social organization but are studied as functioning institutions. Evidence from animal behavior is not judged as conclusive concerning human behavior on the ground that human beings as a distinct species may have developed or discarded any part of the instinctive equipment of cognate species.

There is no such institution as the "primitive family"; many and diverse types of family organization exist, some of them close analogies to modern forms. Realistic contemporary discussions of the family among known primitive and civilized peoples have assumed that the biological family-father, mother and children -has been the fundamental unit, overstressing the conspicuous importance of this unit in an attempt to refute the early views which regarded the clan not as extensions of the primary family group but as a primary group from which the family had become differentiated. This point of view has resulted in such analyses of social organizations as Malinowski's treatment of the aboriginal Australian family, in which he ignores completely the class systems regulating marriage. Lowie's discussions also assume the omnipresence of the biological family as a social unit. Material from Mentawei and Aua shows that this is not completely justified. The most articulate balance has been achieved by Radcliffe-Brown, who regards the biological group, with primary emphasis upon the parent-child relationship, as the chief point of reference in any discussion of social organization but gives due weight to the importance of the more complex developments characteristic of many primitive societies. He has also made the most distinguished contribution to the hypothesis that forms of social organization develop tendencies toward particular dénouements and compromises, and that these are dictated not by the exigencies of individual psychology but by the nature of the social forms themselves. From this point of view a class system, as in Australia, with its peculiarly artificial regulation of family composition is seen as a formal compromise between matrilineal and patrilineal forms, an interpretation which is in marked contrast to Malinowski's psychological treatment in which analogous formal compromises are viewed as the result of conflict between mother right and father love.

The family has also been regarded primarily as a status giving group, a device by which society defines the social affiliations of the members born into it. This aspect of the institutionalized family is particularly marked in systems like that of the Mentawei, where a child is formally adopted by the maternal grandfather and economically supported by the maternal uncles until the biological father, who hitherto has assumed no responsibility, upon his marriage in middle life adopts his own children and gives them their final status in the community. The family as a functioning group in the Mentawei community is often therefore actually a pair of grandparents, their sons, their daughters and their daughters' children, while many mating couples have no social existence as a family group.

The interest in forms of marriage as the clue to the historical development of the family has led to an overemphasis upon the marriage relationship and to discussions of the polygamous, polyandrous, matriarchal or patriarchal aspects of the family. The different forms of the family can be viewed somewhat more comprehensively by considering which of a series of possible relationships is made the basis for familial and social organization. These relationships are those of father to son, mother to daughter, father to children of both sexes, mother to children of both sexes and the relationship which follows from these last two at the death of the parents, brother to sister and that relationship which lays emphasis not upon kinship but upon a mere alliance of husband and wife who are members of different kin groups. All the familiar forms of primitive social organization can be derived by the elaboration of one or more of these relationships. In a strict patrilineal system, such as is found in parts of Africa, the primary emphasis is upon the relationship between a man and his male children. Wife purchase is particularly congruent in such a system, for the status of a woman is stressed neither in relation to her father nor to her husband; her primary social

function is to produce sons. In contrast to such a patrilineal system is a matrilineal system like that of the Zuñi, where the important relationship is that of mother to daughter. Here women desire not male but female children; the house is owned and administered by women, the residential unit is a group of women and their more or less transitory husbands, who become even less institutionalized as members of their spouses' households than do wives under a system of wife purchase. Patrilineal and matrilineal emphasis may be combined in various ways; conditions under which an individual's status is twice defined, once in terms of the mother and differently in terms of the father, result in class systems like those of Australia and the New Hebrides. A different result obtains when the original modification is made within the family group and the relationship of one parent to children of both sexes is made the subject of formal elaboration. This is a familiar condition in Oceania, where instead of wife purchase there are exchanges validating marriage and a married woman remains an important and functioning member of her father and brother's kin group. If the system has a patrilineal emphasis, as in Tonga, Samoa and Manus, the father's sister has an important role; or if the system has a matrilineal emphasis, as in the Trobriands and in Dobu, the married man is permitted to play a more extensive social role in his sister's household, especially in regard to her children, than he could play among the Zuñi. Ramifications of this system in west Africa spring from the inclusion of children of both sexes in the relationship to a parent of one sex and after the death of that parent appear as a social expression of brother and sister solidarity. Among the Dobuans the brother disciplines his sister's children, while the father of the children plays a less permanent role in their lives than in the lives of his sister's children. Conversely, among the Tongans the father's sister exercises a different type of authority in the lives of her brother's children than she does in the case of her own children.

All of these developments are in contrast with the type of family in which there is a strong emphasis upon the husband-wife relationship. Such institutions as the sororate, in which a man marries his wife's sister or sisters either before or after his wife's death, and the levirate, in which a man inherits his brother's widow, or the form of fraternal polyandry in which a group of brothers share one wife do not emphasize the conjugal relationship; they rely rather

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upon the important ties within the group which make it possible to substitute one member for another primarily as a function of intrakin solidarity, whether in making good a bride price or in caring for a brother's widow. Polygamy is not so much an elaboration of the husband-wife relationship as the reflection of rank or wealth in a system which puts little emphasis upon the husband-wife relationship.

A primary stress upon the husband-wife relationship results in a bilateral kinship system and a very simple kinship structure which lacks the continuity of descent groups. Each family comes into existence from the alliance of adults who are themselves without the definite and binding ties of unilateral societies. This condition is found among many of the very simple peoples, such as the Indians of interior Canada, and paradoxically in modern industrial society. In both cases the societies have to rely upon other types of social groups for permanent form, as the family founded upon the husband-wife relationship is too unstable and discontinuous a form of organization to provide the type of firm structure which is given by social groups based upon blood relationship. It is possible to show in the case of modern society that the conjugal stress and bilateral kinship grouping has developed from more complex kinship forms based upon blood groupings. For the simplest human societies, however, there is no evidence of any such historical background and it is more correct to explain the similarity of form between such family forms and contemporary forms on the basis of a similar emphasis upon the husbandwife relationship.

As the contemporary family is often discussed from the standpoint of loss of the functions which the family discharged in earlier periods of western European history, it is worth noting that in primitive society there are also very different degrees of dependence upon the family as a focusing point of social, religious, political and economic activities. There are societies where the men take meals entirely outside the home; others in which religion is entirely socialized; others in which the economic unit is far larger than the biological family. The degree to which the family serves as the transfer point of civilization differs depending upon whether religious instruction is given by the father to the son, as among the Omaha Indians, or is made a group function with formal initiation ceremonies; whether children learn crafts from their parents or receive formal instruction from ex-

perts, as in Samoa and among the Maori. Some societies rely heavily upon the family group to dispense economic and social instruction to the children; others rely upon age groups, special ceremonies or formalized instruction. The family may comprise almost the entire social world of the child, as among some particularly nomadic groups. The biological family may be obliterated by a much larger group, so that the child is required to adjust itself to a group of some fifteen or twenty persons. Male club houses may result in boys leaving home at an early age and in the realignment of old and young along sex lines. Social institutionalizations of the old may give the grandparent generation a decisive part in the training of the young, as among the Plains Indians. Residential exclusiveness of parents and minor children, coupled with an educational convention whereby adults devote time to the care and training of young children, may result in making the child's character and temperament dependent upon that of one or both parents. In Manus, where the father plays the most important part in the life of young children, the temperament of the boys corresponds to that of the fostering male, whether he is the true or adoptive father. Under conditions of diffused family life, as in Samoa, where the child is reared as one member of a large household and is cared for not by adults but by the older children, the family plays a less determining role in the development of specific personality traits. MARGARET MEAD

SOCIAL ASPECTS. The word family has been taken over into modern European languages from Roman law, where it denoted the community of producers and consumers formed by the largely self-sufficing household which included slaves and other servants as well as members connected by common descent or marriage. The family tends to reach beyond blood relationship, either in the form of adoption or otherwise, and to embrace more than one unit of monogamic parents and their children in the form of the so-called "large" or "joint" family. Both tendencies are rooted in social conservation, economic division and union of labor. In so far as they prevail, the boundary between the family as the narrower and the sib or clan as the wider group of blood relationship may be fixed by the external difference of living together in a household rather than in a settlement or grouping consisting of more than one household. On the other hand, the tendency toward monogamy, even when in the form of the polygyny of one husband or the polyandry of one wife, makes strongly for the limitation of the family to the small unit of parents and children. This, the chief social nucleus of occidental Christian civilization in the Middle Ages, in modern times still resists the dissolving forces brought to bear on it by the ever increasing separation and market organization of the processes of production and consumption.

The hostility shown to the family by some modern socialists is based chiefly on its alleged character as the social and jural upholder of private property and consequently as an individualistic if not antisocial body. Its more important functions, however, are as the seat of parental authority and as the most tangible incarnation of the succession of generations. It has thus served as the most persistent factor in the education of mankind for the national community.

The nature and development of the family have deep roots in the physiological conditions of human mating, reproduction and education. The exceptional prolongation of infancy as a state of helplessness and immaturity is one of the most distinctive features of mankind generaily. Through it the role of the parents as well as of other relatives in nourishing, protecting and educating offspring is of the utmost importance for the individual and for society. However fixed the inherited traits and gifts of the individual may be, the child's necessary social equipment is doubtless acquired only through a circumstantial and long continued process of artificial training and adaptation. The family has been the chief bearer and medium of this process, which also vitalizes the relations between the parents and in a wider sense between all the members of a blood relationship, for they are connected from generation to generation by the awareness of this social tradition. Parents and relatives remain together not only because the physical necessity that the female be protected and assisted under the peculiarly difficult conditions of human pregnancy, childbirth and child rearing is transformed into social customs and into laws of responsibility but also because of the mental and moral bonds arising from common propagation. The delicate structure of this complicated net of relations has often been lost sight of since modern individualism began pleading for freedom from social limitations of choice in mating and, through increasing facilitation of divorce, from legally enforced family

coherence. The continuous reemergence of concubinage as the expression of the limitation which differences in wealth and standards of living especially impose upon normal social intercourse proves that there has been no direct development away from the family.

The waning of the authoritative elements in the family is very probable in the light of economic changes which have occurred since the advent of capitalistic society. Production for the market instead of for the household tends to remove the center of production outside the family—from the artisan's workshop to the factory, from a desk in the home to an office. The far more persistent union of living and working among farming populations leads the family to play a different role in rural society. Capitalistic economy, furthermore, is not satisfied with the productive services of merely the father or some other leading and responsible member of the household; it attracts the labor of all adults and in many cases of the children. In Soviet Russia the creation of the five-day working week, as a result of which different family members often have a different rotation of workdays and holidays, is undermining the family in a manner comparable with that of industrialization in all modern civilized countries. The social and economic changes of modern society are likewise militating against the practise of domestic cooking as well as the family ritual of joint meals connected with it. German "house music" and the pastimes of the English drawing room are giving way more and more to amusements outside the home that unite each generation instead of the family. Although there have always been powerful community centers competing with the family, from the men's clubs of primitive societies down to the political and social clubs and coffeehouses of modern Europe, it is not until recently that leisure time activities as well as work have been quite generally transferred from the family to the larger social units. Civic or community centers in the United States appear to typify this transition.

Changes in the family have been accelerated by movements growing out of modern individualism and socialism. Feminism is one of them; social work as a concept comprehensive of all action for social reform is another. The program of the female emancipation movement of the nineteenth century was directed only against the dominance of men in society at large and especially in the family. The movement, however, while it improved the status of wives

and mothers and especially of the spinster. who had had a very precarious place in the tamily, could not but generate criticism, aloofness and hostility toward the traditional family. In these respects it was assisted by the extension of the slogan of emancipation to include the position of children in the family, through such books as Ellen Key's The Century of the Child (1900). The revolt of children against the old time family became particularly insistent as the acceleration of social change before, during and after the World War united the younger generations against the authority and standards of the older generations in the consciousness and organization of youth movements, which are especially prominent in Germany.

The emancipation of women and the manifold objectives of child welfare work will put the modern family to a definite trial. The more rational and specialized methods of education for societies that have an ever growing division of labor were very early taken over from the family by the modern state and its subordinate corporations. This applied at first primarily to the upper rather than the lower classes of society, but with the advent of the industrial communities public action was evoked by the neglect, distress and delinquency of the children of the lower classes. The real force of neo-Malthusianism lies not in the rationalistic individualism of birth control which is provoking resistance on the part of churches and governments, but in its challenge to these institutions to provide economic and cultural living room for the passing prolific family. The system of social welfare promotion with its subdivisions of public education, sanitation, housing, relief and recreation hems in and detracts from the social status and authority of the family. But there are indications that as the older and more revolutionary ideas of emancipation from the family and of substitutes for it are followed and partly replaced by intensive efforts to combat its modern diseases and degenerations, its natural foundations and positive beneficent influences will more clearly reemerge. Such indications come in the shape of reactions of the working classes. The superiority of their family spirit over that of a large part of the so-called higher classes does not appear to be a mere residuum of an older social order, but rather a persistent habit of comradeship and cooperation which is fundamental for the modern labor movement. There is also evidence that in Soviet Russia the original government policy of eradicating the family is

yielding to the resistance of the rising generation.

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Revolutionary socialism believed the family to have developed out of sexual promiscuity and economic communism. In reality the family as the last stronghold of the precapitalistic selfsufficient and patriarchal household offered a model to communism, just as the family was the pattern on which such forms of common life as the monasticism of the churches and the brotherhood of the sects were molded. At present the European-American family is vigorous not only in the Roman Catholic world, where the sacrament of holy orders is the counterpoise of the sacrament of matrimony, but also in the Protestant denominations, where the family life of the clergy has been intended to set a standard for the rest of the community. Even in Islamic and Buddhistic countries recent economic changes have frequently led from polygyny to monogamy. A conservative attitude with reference to the family is only partly due to the power of political and ecclesiastical domination and consequently its doom was not pronounced by the transference of marriage and divorce from clerical to secular jurisdiction. Modern French jurisprudence, even since the restoration of divorce in 1884 (it had been abolished in 1816), recognizes the family as an institution instead of as a mere contract relationship. In spite of the disintegrating forces operating in capitalist economy and mentality, counterforces toward family coherence assist the common household; for example, the voluntary labor and pecuniary contributions of grown up children. In Europe during and after the World War the voluntary relief of relatives alleviated at least partially the economic distress and dismemberment of the middle classes who were suffering under the burden of inflation and taxation.

Some of the earlier programs of social reform relating to the family appear not to be applicable to present day conditions. Contemporaneous with the development of lucrative female occupations the fight of the feminists for the limitation of the husband's lordship and guardianship in the family is being extended to prevent the husband's appropriation of current earnings, which, whether a regime of separate marital property exists or not, often takes place. Adoption, which formerly functioned chiefly as a means of legitimizing children and of equalizing the burden of education between different social classes, is now frequently being commercialized as an instrument for the acquisition of titles or other social good will. Marital status and the

number of children in the family, formerly private and individual responsibilities, are now made the subjects of elaborate government policies, especially in countries with a declining birth rate. Prizes and tax reductions are awarded to encourage childbearing; special taxes are often levied on celibates. Public and private policies of salary and wage fixing are now also partly determined by family status; family bonuses are offered. Prostitution, which has been regarded not without reason as a social by-product of strict family regulation, can no longer be interpreted merely as another obvious form of exploitation of the lower classes by the higher, for it has cropped up in the very midst of the degenerate plutocracy of the capitalistic countries. Illegitimacy, which was regarded as the most unjust, if unavoidable, corollary of the legal family, appears to be on the decline in Germany, although legislation has been passed to soften its disadvantages.

CARL BRINKMANN

Sec: Social Organization; Marriage; Concubinage; Woman, Position in Society; Marital Property; Divorce; Domestic Relations Courts; Adoption; Guardianship; Illegitimacy; Child; Family Desertion and Non-Support; Family Allowances; Mothers' Pensions; Birtis; Birth Control; Education; Education, Primitive; Home Ownership; Home Economics.

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FAMILY ALLOWANCES. The system under which the workers' wages are supplemented by sums proportional to the size of the family is known as the family allowance system. Such a system may replace or modify the system of wage remuneration according to output by the principle of remuneration according to need.

The supplementary payments may be made voluntarily by employers as individuals or in groups, compulsorily as contributions to state systems or by the state itself entirely out of its revenues. Of the systems operating at present in more than twenty countries and affecting over ten million workers those of continental Europe covering workers in private industry are mainly voluntary employers' schemes, with state

paid allowances applying only to public employees.

The supplementary payment may be regarded by the worker as an integral part of his wages and therefore due to him as his right; this view is usually expressed in collective agreements embodying family allowance systems such as exist in Germany. These payments may, on the other hand, be considered as the right of the parent, particularly the mother in return for her services to the state in bringing up her children, in which case the payment should be made directly by the state. Although the assumption by the state of the obligation thus to supplement wages involves a comparatively new and extremely controversial principle, the state has in other and various forms assisted in the economic burden of maintaining a family. A tax on bachelors and graduation of taxation according to the number of the taxpayers' dependents are negative forms; a positive form is the encouragement of larger families by bounties in countries such as France, where decline in population is viewed with concern; other public benefits in money or in kind are mothers' pensions, additional social insurance benefits based on the number of dependents, free education, housing subsidies and the like.

The allowance may be regarded not as a right of the worker and an obligation of the employer but as an act of Christian social justice; this motive has somewhat influenced the introduction of the scheme in countries influenced by the Catholic social doctrines. Or the employer may regard the payment of the allowance as a gift on his part and use it without consulting the workers as a form of welfare activity to reduce turnover.

On the whole, the family allowance system is a post-war method of wage remuneration in industrial establishments. Isolated instances on a small scale existed in the factories of social Catholic employers in France prior to 1914. In agriculture supplementary allowances in kind are a common practise of long standing in many countries. The extensive application of the system in industry developed from the practise of meeting the wartime rise in prices by supplementing wages with cost of living bonuses varying in amount according to family needs. This mitigated the worst effects of the fall in real wages during the period of inflation without any admission of the necessity for adjusting basic wages. Subsequently to stabilization, however, the practise declined in importance in private industry.

By 1921 in the Scandinavian countries and in Switzerland it was almost entirely abandoned by private industry but was continued in some of the public services. In the central European countries of Czechoslovakia, Austria, Poland and Germany, even though currency stabilization was followed by a pronounced decline in the extent of application of the system, it was continued by collective trade agreements in various industries, particularly coal mining and metal trades and for clerical workers in commerce and banking. By 1929 family allowance clauses were included in collective agreements covering about 3,000,000 workers in private industry in Germany. In all of these countries and in Italy, Holland, Latvia, Estonia, Hungary and several other countries the system is in effect for all or some of the persons employed in the public services. In France and Belgium it developed steadily during the decade after the war. In France in 1930 approximately 4,-260,000 persons in private industry and public services, central and local, were employed in enterprises which paid family allowances. In Belgium the corresponding number for 1929 was over 800,000. In both these countries legislation requires employers engaged on state contracts to pay family allowances.

An important post-war application of the system has been in Australia and in New Zealand; in New South Wales particularly it developed out of the difficulties arising in compulsory arbitration over the definition of a living wage and in distinguishing between the wages paid to women, to unmarried men and to married workers. Women's wages were influenced by the fact that here as elsewhere women were considered to be without dependents. Moreover, there was considerable controversy over the size of the "average family." In Australia allowances paid directly out of state revenues had been made to the lower paid grade of federal officials since 1920. In New Zealand under the act of 1926 allowances are paid for each child under fifteen years from the third child onward in families of small incomes; in 1928-29 there were 3763 families benefiting and allowances totaled over £54,000. New South Wales introduced a system in 1927 based on a tax on employers; in 1929 the scope of the system was extended, and in 1930 the tax was reduced to 1 percent of the annual wage bill. Extension of the system to all states of the commonwealth with coordination between the basic wage and the allowances has been a burning question for several years, but after a detailed investigation a majority report of the Royal Commission early in 1929 recommended against its general compulsory adoption.

Since the advocates of the family allowance urge it as a method of redistributing the amount available for wages according to need, thus eliminating the poverty which is serious among workers with large families and low earnings under a system of uniform wages, it is relevant to raise the question of what effect the system has—first, on the total wage bill; second, on the actual allowances paid to the married workers; and third, on the possibility of discrimination against the worker with a family.

The payment of the allowances may involve an increase in the wage bill or perhaps merely a redistribution so that those with large families receive a greater proportion, or it may be so introduced that the total wage bill is reduced. The effect of the introduction is closely related to the sponsorship and administration of the system. When the system was adopted during periods of severe inflation in certain European countries, there was an actual reduction of the total wage bill, which gave the employers a competitive advantage over their rivals who increased the wages of all their workers. Workers with large families received allowances which compensated for the increase in the cost of living, but those with few dependents lagged behind and consequently the total real income of the workers was reduced. This is less likely to occur in more normal times, especially if the fixing of scales and allowances is part of a system of negotiation between trade unions and employers or where the allowances are paid by the state, Recently in New South Wales, where the state fund is created by compulsory employers' contributions, there has been acute controversy as to whether the adoption of the system should be accompanied by a reduction of the basic wage of all workers.

On the whole, the amounts of allowances, the scales of which differ both in type and amount, have rarely been adequate for the full maintenance of the children for whom they have been paid. In France and Belgium they are usually paid only for children but, mainly because of the definite purpose of increasing the birth rate, on an ascending scale, i.e. with a larger amount for each succeeding child. Descending scales are rare. Sometimes ailow-

ances are paid only for children after the second or third; less frequently they are paid for the first two, three or four children but not for succeeding children. Often, especially in France, the allowance for families with two or three children represents an addition of 4 to 10 percent to the worker's wage. For some grades of public servants and banking officials, especially in Germany, the addition to the wage or salary is considerably higher, sometimes as much as 20 to 30 percent.

To meet the problem of discrimination in favor of the worker with few or no children equalization funds have been established in France and Belgium. These are funds for the payment of allowances established by employers of a given industry or district into which each employer pays at regular intervals amounts based on some criterion other than the number of the children of his employees, the most usual criteria being the total wage bill and the total number of workers. In 1930 there were in France 232 funds covering 1,820,000 employees. In Belgium in 1929 there were 40 funds covering 600,000 workers. The equalization fund system has also been tried in one or two other countries, particularly in Holland.

The question of the effect of family allowances on the birth rate is highly controversial. The fact that it is introduced in some countries as a definite incentive to that end and the belief that the allowance system of the poor law relief of the nineteenth century resulted in an increase have led to opposition in those countries already sufficiently populated. French and Belgian statistics seem to show some tendency toward an increase in the birth rate among families receiving allowances and a definite diminution in child mortality among families covered by equalization funds, probably as a result of the advice of doctors and visiting nurses, for which many funds provide. But this effect will vary not only with the size of allowances and the kind of scale but with the extent to which family limitation is a conscious policy.

When the system was first introduced into private industry in France and Belgium it was strongly opposed by the socialist unions, who considered it a means of withholding increases in wages which should have accompanied the rise in prices. There was also the fear of dividing the interests of the workers. But as the system spread, the unions found it difficult to prevent its acceptance by the rank and file. Neverthe-

less, they demanded instead a compulsory state system to be paid out of revenues or from joint contributions of employers and the state. Attempts to make the payment of allowances compulsory for industry in France have been unsuccessful. Similarly, in various central European countries the socialist unions oppose allowances on a private basis; the Christian unions, however, are not hostile to the system.

In Great Britain, where the subject is a matter of considerable interest, most of the proposals are for the introduction of such a system by the state. Although generally the British trade unions seem to prefer other methods of compensating for inequalities in wage remuneration, the family endowment scheme has considerable support among the group interested in the application of the principle of equal pay for equal work between men and women. Those proponents of the scheme who consider the matter one primarily of community interest suggest payment out of state revenues. Joint contributions of employers, workers and the state are also proposed to create a form of social insurance against need, although the applicability of the term insurance is a matter of doubt. There has been evidenced even less public interest in the family allowance system in Canada and the United States, where neither trade unions nor employers have espoused the system. J. II. RICHARDSON

Sec: Wages; Poverty; Family Budgets; Social Insurance; Mothers' Pensions; Births.

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Report, Proceedings and Evidence . . . upon the Question of Granting Family Allowances As Ordered by the House on the 13th of Feb., 1929 (Ottawa 1929).

FAMILY BUDGETS. Interest in family budgets had its beginning in England at the close of the eighteenth century and followed the industrial revolution across the channel to the continent. Beginning as a study of poverty and social distress, with an immediate aim of modifying or justifying existing poor laws, schemes of taxation and the like, it gradually became wider and more objective, especially after the development of the science of index numbers, sought to include more social classes and today tries to make itself a tool of general social investigation.

The first attempts were rudimentary. Thus Arthur Young (Farmer's Letters, London 1767, 3rd ed., 2 vols., 1771, especially Letter v), intent upon showing that the wages of the agricultural laborer actually permitted a surplus over subsistence needs, drew up a budget based upon "the actual outgoings" of four families. On the other hand, the rector of Barkham, David Davies, collected a number of actual budgets from his own and other parishes to prove that wages were insufficient and that "it is but little that . . . the belly can spare for the back" (The Case of Labourers in Husbandry, London 1795). Sir Frederick Eden, anxious to prove in the years of distress which attended the high price of corn that increases in the poor rate were not necessary, gathered his returns on a large scale and with the beginnings of a scientific technique. He collected more than one hundred estimated budgets from many English counties, sending about at his own expense "a remarkably faithful and intelligent person" to obtain the "exact information" according to a schedule. Eden's schedule in addition to a great deal of miscellaneous information called for the "usuai diet of labourers" and "earnings and expenses of the labourer's family for a year: distinguishing the number and ages of the family and the price and quantity of the articles of consumption."

The most significant pioneer contribution, however, and one which influenced many subsequent budget studies both extensive and intensive, was that made by the French engineer Le Play, who after twenty years' study of individual working class families scattered over many European countries published the budgets of thirty-six of them in his monumental Les ouvriers européens (Paris 1855). Le Play carefully selected his families after consultation with local clerical,

educational and other authorities so that they might be "typical" and then lived with each himself for months at a time. He wished to discover what were the conditions that made for the famille souche and what were some of the factors in its disintegration. Hence his limitation to a purely monographic method and his emphasis upon the whole configuration of each family's economic life—its treasured possessions quite as much as its income, its working habits and the collaboration of the members with one another as well as their physical consumption. He believed that every act of a family's life can be expressed in an income or an outgo, and each item of his budgets was most carefully computed as to quantity and price. In the second edition of his work (6 vols., Paris 1877-79) Le Play added twenty-one additional budgets. In the meanwhile the Société Internationale des Études Pratiques d'Économie, founded by him in 1856, pursued similar studies, publishing family monographs periodically and serving as the center for European students who later carried on the work begun by Le Play. In 1890 appeared the "Budgets comparées de cent monographies de familles" (in Institut Internationale de Statistique, Bulletin, vol. v, 1890, p. 1-157), in which two of his disciples attempted to treat comparatively a hundred of the highly diverse budgets amassed by Le Play and his school.

Meanwhile the first of the extensive governmental budget studies, instigated by admirers of Eden, had been begun on the continent. Following the years of distress, 1850 and 1851, the Belgian central statistical bureau, of which Quételet was a member, hastily improvised a study for the consideration of the first international statistical congress held in 1853, for which it secured the auspices of the government and the direction of Edouard Ducpétiaux, whose report appeared in the same year as did Le Play's work (Budgets économiques des classes ouvrières, Brussels 1855). In order to make its data comparable, the bureau had sought what it considered the typical family—a man, wife and four children, two wage earning, aged sixteen and twelve, and two dependent, aged six and two. Its schedules, distributed through the medium of local statistical bureaus, attempted to distinguish between "material necessities," "cultural goods" and "luxuries and waste" and required quantity as well as cost estimates. It demanded that in each locality families be selected at three economic levels: the dependent, the barely self-supporting and those with a little saving. Over a thousand

schedules were returned but only 199 later proved usable. Ducpétiaux' study was thus decidedly limited. Moreover, he himself gave his results in francs only, content to show how much poorer was the Belgian worker's standard than that of the soldier, sailor or even prisoner.

It remained for the German statistician Ernst Engel, a disciple of Quételet and originally of Le Play, to evolve a statistical basis which would render comparable budget studies made at different times and places, despite variations in the composition of the family in age, sex and number. In 1857 he had reduced 199 of Ducpétiaux' budgets and thirty-six of Le Play's to a percentage and per capita basis. From his results, which he confirmed by later investigations, he deduced the law of consumption which bears his name: the greater the income per family, the smaller the proportion spent on bare subsistence necessities; or, stated somewhat more fully, as the family income increases, a smaller percentage is spent on food and the expenditure for clothing remains approximately the same, as does the percentage for rent, fuel and light, whereas a constantly increasing percentage is expended for education, health and other "cultural" items. At this time he was content to differentiate between children and adults, as Ducpétiaux and others had done before him, by merely calling a child equivalent to half an adult. Somewhat later as chief of the Prussian statistical bureau interested in calculating the incidence of Bismarck's social insurance program Engel sought a more exact scale of measurement. In Der Werth des Menschen (Berlin 1883) he drew up a scale for measuring family composition in terms of consumption units, Gliedeinheiten, in which he took as his unit (later named the "quet" in honor of Quételet) the hypothetical costs of the child at birth and on the basis of Quételet's height-weight tables increased these costs by annual increments of o.1 up to the age of twenty for women and twenty-five for men, at which times they rank at 3.0 and 3.5 respectively. This quet scale, which he employed in further studies, is still widely used on the continent (as in the Swiss survey of 1912, the Hungarian of 1917 and the Belgian of 1921). Engel believed in combining with the extensive method the technique of the carefully supervised account book (see Das Rechnungsbuch der Hausfrau, Berlin 1882). The most successful continental surveys of later years have followed this plan.

Equipped with the tools of comparison provided by Engel, European governmental statis-

tical bureaus undertook a number of extensive budget surveys in the eighties and nineties, most of which were, however, rather perfunctory. An outstanding exception was the study undertaken by the Danish governmental statistician Marcus Rubin in 1897. Unofficial investigators, on the other hand, confined themselves for the most part to limited monographic studies in the Le Play manner. In Germany especially the gathering of individual household accounts went on apace. The leaders of the movement were Gottlieb Schnapper-Arndt of Germany and Carl Landolt of Switzerland.

In the United States unusually extensive government surveys were begun at an early date (1874-75) by Carroll D. Wright, then head of the Massachusetts Bureau of Statistics of Labor. Later as federal commissioner of labor in his annual report for 1891 Wright, who was apparently ignorant of the quet scale, developed one of his own, avowedly arbitrary, to represent both food and general consumption at different ages. In the surveys made by the United States Bureau of Labor in 1890, 1891 and 1901 Wright emphasized, as had Ducpétiaux, the "normal" family, but he reduced it to an average of three children (one to five allowed), none of them wage earning. These surveys, the last of which covered more than 25,000 families, over 11,000 of which were "normal," were all carried on by field agents using the single interview method.

Early in the twentieth century a number of useful studies of the poverty line and above were undertaken by various non-governmental agencies in England and America. Outstanding among these was the work of B. S. Rowntree of England, who, beginning with his survey of York (Poverty, A Study of Town Life, London 1901) sought to follow out and deepen the lines laid down by Booth (Labour and Life of the People, 3 vols., London 1889-91) a decade earlier. Whereas Booth in the first volume of his survey had incidentally used some budget material of an outline sort, Rowntree stressed it and began a system, continued in his subsequent publications, of introducing detailed actual as over against standard budgets, carefully gathered by field agents, in the body of his work. In the United States Mrs. L. B. More working through the medium of a settlement house made a survey of the Greenwich section of New York, covering some 200 families, by supervised schedules, which were supplemented by a number of more or less successful actual household accounts kept for brief periods by families (Wage-

earners' Budgets, New York 1907). Although her survey was in the main extensive, Mrs. More attempted some approach to the monographic method of Le Play through the oft repeated visits of charity visitors, nurses, teachers, clergy, etc. for the period of a year or more. Comparing her work with previous American studies Mrs More showed some modifications of Engel's law. An even more valuable study was that made by R. C. Chapin for the Russell Sage Foundation of New York (The Standard of Living among Workingmen's Families in New York City, New York 1909). Chapin placed more reliance upon the single interview, but combined it with an unusually full and well organized schedule and worked up his material in excellent comparative form.

Later American studies of living standards have added further refinements of computation. An unusually accurate study was that undertaken by the Philadelphia Bureau of Municipal Research under the direction of William C. Beyer (Workingmen's Standard of Living in Philadelphia, New York 1919) in the midst of the wartime rise of prices. It not only successfully combined the agent schedule method with the check up furnished by supervised account books, but it succeeded in separating out the quantitatively expressible material in its returns in the simplest form for future recalculation. In its final quantity cost standard budget this "specified" portion amounted to four fifths of the total expenditure. The remaining "unspecified" fifth was then assumed to vary in price in the same proportion as the specified.

In Europe today budget study has progressed furthest in Germany, Belgium, Holland and the Scandinavian countries. With the one outstanding exception of the study by the Institut Solvay in Belgium (Slosse, A., and Waxweiler, E., Enquête sur l'alimentation de 1065 ouvriers belges, Brussels 1910) the surveys have all been undertaken by national or municipal authorities. In all of them actual family accounts were secured, running for from two weeks to two years and carefully supervised; in many cases the studies included under separate classification lower middle class groups as well as wage earners.

Outstanding among this continental group have been the German studies of 1907-08 and 1927-28. They not only covered an unusually large number of cases with a high degree of accuracy by the long time account book method, but they included two significant groups, public officials and salaried employees (the earlier study

included school teachers), and gave their results in comparative tables arranged carefully for each group by size of family as well as by income class. In England, on the other hand, the method of collecting returns appears to have been relatively casual. The British Board of Trade even in its extensive 1904 and 1918 surveys depended largely upon unsupervised answers to questionnaires, which were distributed by friendly societies, secretaries of trade unions and the like. In Ireland the distribution was by school teachers and in Australia apparently largely by mail; as a result only a small proportion of the returns were usable.

The period of the World War brought about an extensive movement for budget surveys in all the leading countries to establish cost of living indices, followed in the immediate post-war period by a widespread move to resurvey (see Cost of Living). Not only England and the continent, the United States and Canada, Australia and New Zealand (where budgets of one sort or another had long been used for wage arbitration), but Japan, India and the Dutch East Indies began to publish budget data. The 1918-19 survey by the United States Bureau of Labor Statistics of over 12,000 families was especially valuable. The schedules were greatly elaborated, handled by experienced agents and checked to within 5 percent accuracy or else discarded. The survey, however, continued to concentrate upon one class only, the "typical" industrial workers in each selected community. Middle class and rural families were not touched. Indeed the only noteworthy attempt so far in America to deal with middle class budgets inductively has been by certain private groups in university centers, which have undertaken small scale studies of professors' expenditures. Other lesser studies by the bureau and by private agencies, especially by trade unions, have dealt with special occupational groups. Special surveys for health purposes have also been undertaken. An extremely exact as well as extensive study was that made by the United States Public Health Service in 1916-17 in seven South Carolina mill villages; it covered 4000 persons and had as its point of departure the question of the relation of income to pellagra incidence (United States, Treasury Department, Public Health Reports, vol. xxxv, pt. ii, 1920, p. 2829-46).

One of the latest steps in American post-war development has been the beginning of the study of farm family budgets. Intensive study of farm families had long ago been developed by zemstvo

statisticians in Russia as a means of casting light on the condition of the liberated peasantry (see especially the work of F. A. Shcherbina, Krestianskie budgeti, St. Petersburg 1900); and various continental countries had made extensive surveys. In the United States, however, it was not until 1922 that the Department of Agriculture in conjunction with a number of land grant colleges, particularly Minnesota and Iowa, began to make a series of farm budget studies, highly suggestive although of an uneven statistical value (see Kirkpatrick, E. L., The Farmer's Standard of Living, New York 1929). Agricultural county agents were used to supplement the work of the special budget personnel. Most of the studies divided the families according to their property status, as owners, tenants or share croppers, but in a survey of Virginia urban and farm communities the division was kept on a purely income basis for the sake of comparability.

The accounting side of farm budget study presents special problems. Here the family is both producer and consumer, and the budget gatherer has not only to disentangle net income from production costs but to allocate to the latter a proportion of what would ordinarily be accounted household expenditure (e.g. the telephone, the automobile). On the other hand, home grown food although in large part a byproduct of production for the market takes the place of retail purchases that would otherwise have to be made and so is usually assessed at its retail purchase price. Some experimental work has been done in the farm surveys to estimate the relative value of the agent schedule as over against the account book method. Here as elsewhere in American experience the weight of evidence is in favor of the interview method when properly applied. Short time supervised accounts can then be used as a check up. The correct technique in the case of farm families of course requires an interview with the farm operator as well as with the housewife. The schedule must be extremely detailed.

In attempting to set up "standard" budgets for any group the statistician is confronted by this dilemma: shall he simply portray "average" existing conditions, or shall he cut loose from those moorings here and there to portray conditions as he would have them—e.g. such as would be required for good health? Usually the result is a compromise with its direction determined by the purpose for which the budget is drawn. Thus during the war, with labor greatly

in demand and the government pledged to preserve industrial peace, the content of American standards was distinctly scaled up. Standards originally considered "subsistence plus" were now accounted merely "subsistence," while below them came "poverty" and above, "health and decency" and even "comfort"—the last a conception new to the cost of living world. Government agencies actually drew ideal budgets adjusted to these levels (see STANDARDS OF LIVING).

A constantly recurring problem in budget study is that of devising the best unit of measurement of individual consumption by sex and age. Engel's quet scale was abandoned in Germany as long ago as the 1907-08 study, for it was considered, when applied to items other than foods, to run too high for children. An arbitrary scale of sharper inclination was therefore chosen to combine the hypothetical effects of food and other costs. In the 1927-28 study this was in turn abandoned in favor of two separate scales—a food scale and another, far lower one for other items. In the United States the even more arbitrary Wright scale continued to be used by the Bureau of Labor Statistics for general purposes, although for food requirements it had early been replaced here as in England by the Atwater scale. The latter, drawn up in 1805 by W. O. Atwater, was based on the number of calories found to be required at different periods of physical development and under varying requirements of muscular activity in varying types of occupation. Still another, simpler scale of food requirements was that devised by Professor Lusk of Cornell in 1907, adopted by the Inter-Allied Scientific Food Commission and used in the British family budget inquiry of 1918, the Egyptian inquiry of 1920 and the Bombay inquiries of 1921-22. All these later scales take the adult male as the unit of consumption.

The use of different requirement scales naturally produces widely varying results. Thus the investigation of the Agricultural Wages Board in Great Britain in 1919 disclosed that its "standard" family of five contained 3.8 units when calculated according to a modified Atwater scale and 4.4 units under the scale of the Inter-Allied Relief Commission. A more recent attempt to improve on these scales of food requirements is that devised by Edith Hawley ("Dietary Scales and Standards for Measuring a Family's Nutritive Needs," United States, Department of Agriculture, Technical Bulletin, no. 8, 1927).

In the realm of expenditures other than food the one outstanding scale arrived at inductively is that of Sydenstricker and King, devised in the course of the United States Public Health Service study in 1916-17. Seeking to classify the population of cotton mill villages by per capita income—the only significant standard for health purposes—and having to take all the population as it came they first built up a food expenditure scale in adult male units. This socalled "ammain" scale differed slightly from the Atwater scale, particularly in the case of aged persons. They then segregated the major items of individual expenditure other than foodclothing, education, amusements, health, etc. by sex and age of the individuals and found this scale to run far lower for women, children and the aged than the corresponding food scale. Finally, combining the two, they secured a general "adult male maintenance," or "ammain," scale that still fell off far more sharply than the Atwater for age and sex. In less poverty stricken communities these differences, particularly in regard to women, would certainly prove less marked.

Once a series of satisfactory scales for successive income levels has been built up, it should prove possible to leave behind the restricted field of the "normal" family and to test out the expenditures of actual family groups as they occur in the general population—young wage earners and aged dependents included. Moreover, it should be possible to trace out inductively what Engel and Rowntree long ago suggested, the moving costs of a family from the birth to the death of its members.

DOROTHY W. DOUGLAS

See: Cost of Living; Standards of Living; Consumption; Home Economics; Poverty; Minimum Wage; Family Allowances; Social Surveys; Labor, Government Services for.

Consult: Russell Sage Foundation, Cost and Standard of Living, Bulletin no. 90 (New York 1928), a bibliography for 1923-28; Winslow, E. A., "Contributions from Budget Studies to the Construction of a Statistical Index of the Purchasing Power of Consumers in the United States" in Berridge, W. A., and others, Purchasing Power of the Consumer (Chicago 1925) bk. ii, containing also a bibliography of American and foreign material; International Labour Office, Methods of Conducting Family Budget Enquiries, Studies and Reports, ser. N, no. 9 (Geneva 1926), containing complete list of governmental surveys after 1900; "Fourth International Conference of Labour Statisticians" in International Labour Review, vol. xxiv (1931) 1-23; League of Nations, International Economic Conference, Report on the Standard of Living of Workers in Various Countries, C.E.I. 26 (Geneva

1926), especially pt. iii; National Industrial Conference Board, The Cost of Living in Foreign Countries (New York 1927); "Ergebnisse der amtlichen Erhebungen von Wirtschaftsrechnungen vom Jahre 1927-28" in Wirtschaft und Statistik, vol. ix (1929) 818-24, 902-07, 978-82, and vol. x (1930) 38-43, 78-81, 170-78, 266-71, 310-18; Suhr, Otto, Die Lebensaushaltung der Angestellten (Berlin 1928); Albrecht, Gerhard, *Haushaltungsstatistik* (Berlin 1912); Porte, Marcel, "Budgets de familles et consommations privées" in Université de Grenoble, *Annales*, vol. xxiv (1912) 419-80, vol. xxv (1912) 201-55; Bowley, A. L., and Hogg, M. H., Has Poverty Diminished? (London 1925); United States, Bureau of Labor Statistics, "Cost of Living in the United States," Bulletin, no. 357 (1924); Houghteling, Leila, The Income and Standard of Living of Unskilled Laborers in Chicago (Chicago 1927); National Industrial Conference Board, "Family Budgets of American Wage-earners -A Critical Analysis," Research Report, no. 41 (New York 1921); Sydenstricker, Edgar, and King, W. I., "The Classification of the Population According to Income" in Journal of Political Economy, vol. xxix (1921) 571-94; Gee, Wilson, and Stauffer, W. H., Rural and Urban Living Standards in Virginia, University of Virginia, Institute for Research in the Social Sciences (University 1929); Zimmerman, Carle C., "Incomes and Expenditures of Minnesota Farm and City Families, 1927-28," University of Minnesota, Agricultural Experiment Station, Bulletin, no. 255 (St. Paul 1929); University of California, Heller Committee for Research in Social Economics, Cost of Living Studies, nos. i-iv (Berkeley 1928-31); Russia, Tzentral nove Statishcheskove Upravleniye, Krestianskie budzheti 1922-23 i 1923-24 (Peasant budgets 1922-23 and 1923-24), 3 vols. (Moscow 1926-27); Burma, Labour Statistics Bureau, Report of an Enquiry into Standard and Cost of Living of the Working Classes in Rangoon (Rangoon, Burma 1928); Bombay (Presidency), Labour Office, Report on an Enquiry into Middle Class Family Budgets in Bombay City (Bombay 1928).

FAMILY DESERTION AND NON-SUP-PORT. Family desertion as a problem of the court and of the social agency is generally accepted to mean desertion by a husband of his wife or by a father of his children in cases in which the question of support arises. The two aspects are always linked together, so that cases of non-support under separation or divorce agreements or decisions which do not involve desertion are rarely included in the term. On the other hand, desertion by the wife or mother or even desertion of aged parents is excluded because of the absence of the element of support. In most countries there is a distinction betv ? ? the rights of legitimate and illegitimate children to support, and family desertion usually covers only the former.

In so far as it becomes known to courts of domestic relations and social agencies family desertion is largely a phenomenon found among the low income groups, not necessarily because desertion as such is mainly due to economic pressure, but more probably because men in this group choose the informal freedom of desertion rather than the more conclusive and expensive methods of formal separation or divorce when family discord has reached the breaking point. The extent to which such desertion finally culminates in legal separation or divorce varies according to a number of factors, among them the provisions in the various states regarding desertion as a cause.

There is little accurate information as to the extent of desertion in the entire population. Many deserted wives do not resort to the courts or to charitable agencies and those who do frequently conceal their true state by calling themselves widows. On the other hand, the statistics of desertion and non-support of wives as a basis for divorce are no accurate index, as this allegation may be a convenient cloak for other reasons.

Several studies have been made of all aspects of desertion in the United States by the agencies which over long periods found that the burden of caring for deserted families formed a considerable percentage of their entire task. Early attempts to study the causes of desertion are numerous and there exist elaborate tables which attempt to fix the preponderance of one cause or another. In later years such attempts were abandoned. In their stead were listed the causal factors found or explanations of desertion given by the clients themselves, and with the more searching study of the family as a social institution desertion has been recognized as only one of the possible results of behavior patterns which relate to the much wider problem of family discord and disorganization.

From these studies it is safe to say, however, that desertion, like other manifestations of family disorganization which come to public attention, is preponderantly a problem of the city. This seems true as well of countries other than the United States. Desertion increases with the increased mobility of the head of the family as a wage earner. Although it is not markedly affected by racial origins or by religious affiliations, in this as in other types of family discord "mixed marriages" in either of these particulars have been shown to yield a high rate of desertion and divorce. In one study recently made in Boston it was disclosed that contrary to the popular impression the native born population

formed the largest single group of disorganized families; these figures do not, however, indicate the race of the native born group. In the immigrant group desertions are probably high in comparison to the rate of desertion in the "old country"; the quicker adjustment of the husband to certain American manners and standards is often a cause for discord, while, on the other hand, American standards of feminine freedom are slow to be accepted by immigrant husbands. Families left behind in the "old country" are frequently deserted, and this causes special legal and social difficulties.

Conclusions as to the effect of economic factors must be similarly qualified. For instance, while it is true that the cases which come to the attention of the court and social agency fall in low income groups, a positive correlation between desertion and periods of economic depression is hard to establish and the figures of the (Jewish) National Descrtion Bureau show that in neither 1914 nor 1921 was there an unusual increase in new cases. The period of depression did bring additional applications for relief from self-supporting deserted wives who 'and previously needed no assistance, but, on the other hand, in several instances, particularly where adultery had been the cause of desertion, unemployment and hard times caused a return of the husband to the home.

More positive statements can be made of financial and social costs to the community which result from desertion. The studies made show a surprising uniformity in the ratio of deserted families to the entire load of dependent families carried by family welfare agencies. Figures presented by E. E. Eubank in A Study of Family Desertion (Chicago 1916) show that up to that year they formed about 10 percent of the burden. According to the more recent Boston study, covering the period from 1918 to 1928, the load still remains fairly constant. The latest attempt to estimate the financial cost of desertion to the social agencies of a city was made in Cleveland in 1929, when a careful statistical study was made of all deserted families coming under the care of social and health agencies, courts and institutions during a sixmonth period. The total cost of assistance rendered, including direct relief, cost of service and institutional care for 533 families, was estimated at \$158,000 annually.

Of greater significance is the relation between non-support or desertion and juvenile delinquency. Of a group of 1323 Philadelphia fam-

ilies dealt with in non-support or desertion cases involving children between the ages of ten and twenty 230, or 17 percent, had one or more children known to the municipal court at some time because of delinquency or crime. Of a group of 284 families with children to which divorces were granted in Philadelphia during a period in 1923 and 1924 selected for study 13 percent were known to the municipal court almost entirely through its domestic relations division during the year in which applications for divorce were filed; and 47 percent had been known in that year or previously.

Figures obtained by the United States Children's Bureau showed that of 5286 families dealt with in Cincinnati in 1923 by the courts and by the Ohio Humane Society (with or without court action in the municipal or other court) covering cases of desertion, divorce, non-support and delinquency 13 percent involved more than one of these types of case during the year. Among the children's cases dependency and neglect were most likely to occur in combination with other types of case; 41 percent of the families known in dependency or neglect cases were known also in cases of other types, usually non-support or desertion or divorce; 28 percent of the families dealt with in cases of non-support or desertion were dealt with in cases of other types also-for the most part children's cases or divorce cases; and 26 percent of the families dealt with in divorce actions were known in cases of other types, chiefly non-support or desertion.

Juvenile court statistics compiled by the Children's Bureau for children dealt with in dependency and neglect cases by fifty-three courts during 1928 show that only 28 percent of the children were living with their two legitimate parents. Not only the lack of proper support and care but the failure of parental companionship and guidance, the shocks of family discord, the fear induced by abandonment, are here apparent.

The various family welfare agencies interested in the problem in the United States have devoted considerable attention to its remedial aspects as well as to the matter of immediate monetary relief. As a result of their efforts considerable progress has been made in improving the laws on desertion and non-support. Probably because it represented a startling departure from previously maintained family standards in their group and because of the complexities involved in desertion among immigrants the Jewish social agencies were among

the first to institute studies of the problem. As a result of persistent study and agitation by the National Conference of Jewish Charities the National Desertion Bureau was established in 1919. It has prosecuted vigorously the work of locating and apprehending deserters, preventing fraudulent actions for divorce and representing in this country the interest of Jewish wives and children abandoned in Europe. It handles about 2500 cases annually. William H. Baldwin, a member of the Board of Managers of the Washington, D. C., Associated Charities, between 1905 and 1921 published a number of pamphlets dealing with various phases of nonsupport law, particularly with the injustices and inequalities in the interstate and international extradition laws and treaties and with the desirability of making allowances for the support of the wives and children of men imprisoned for non-support.

The common law recognizes only the civil right of tradesmen to recover from the husband debts contracted by the wife for reasonable living expenses and does not recognize a right by the wife to sue her husband for failure to support her and her children. The statutes of the several states do recognize this right but appear with some exceptions to be based on the premise that the abandoned wife and children are "likely to become public charges," although in no case is it demanded that they shall have become such before suit for support can be started.

Nevertheless, there is still a great variance in the laws of the various states as to the degree of criminality involved in desertion or non-support and even more variability in their administration. In 1910 the Commissioners on Uniform State Laws developed and recommended for adoption by the several states a Uniform Desertion and Non-Support Law. This has been adopted in part by several states, but its terms are necessarily quite general and it does not make a clear pronouncement on several troublesome points; for instance, whether desertion should be classed as a misdemeanor or a felony.

The decision whether a man shall be prosecuted for non-support, which is usually classed as a misdemeanor, or for child abandonment, which is usually a felony, may rest on the extraneous consideration of whether he has or has not left the jurisdiction of the state. Although the offense would seem of equal magnitude in either case, in order to obtain his extradition

it may be necessary to proceed on the more serious charge.

Other discrepancies are found in many states on such questions as the length of time that must elapse before the wife may take out a warrant, the right of a childless wife to sue for support, the status of the pregnant wife and the child in utero as to support. There is great variance among the states in their willingness to extradite for desertion and much confusion as to whether the wife may sue in the state where she happens to be, in the state where her husband is or in the state where the desertion took place, if these happen to be different. In some states no satisfactory court decision has ever been rendered as to whether desertion is or is not a "continuing offense"; that is, whether a man who has been arrested and has served a sentence for abandonment can be rearrested after release if he persists in failure to support.

There is also wide variation in the legal treatment of cases of desertion and in the kind of courts to which they are assigned. The ordinary procedure, when court action is to be resorted to, is for the wife to make the complaint. In some states a social agency which has assisted her is allowed to enter the complaint. States which permit mothers' pensions to be paid to deserted wives usually insist that the wife appear as complainant as a prior condition to granting the allowance. If the husband is in the city he is summoned to appear; a warrant for his arrest is not usually issued unless he fails to answer summons or has left the jurisdiction. If his whereabouts are not precisely known, most enforcement officers will customarily take no steps toward his apprehension, placing upon the woman or the social agencies interested in her the task of locating him before steps are taken for his arrest. There is often further official inertia to be overcome on the ground that it will cost the state too much to send for him, or that if convicted and sentenced he will be of no more use to his family than if he remains at large. This argument is of less avail in states which have a provision for payment to the families of imprisoned men of sums earned or saved during the period of their sentence. When released on probation the man is often placed under court order to pay an inadequate amount as alimony toward his family's support, on the ground that if forced to give up too much of his earnings he will break probation and leave the jurisdiction. Pressure is often exerted in

courts to bring about a reconciliation as the quickest and easiest way of disposing of the case. Experience has taught social workers that these coercive reconciliations are not likely to be durable. All this has discouraged social agencies from relying on legal procedure except where a good court of domestic relations is in operation.

The problem of desertion is an extremely difficult one for the social agencies. A high percentage of deserters (39 in the Boston study) cannot be located; a very small percentage support their families. The necessity for relief is likely to begin soon after desertion—in the Boston study referred to, four out of five families deserted had to seek aid before the end of the first year—and it has frequently to be continued over long periods.

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See: Family; Divorce; Domestic Relations Courts; Woman, Position in Society; Child; Juvenile Delinquency; Poverty; Social Work.

Consult: Mowrer, Ernest R., Family Disorganization (Chicago 1927); Richmond, Mary E., "Married Vagabonds" in The Long View (New York 1930) p. 69-76; Eubank, E. E., A Study of Family Desertion (Chicago 1916); Colcord, J. C., Broken Homes (New York 1919); Brandt, Lilian, Five Hundred and Seventy-four Descriers and Their Families (New York 1905); Smith, Zilpha D., Deserted Wives and Deserting Husbands (Boston 1901); Zunser, Charles, "Family Desertion" in American Academy of Political and Social Science, Annals, vol. cxlv (1929) pt. i, p. 98-104; National Conference of Jewish Charities, Family Desertion (New York 1912); Bucklin, D. R., "Studies of Breakdowns in Family Incomes; Broken Families" in Family, vol. xi (1930-31) 3-13; Patterson, S. H., Family Desertion and Non-Support: a Study of Court Cases in Philadelphia (Whittier, Cal. 1922); Baldwin, W. H., "The Present Status of Family Desertion and Non-Support Laws" in National Conference of Charities and Corrections, Proceedings, vol. xxxviii (1911) 406-13, and "The Canadian Extradition Treaty and Family Deserters" in Journal of Criminal Law and Criminology, vol. xii (1921-22) pt. ii, 199-212; United States, Children's Bureau, "Child, Family and Court" by B. Flexner and others, Publication, no. 193 (1929), and "Juvenile Court Statistics, 1928," Publication, no. 200 (1930), and "Analysis and Tabular Summary of State Laws Relating to Jurisdiction in Children's Cases and Cases of Domestic Relations in the United States," Chart series, no. xvii (1930).

FAMILY ENDOWMENT. See Family Al-LOWANCES.

FAMILY LAW, or the law of domestic relations, as it is more usually called in Anglo-American law, is in all modern legal systems a

branch of private law. An independent system of family law does not exist. The individual and not the family is the basic unit of the legal order. In truth, however, the continuous operation of the forces of individualism in western society has produced a system of family law which is without any consistency of conception, and it is now private law, now public law. The modern family thus has no organic law. However much its legal constitution is intended to realize individualistic ends, the interest of the state always remains paramount.

In a sense there never existed a family law. The ancient patriarchal family, which in the historical period may be considered the general type of family among the Indo-European races in the West, was a law unto itself. Family law existed only in the sense in which international law does today. It was an interfamily law. The political organization embraced the families, but the head of each was sovereign. The paterfamilias was a benevolent despot. He was the priest of the family cult. So exclusive was the family bond that the solidarity of the family was recognized as the basis of the criminal law. The early patriarchal family was not simply a biological family composed of husband, wife and children, but a larger multiple family or family community variously called domus, Hausgenos-. senschaft, maisonnée or household, in which were included the married children of the head together with their descendants and domestic slaves. Such a group represented a defensive and offensive alliance.

In both the Latin and Germanic languages the supreme authority of the house lord was expressed in terms of the most obvious symbol of power, the hand. The Roman manus and the Germanic munt—later Latinized into mundium—were the basic concepts of family law and custom. They embraced not only the descendants but all members of the household. In Roman law the term manus later became restricted to the power over the wife, and patria potestas is now commonly used to express the whole authority of the head of the Roman household.

In the early history of Rome birth did not create the right of membership in the family. A newborn child had to be ceremoniously acknowledged by the paterfamilias, who if he chose could expose the child. The wife in manu was completely under the control of her husband; in fact, in contemplation of law she was a sister of her own children in her own household. The

paterfamilias held the power of life and death over all the members of the household, and he could sell or enslave any one of them or yield any wrongdoer in noxal surrender. Not only the family goods but the members of the family were property. Only the paterfamilias was sui juris; all the other members of the family were alieni juris. Not even sons became emancipated when they reached majority. They might then acquire civil and political rights but they could not hold property or found a new household. For it was the most fundamental rule of the Roman family organization that the patria potestas endured as long as the paterfamilias lived.

The later history of the Roman family law under the stress of a growing individualism is of particular interest to the westerner because the modern family in a general way has only repeated it. The dissolution of the ancient Roman patriarchal family, begun under the republic, was fairly complete by the time of Justinian. Custom had long interdicted the absolute rights of the paterfamilias before imperial rescripts restricted domestic rights to powers of chastisement. Caracalla forbade the sale of children except in case of extreme poverty. The lex julia, de adulteriis, abolished the husband's power of life and death over his wife. When Justinian suppressed noxal surrender the last causa mancipii disappeared. Marriages sine manu were made possible through the device of the trinoctium abesse. The wife sine manu could reserve independent property rights—the parapherna and the dotal system protected the property a wife brought in marriage. Although the patria potestas remained perpetual it was undermined through a number of devices, such as a fictitious sale by mancipation which made the son free altogether, or through other devices which made it possible for the son to hold property, such as the extension to the professional classes of the peculium castrense, originally property to which the son was independently entitled because it was acquired in consequence of military service. A long development in favor of cognate relationship was completed by the Novels 118 and 127 of Justinian. When the paterfamilias lost the right to constitute the family as he wished, it was plain that the ancient patriarchal family had become simply a legal family.

The modern western family is descended more directly from the Germanic than from the Roman, and it has sometimes been contended that the German *mundium* implied a conception of protection rather than of power; but

this view has little to support it. In early family law rights are generally without reciprocal duties and are intended to profit their holder. Traces of the possession of the power of exposure, sale and life and death are indeed to be found in the very early Middle Ages. Nevertheless, it is true that in the historical period the German house lord was never as absolute a master as the Roman paterfamilias. Doubtless Christian influences had their due effect. Indeed the power of the church must be reckoned as the most important factor in the development of western family law as late as the nineteenth century. Until then family law was largely a branch of canon law. A weakened mundium can be traced in the Germanic laws in the early recognition of family joint ownership but especially in the fact that it did not endure during the whole life of the father. While majority did not itself emancipate, a son could by leaving the household establish a new one. On the other hand, with some interruption toward the end of the Middle Ages sex guardianship of adult women prevailed. Still the mother with the growing recognition of cognate relationship often became at least the assistant of the father in his role of family head. In the Anglo-Saxon period in England the wife thus occupied a far more favorable position than she did later under the classic common law.

Despite the general reception of the Roman law in western Europe, the Germanic family law was not greatly affected. To be sure many Roman family law doctrines made their way in the process of "early reception" which was represented by infiltration through the canon law for instance, the rule consensus facit nuptiasand, while the Roman law influenced the family law of persons hardly at all, it did to a measurable extent affect the family law of property, particularly in adding the dotal system and imposing almost the whole law of guardianship. In France in the pays du droit écrit, which were the regions of the Roman law, the result was that sons had to be expressly emancipated. It is significant that if Roman law ideas were received they were often such as tended to strengthen the unity of the family. Nevertheless, the growing individualism of Europe toward the end of the Middle Ages was also soon reflected in the acceptance of rules of a contrary character.

The general tendencies in the history of the family law in the orbit of Germanic-Romanic civilization may be summarized as a movement from the patriarchal household, based upon a

rigorously held concept of the solidarity of the family, to the modern biological family which is legally protected because it rears the citizens of the state. In this process agnatic relationship has first given way to bilateral relationship. Restraints upon alienation of the family property have generally tended to become increasingly attenuated, but here perhaps change has least followed any single pattern and family property systems have shown great variety. The intervention of feudalism alone for a long time arrested the effects of individualism. Children became emancipated before wives, finally simply by reaching majority, and powers of correction over even minor children became very mild. An exception is to be noted in the oldest of the great modern codes, the French Code civil, which has retained although in a milder form a father's power to cause the imprisonment of a recalcitrant child, a power that was notoriously exercised under the ancien régime. The modern wife has not yet achieved everywhere complete legal independence of person and property but is rapidly doing so under the impulse of the feminist movement. Under the French civil code the wife is still incapable of exercising parental power. Under the more recent German and Swiss civil codes the husband is still the legally recognized head of the family, but the mother shares the parental power and upon the husband's death may exercise it exclusively. The post-war German constitution declares that marriage shall rest upon the concept of equal rights for both sexes but the provision still remains programmatic.

Thus the progress of individualism has not always been either continuous or uniform. It is in the nature of individualism to breed a multiplicity of forms. On the whole, the individualization of the family law has been carried farther under the common law than under the civil law despite the generally more individualistic private law conceptions of the latter. The original implications of status in the very term domestic "relations" has for a long time had no reality. As far as husband and wife are concerned the classic common law abandoned almost completely all ideas of relation. Its most marked characteristic became the rigorousness with which it worked out the conception of the unity of husband and wife and made it the basis of the family relation. It was applied not only in the fields of contract and tort but in the criminal law. The wife was not merely subordinated to the husband, as was generally the case in civil law countries. During coverture—a polite euphemism—her legal personality became absolutely suspended. The relaxation of this system, however, was soon accomplished through equitable channels by means of the trust and the married women's separate estate, which substantially procured for the married woman of the wealthier classes all the rights of property that women generally secured in common law jurisdictions considerably later through the married women's property acts, the foundation of the extreme individualism of the common law of domestic relations.

On the other hand, the civil law countries still retain more of the early Germanic legal conceptions of the family. More than any other European code, perhaps, the French Code civil, which was inspired by Napoleon, attempts to realize the idea of the solidarity of the family and also, perhaps more than any other, it has emphasized filial duty. European codes have generally retained the old institution of the family council, but except under the French code its functions are now practically confined to the guardianship of minors. The systems of dotal and community property in European countries undoubtedly help to maintain the integrity of family life, but on the other hand it must be remembered that the codes generally allow the ordinary property system to be varied by contract. Under the law of western countries family rights are thus sometimes based upon the idea of contract, sometimes upon the idea of status. Common law courts too, while they say that marriage is based upon contract but is itself a status, often allow its incidents to be controlled.

Perhaps some importance attaches to the fact that in European countries the family law exists in codified form, which makes it easier for the jurist to formulate its rules and conceptions. Unlike the French civil code the German and Swiss codes have separate books of family law. The Anglo-American law of domestic relations has not really been authoritatively stated since Blackstone. There is room for debate in this third decade of the twentieth century as to who is the legal head of the American family. It is not the husband merely because the law gives him the right to determine the matrimonial domicile. The husband also has this right under the continental codes, but the headship of the family is separately defined. The family law, which is of great popular interest, might well be made available in clear, compact and definite form. From this point of view the codification of family law has much to recommend it, although this is not to imply that the family code should become every matrimonial couple's vade mecum. The particular advantage of a codified family law is that it proceeds from the normal, not the abnormal. It states positive rules of family obligation under the conditions of family harmony. On the other hand, the fact that Anglo-American law is only precipitated in controversial decisions has tended to make it a law of breach—an emphasis that is too predominantly negative.

Of course it must be recognized that in a great many family situations the law is really powerless to restore harmony. Family law is particularly a law of imperfect obligations and imperfect sanctions. In theory all family relations are subject to the legal regulation of the state. But even as to those rules that are compulsive and exclusive the state must often pursue the policy of laissez faire which obtained in the early law. Norms of family law often fit ill into any analytical scheme of jurisprudence which places the emphasis upon the state as the creator of law. Austin himself was driven to the extremity of holding that the head of a family fulfilled a semipublic function which made the commands he gave precepts of the positive law. Family law, which is an admixture of the law of property and the law of persons, fails particularly in regulating personal relations. The state, alas, cannot always compel a wife to love her husband or a child to respect its parents. Old codes may be found which contain many a pious but futile maxim. The French civil code decrees that "A child at all ages owes honor and respect to his father and mother." The German and to a lesser extent the Swiss civil code has, however, avoided all exhortations to domestic felicity and connubial bliss.

In the last analysis family law remains less a product of legislation than of custom. Although legislation is paramount in modern law it is almost as true now as in the Middle Ages that family law is par excellence customary law. It succeeds best when its roots are deep in national character and feeling—when it gives expression to customary modes of living and the alignment of classes. Family law in its first stages as a law of the state tends to embody only the notions of the wealthier classes and to impose them as the law of all classes. This tendency often becomes weakened but it never ceases to be operative. Many divergencies between family law and custom may be observed. Even where no legal system of community property is recognized, as in Anglo-American law, the practise of the middle classes approximates it. The family customs of the immigrant are not the same as those of the native. Indeed it is no more possible to secure a real insight into the familial institutions of any given society by referring to its family law than it is possible to judge a man's character from the inscription on his tombstone. To the old fashioned jurist family law was as disagreeable a subject as constitutional law was to John Chipman Gray, the great authority on the law of property. Family law particularly requires the sociological approach. It offers an immense opportunity for an anthropology of the civilized races.

Doubtless under popular political institutions family law and customs tend to coalesce, but the process must always remain far from complete. Certainly enormous obstacles still stand in the way of any international assimilation of family law, with the result that the solution of problems of the conflicts of laws in this field is particularly difficult. Even in a federal nation such as the United States uniformity in family law has not been possible. The adherence to the principle of nationality in determining incidents of status in continental countries has made it impossible to work out any basis of agreement with Anglo-American countries which adhere to the principle of domicile.

In the East the joint household may still be observed, but already it has begun to disintegrate in many places, repeating the experiences of the West, even as the Germanic races have repeated the experience of Rome. Particularly in Japan, which has adopted a code built upon western models, a compromise between ancient ideas and modern needs is taking place. The Japanese house, or iye, is not legally ended even with the death of its head, and a successor is provided; but within the house the occidental biological family is recognized since parents as such exercise an authority independent of the head of the house, and property rights are vested in the individual. Nevertheless, an even wider family than the household exists, consisting of persons related by blood or marriage within certain definite degrees, and through a family council it exercises powers that are very wide when compared with those of European family councils.

In the West the "socialization" of family law is frequently urged. But such legislation as has been adopted indicates rather that it is not so much the family itself that is being legally so-

cialized as that family obligations are being transferred directly to the state, which decreasingly relies upon the family to rear its future citizens. Duties rather than rights had for a long time been emphasized in family law, but the duties, particularly those of parents toward children, remain largely unfulfilled. Particularly with regard to children has the state come to interfere more and more in order to secure for them adequate development and protection. In the United States special domestic relations or family courts have even been created to deal with family problems. But such legislation, far from strengthening the family as a legal and social unit, tends to do the opposite. It proceeds from the failure of the family and carries to its logical conclusion the individualization of family law. The family preceded the state. But in its political organization the family now tends to repeat the structure of the state.

WILLIAM SEAGLE

See: Family; Marriage; Common Law Marriage; Breach of Marriage Promise; Divorce; Alimony; Marital Property; Inheritance; Primogeniture; Domestic Relations Courts; Woman, Position in Society; Conflict of Laws; Domicile.

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FAMINE is a state of extreme hunger suffered by the population of a region as a result of the failure of the accustomed food supply. It is to be distinguished from the more or less constant undernourishment of chronically poverty stricken districts. Famine may be the consequence of drought, prolonged winters, cold summers, floods or plagues of locusts or rodents. The ravages of war and the devastation of rural regions during periods of upheaval may prevent adequate food production, and the breakdown of systems of distribution may affect regions dependent upon importation for food. Other less direct factors may contribute to famine. Deforestation may increase the danger of floods. Overpopulation in some regions may reduce the acreage per farm until it is barely sufficient to afford miserable sustenance in good years, precluding the storage of surplus for lean seasons.

Except in tropical regions the peril of famine in primitive society has always been great because of crude methods of food production and the absence of adequate methods of storage. Early civilizations were also subject to famine. Egypt was afflicted with both drought and locust plagues. In ancient China and India primitive agriculture and inadequate transportation combined to intensify the disastrous results of drought. The development of large urban populations in Greece and Rome increased the difficulties of securing sufficient food in years of bad harvests. In mediaeval Europe, when peasant farmers living in isolated and self-sufficing communities formed the majority of the population, a crop failure in one locality meant famine even if harvests were normal only a short distance away. The approximately four hundred and fifty recorded famines from the year 1000 to 1855 were largely confined to small local regions such as Wales, Lorraine and Alsace. These dearths were caused by long, cold winters, which hindered planting, or by dry or cold summers, which prevented growth, and by floods, locusts and war. That eastern Europe was not untouched by famine in mediaeval times is indicated by the plaint of the chronicler of Novgorod.

Famine has been almost banished from the western world during the last century. The revolution in agriculture has removed food production from the list of famine factors in spite of

the vast urbanization which has occurred. The crops of a locality may be destroyed by drought, hail and frost, but the progress which has been made in the storage of surpluses and the increase in facilities for transport have reduced the effect of such disasters. Developments in food preservation such as canning drying, pickling and freezing are also famine preventives. Poverty stricken urban dwellers may starve to death, but ample food exists. When famines do occur in occidental societies the farmers are especially affected, as in the famine stricken area in the United States in 1930-31, when the poverty of the farmers made it impossible for them to purchase sufficient food from the ample supply existing in the country.

Although famines are unusual in civilized societies, there have been severe famines in modern Europe and there are still chronic famine areas in the world. The Irish famine from 1846 to 1851, which was the most disastrous in western Europe in the nineteenth century, was caused by the potato blight. It resulted in over a million deaths and was a factor in the emigration of a million and a half people within a decade. The famine was intensified by the miserable poverty of the people who were dependent on potatoes for sustenance. In 1841 almost one half of the farms in Ireland contained less than three acres, making it impossible for the farmers to accumulate reserve supplies.

Russia was scourged by major famines eleven times between 1845 and 1922. Although drought was the immediate cause of these crop failures, the steadily increasing population and progressively smaller farms contributed. In 1905, although 12.5 dessiatines (of 2.7 acres each) were considered necessary for the adequate sustenance of a family, 70 percent of the households in 47 regions had fewer than 10. The peasant population suffered even in normal times from lack of food because of the extremely primitive agricultural methods, and as a result in 1890 the death rate was higher by 30 percent in rural districts than for Russia as a whole. Since no adequate reserves could be maintained, even a partial crop failure precipitated a famine. Added factors in the famine of 1921-22 were the international blockade against the Soviet Union, the severe decrease in planting due to counterrevolutionary disorders and the opposition of the peasants to foodstuff requisitions.

In north China the scant 21 inches of rain falls in the spring, making the wheat crop possible, and in the summer, when millet and kaoliang

are planted. Failure of rain at either time is serious; failure at both times is fatal. Some of the rivers silt up, partly because of deforestation. A break in the dikes on such rivers means floods, the severity of which is increased by the slow drainage of flood waters from the level fields. Locusts plague some regions, particularly in Shensi, where they have caused 20 of the 162 historical famines. Although 4.7 acres are necessary to raise sufficient wheat for the average family in north China, 55 percent of the farms contain 1.5 acres or less. The size of the individual rice fields is also inadequate and as a result the majority of families have scarcely enough food in normal times and cannot lay aside reserves. Insufficient credit, poor roads in the interior, the burden of large armies, foreign aggression and the lack of a stable government have aggravated these conditions and have contributed to an economy which is peculiarly susceptible to famine.

Famine in India has been defined as "only the exceptional aggravation of a normal misery." Drought due to the failure of the monsoon rains is the primary cause of famine, although flood, hail and locusts have been occasional factors. There seems never to have been a country wide drought in India. In famine regions imported food has been obtainable but the widespread and extreme poverty of the rural population has made the purchase of such food largely impossible. The agricultural workers, dependent on the produce of their land for sustenance, have almost no reserve and are prostrated in the event of crop failure. Heavy taxes, inadequate agricultural methods, the burden of a caste system containing large numbers of unproductive people and the British drain upon Indian resources have been offered as explanations of Indian poverty.

Unless relief is unusually efficient famine involves a temporarily increased death rate due either to starvation or to the increased disease resulting from weakened resistance. The aggregate death list from famine would be as staggering, were it carefully kept, as those of many wars. Although the data are sadly incomplete, the greatest death toll has probably been that in the widespread famines in India, China and Russia. Imperial Russia and India suffered famine nearly every year; from 108 B.C. to 1911 there were 1828 famines in China. The ten famines in India between 1860 and 1900 are estimated to have resulted in fifteen million deaths, and nine million fatalities were caused by the famine in north China from 1876 to 1879. Little is known

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of the mortality of the approximately 600 recorded famines in Europe from 6 A.D. to 1855. After his study of famine in China Mallory concluded that the conditions arising from food scarcity were the main checks on population. The periodic famines in semi-arid Iran seem to have served to keep the population within the limits set by the environment. But in spite of the large death rates they occasion, famines can in no sense be considered permanent checks on overpopulation. Their temporary effects are readily compensated for in succeeding periods of relative plenty.

When a country experiences famine only as a rare and extraordinary disaster, the effect is likely to be ephemeral; but if famine is a recurring phenomenon it may leave its mark on the social, economic and spiritual life of the society; it may be a factor in epidemics, a motive for migration and a regulator of population growth. In considering famine as a possible factor in migration one must distinguish between the wanderings of small groups of people and the larger movements which are more clearly migratory. Famine conditions in one region have often prompted a stricken population to move into more favored places. Delafosse records Wadaian depredations in western Darfur about 1830, stimulated by famine in Wadai. Petrie believes that the famine conditions of dry years caused the pastoral races living in arid regions to migrate to the richer lands. It is less certain that dry periods and famines precipitate larger movements of peoples. It has been suggested that the Arab migration started from a great famine in Arabia in 600 A.D. and was kept in motion by a series of dearths from 816 to 1072, and the prolonged drought on the steppes about 3000 B.C. seems to have urged groups of nomads westward and southward into the northern plain and Hungary. A series of droughts with frequent famine may have urged nomadic tribes to move in search of better grazing land, but that famine has been a significant factor in inducing the people of a settled economy to migrate seems open to doubt. The agricultural regions of China and the Pueblo culture of America have suffered countless famines and have passively withstood their effects or have developed a reasonably famine proof economy.

The judgment of epidemiologists is that disease is the invariable consequence of famine. The debility resulting from lack of food or from vile food substitutes paved the way for cholera, typhus and malaria in India, and the famine in

Florence in 1347 was the forerunner of the plague of 1348. Famines do not produce new or special epidemics, but under famine conditions the typical diseases flourish. The so-called famine typhus is spotted fever, and the diseases which followed the famines in Upper Silesia in 1848 and in Finland in 1807-68 were the malaria and typhus common to the region.

Famines are reflected in religious belief and ritual. The Hopi Indians, for example, who are dependent on corn, have a series of extremely elaborate corn and rain producing ceremonies, of which the snake dance is the best known. There is a distinction between ritual for the production of food and rain and the ceremonies which take place after famine or drought ensue. Fertility rites to prevent famine abound in primitive and ancient religions and have their modern counterparts. In Biblical times famine was often considered a sign of the wrath of God (see II Samuel XXI), and the idea survives in the prayers for rain offered by many Christian churches in times of drought.

The development of some primitive social customs may have been conditioned by food scarcity. Sumner interpreted abortion and infanticide to be often protective devices against famine and other calamities arising from overpopulation. In Australia, for example, where limited food and water made wandering necessary, women with two infants were unable to accompany their husbands. Cannibalism has often occurred during famine, but does not seem to owe its existence as a regular practise to the absolute lack of food. Curschmann listed the following socio-economic changes among the aftereffects of mediaeval European famines: an increase in the price of grain, a rise in rates of interest, a general desertion of stricken villages and farms, the impoverishment of the people, the destruction of livestock and an increase in restlessness and disease. Other students have seen a connection between the very prevalent famines in Europe in the Middle Ages and religious exaltation and mania. group movements and political and social turbulence. Occasionally some constructive institution has risen from a famine situation, as did Raiffeisen's rural cooperative credit societies, which were organized in Germany to meet the needs created by the famine of 1848.

Where famines are frequent some attempt has usually been made to store food or water. In savage societies the storage of food to carry the tribe through dearth has been the most preva-

lent method of famine prevention. The New Zealand Maori, the Hopi and Moqui of America, for example, regularly store food as an insurance against scarcity. Traces of grain and fruit stone storage rooms have been found in the Swiss lakeland prehistoric remains. The irrigation systems of primitive cultures such as those of Easter Island and the Arizona Pueblos play a role in famine prevention. The Badarian culture in lower Egypt about 12,000 B.C. used underground granaries, and the storage of grain in conical structures under the supervision of a superintendent of the granaries was systematically carried out under the pharaohs. The Incas confiscated and held in storehouses all surplus foodstuffs in an effort to maintain a three-year supply from which public distribution could be made in time of dearth. The canal and irrigation system of Sumer (3000 B.C.), the irrigation works of the Incas, the flood prevention dikes on the Hwang Ho (2000 B.C.), are illustrative famine prevention activities of ancient civilizations. In India before the advent of English rule the native rulers and the wealthier farmers maintained haphazard reserve supplies in good years. Probably the first to introduce vigorous famine relief in India was Muhammad Tughlak, who in 1343 distributed six months' supply of grain to the inhabitants of Delhi, made grants from the treasury for farming and well digging and unsuccessfully attempted to introduce compulsory labor. Shah Jehan, who in 1630 made extensive doles of food and money and remitted taxes, initiated the extension of relief to rural districts. Irrigation was the most important preventive effort against famine in this early period.

In mediaeval Europe occasional storage of grain was the only means used to attempt to prevent food scarcity with the exception of scattered regulatory laws. The English government placed various prohibitions on forestalling and engrossing-practises closely akin to modern speculation and monopoly. The Assize of Bread issued in 1202 was an attempt to prevent speculation in bread by varying its weight with changes in the price of wheat. This and the later Assize of Bread and Ale issued by Henry III in 1266 were antispeculation or antimonopoly acts rather than price fixing laws and were the products of an economy in which the monopolizing of food in times of dearth increased the hardship experienced by the poor. The famine relief of this period was left largely to the casual alms of the wealthy and to the church. Charlemagne considered the famine of 780 to be God's punishment of man's sin and consequently ordered masses said. His famine relief program included the conservation of food, the prohibition of food export, the regulation of corn prices and the maintenance of feeding stations, but this program was not followed in later years by other princes or by cities, save for the occasional prohibition of exports and regulation of grain prices. The series of bad harvests all over Europe from 1527 to 1536 probably hastened the development of poor law relief in England and on the continent, through which some social responsibility was assumed for destitute persons.

Progress has been made both in famine prevention and in famine relief. The United States and England, impelled by a humanitarian spirit. by political purposes or by the obligations imposed by empire, have participated in efforts to alleviate and conquer famine in China, India and post-war eastern Europe. The Russian peasant under the czarist regime had a legal claim against the government for famine relief, and each community was required to keep an emergency grain store and was allotted famine relief funds; but in practise this system usually collapsed. During this same period the British were developing a system of famine prevention and relief in India, where by 1860 the problem of relief had become the question of how much to pay the famine victims employed on public works and how to force all able bodied men to work. Famine sufferers were divided into those who could labor on public works, those who could do light work in poorhouses and those who were unable to leave their homes—a classification which has since formed the basis for relief work. In 1869 the government introduced the important principle of granting tuccavee, or cash relief, to farmers in order to enable them to remain on their farms for the following year. The famine code of 1883 recommended village relief in preference to the much disliked poorhouse, which was to be retained for the aid of wandering famine victims, urged that work be offered immediately before efficiency was impaired by debility and that tuccavee grants be supplemented by tax remission. With some unsuccessful modifications this plan was applied in the famines of 1896-99 and 1899-1900. In 1906-07, although the food supply failed for nine months, the development of acute famine conditions was prevented by the improved condition of the farmers, extended irrigation, increased loans at low interest to landowners who employed famine sufferers and greater village

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relief. The efficiency of famine relief was increased by the growth of the railway system from 4255 miles in 1870 to 39,049 in 1927.

Although spasmodic attempts at both prevention and relief of famine have been made in China for centuries, determined efforts date from the participation of foreign societies. In the severe famine of 1920-21 the American Red Cross and the China International Famine Relief Commission joined in a relief program which expended thirty-seven million Chinese dollars, one half of which was under international auspices. The international committees alone fed almost eight million persons during the peak of the famine. All able bodied members of stricken families were offered employment on public works, usually roads or dikes, under the supervision of famine commission engineers. The wages were placed below the normal wage scale and where feasible the expenditures were regarded as loans to be subsequently repaid by the community.

During the war and post-war years famine conditions developed in Poland, Armenia, the Ukraine and Russia, and the governments of those countries were unable to render adequate relief. American agencies led in relief efforts, although considerable sums of money were expended by governments and societies in other countries. The greatest of these famine relief programs was that in Russia from 1921 to 1923, in which roughly \$70,000,000 was expended by the following organizations: the Soviet government, \$11,387,000; the United States government, \$22,662,000; the American Relief Administration, \$23,440,000; the American Red Cross, \$3,805,000; American religious and charitable groups, \$5,017,000; European governments and relief organizations, about \$4,000,000. The disbursement of 85 percent of the funds was administered by the American Relief Administration. The combined American relief organizations fed a total of eleven million Russians at the peak of the famine, while an additional million were fed by other foreign agencies. The relief administration established a central organization in Russia, which received supplies and disbursed them to urban and rural kitchens, where relief was directly administered in the form of cooked food. Seed grain and medical relief were also dispensed. By the latter part of 1922 relief to adults was discontinued, and in June, 1923, the American Relief Administration withdrew from Russia.

The conflict between the recognition of gov-

ernment obligation to assist famine victims and the procedure of delegating relief to private agencies dependent upon uncertain individual contributions is still raging. In the United States during the famine of 1930–31 the federal administration opposed the use of government funds for food relief to the farmers suffering from drought, contending that there should be no interference with private relief measures.

China remains the only major chronic famine area; and the near future holds no promise of sufficiently widespread improvement in agriculture, limitation of population and other social and economic changes which would prevent famine recurrence. India although constantly threatened with local food shortage has evolved a system of relief which has mitigated sufferings in famines in which poverty rather than actual food shortage is the chief characteristic. The Soviet government has made prodigious advances in increasing agricultural output through its government farms and by the socialization of peasant farms, and as a result the possibility of future famines in the Soviet Union is slight.

Population experts have predicted an increased pressure of population on the margin of subsistence which unchecked might be expected to breed increased famines in the world of tomorrow. Such prophecies, however, are based on a projection of present net population increases and on present methods of agricultural production. They do not take sufficiently into consideration the likelihood of future modifications of population increases and of enlargement of the food supply.

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See: FOOD SUPPLY; AGRICULTURE; STORAGE; TRANS-PORTATION; IRRIGATION; FERTILITY RITES; EPIDEMICS; MIGRATION; POPULATION; DISASTERS AND DISASTER RELIEF; IRISH QUESTION; INDIAN QUESTION.

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FANATICISM is the anglicized form of a word which in ancient times was used of priests supposed to be inspired by divinity. This early religious association is still influential in current usage. By the sixteenth century, however, if not long before, the original meaning had expanded to include forms of noisy madness having no religious basis. Shakespeare used the adjective fanatical with reference to fastidiousness in pronunciation. During the sectarian agitations in the seventeenth century immoderate adherents of the sects in England were called fanatics. The term was spoken of as coined for the purpose, and it was thought by at least one writer to have been "well cut out and proportioned to signify what is meant thereby, even the sectaries of our age." Extension of meaning has gone on in this manner until fanaticism has come to denote frenzied partisanship or blind zeal in any cause, whether religious, social or political. A list of examples prepared today would include the conduct of religious leaders like Savonarola and Jonathan Edwards, rulers like Philip II and Cromwell, social reformers of the type of John Brown and Carry Nation, certain practises of ascetics, mystics and dervishes and such emotionally charged outbursts as inquisitions, witchcraft persecutions and lynching bees.

Appearing in various forms fanaticism in its authentic occurrence is the effect of three passional components. The peculiar combination of these distinguishes it from mental and emotional states—enthusiasm, faith, loyalty and the like—of which it is a perversion and from which it differs in psychological structure and social tendency. Of these three components the most obvious is extreme narrowness and rigidity of temper. The fanatic is so excessively convinced of the truth and importance of a certain idea or feeling that every other interest, personal or social, is powerless to modify it. He may be teachable in some matters, but it is impossible for him to learn anything that would dislodge the fixed idea. The end which he selects as supreme, the path he follows to arrive at that end and the quality of the good to be obtained are never open to question. With the declaration "This one thing I do!" on his banner he marches to victory or defeat. Not only does he thus resist all influences to broaden his allegiance, whether they come as inner promptings or demands from without, but he makes a virtue of despising every experience which does not positively further his dominating purpose. If a conflicting fact cannot be ignored, he distorts its significance. Events

impinge in vain upon his adamant conviction. This blind obstinacy suggests monomania. It supports the opinion that fanaticism borders on insanity.

Combined with this intense assurance is an unyielding determination to make the fixed idea triumph over men. The fanatic is not of a meditative temperament. He finds it insufficient to make sure of the deepest truth and to order his life in harmony. He is a man of action, a fiery propagandist, an unresting missionary, ready to consume and to be consumed in the cause of spreading his belief. The doctrinal absolutism of Paul, Loyola, Calvin and the rest was no more inordinate than the unrelenting driving power with which each one of them attempted to subjugate the intellect, desires and will of mankind. No organization or endeavor is immune from fanatical exploitation. The history of political revolutions or of such movements as abolition, prohibition, nationalism, imperialism and industrialism proves how real this danger may be. And in whatever field of action or thought the fanatical sentiment arises, its invariable modus operandi is to push out and absorb other fields. When its origin has been religious, as in the case of Joan of Arc, the Jesuit order, the abolition or prohibition movements, it has intertwined itself with political parties and social forces and has entangled them in the destiny of a religious struggle. If it has developed in an economic or political situation, as, for example, in connection with communism or Fascism, it has proceeded to take over the function and authority of religious institutions or has aimed to dominate them. Regarded solely as a manifestation of propulsive energy fanaticism is impressive.

A trait no less characteristic is callousness to pain. The true fanatic's nature includes a quality of hardness which renders it uncommonly insensitive to human suffering, often to the point of cruelty. In the most developed types this insensitivity becomes a positive desire to cause suffering. The desire is frequently introverted, in which case it leads to self-inflicted torments; but it is also turned outward, mercilessly inflicting pain on others. In religious fanaticism this is motivated by a decided antipathy to the satisfaction of natural human desire. There is always a protestation of high purpose and a display of logic to give the suffering an appearance of being rational and right; but a more basic explanation is the presence in the fanatic's disposition of a deep strain of misanthropy, a strong despisal of human nature. With this maisvolent

attribute in mind Isaac Taylor, in a book of considerable psychological insight published a century ago, defined fanaticism as "Enthusiasm inflamed by Hatred."

Such traits operating in conjunction accomplish results, not infrequently vast results. Some of these are doubtless beneficial. In its total effect, however, fanaticism is inimical to individual and general welfare. Its extreme narrowness of aim, inflexibility and brutal disregard of all values that lie outside the scope of a limited goal constitute it a deeply disruptive force in society. The fanatic's morbid absorption impels him to deny ordinary life interests and to place a high estimate on pathological behavior; compare the compassionate theology of the nonfanatical Pelagius with the ascetic doctrine of the fanatical Augustine or the normal outlook on life of the non-fanatical Phineas Quimby with the abnormal outlook of his fanatical pupil, Mary Baker Eddy. The fanatic is, moreover, abnormally self-centered. Judged by surface appearances his tremendous activity may simulate dedication to a cause, but the deeper motive seems always to be an insatiable, if perhaps generally unconscious, desire for self-aggrandizement. Whether the fanaticism arises out of religion, politics or a class struggle, the fanatic regards himself as "chosen" for the role, and the advance of his cause is inevitably bound up with the vindication of his messianic claims. Humility is as foreign to a fanatic as a sense of humor. Equally antisocial is his unbending self-righteousness. Uncompromising foe of compromise, he places himself and his cause beyond the franchise of other minds. His program, as someone has suggested, is driven into the social structure like a wedge. The way to mutual understanding of differences is closed. Human relations are reduced to unconditional surrender or mutual defiance and the struggle for survival.

While fanaticism may appear in an isolated case it is readily spread by contagion. The extravagant ideas and the enormities of feeling and conduct which characterize it can pass from person to person by imitative repetition. In this way many succumb to the malady who would develop no symptoms of it if unexposed to an infecting source. This is evident at a time of war hysteria or during any group delirium. As a mass expression fanaticism assumes an intensified form. Nor is this only because numbers have a cumulative effect. Two other factors enter. By some susceptibility of human nature individual capacity is raised to a higher power when it

becomes a coefficient of group emotion; and when supported by group symbolism an individual readily drops back into ways of feeling and acting more primitive and wild than are otherwise customary with him. Typical mass fanaticism - - a Spanish Inquisition, a witchcraft persecution, a raceriot—is socially irresponsible, ruthlessly malevolent and enormously powerful. An individual fanatic even of the pronounced type is relatively insignificant from the social point of view if he is unsupported by mass fanaticism. If he grows to heroic proportions as a social force, it is because he proves able to call forth in numbers of his fellows fanatical psychoses similar to his own and to unite these into something resembling a mass ego with himself as the dominating intellect and will. As this takes place, that is, as normal persons who are not psychologically predisposed to become fanatics are affected, fanaticism enters its mature and threatening phase.

The causes of fanaticism are very imperfectly understood. They are doubtless biosocial in nature. Neurological abnormality is evidently at the bottom of pronounced cases, with unhappy environmental conditions supplying the explosive stimulus. All of these pronounced types indicate the presence of strong ambition, especially a yearning to occupy a position of prominence in the eyes of men, an ambition which is frustrated by personal handicaps, accident or the circumstances of life. Usually some inhibiting fear or deep sense of insecurity is present also. Very often there appear to be sex complications, shown in the value placed on mystical love trances or by a surrender to what in all probability are sadistic impulses. Fanaticism thus grows out of serious maladjustment of some sort. It is uniformly a compensatory activity, representing self-realization through a deflected channel. The noticeable defiance of socially approved values and arrangements may be regarded as a blind gesture of resentment against obstacles which were sufficient to thwart desires so strong that they could not be killed nor permanently suppressed.

This interpretation holds in general for the individuals who make up a mass fanaticism. In those instances where lack of information, credulity and already existing dogmatic beliefs are more or less deliberately made use of to develop a fanatical scheme, as in Bryan's antievolution crusade, the underlying maladjustment is less obvious but need be no less real on that account. As a matter of fact normal individ-

uals may find liberation and an enhancement of personal significance in fanatical commitments. In their daily routine these persons carry the weight of what is called civilized life. They are constrained to engage in steady labor, often in spite of strong disinclinations; they must satisfy vigorous natural promptings in socially restricted ways; they are haunted by economic insecurity and are thwarted in the realization of even moderate ambition. In a word, they are held by a system of pressures to a life more or less consciously resented. Submergence in a fanatical experience, whether this is associated with a more permanent program or is merely a temporary orgy, may bring relief. It may enable them to break through a sense of restraint and futility to a sense of liberty, power, accomplishment, dignity. It is of course all too evident that the cause in which they thus invest their energies need have no ameliorating effect on the unfortunate conditions against which they rebel.

In view of the complex nature of fanaticism, no simple remedial measures will accomplish satisfactory results. Intended cure must take cognizance of both psychological and sociological causes. Predisposing psychic causes can be dealt with only by an adequate science of neuropsychiatry. The process of education is implicated. A type of education that encourages credulity and stresses the finality or absoluteness of attitudes and ideals, thus operating to mold an adventure seeking being into a creature of mechanized habit, prepares the way for social maladjustments and irrational commitments. On the other hand, an educational process that positively encourages the experimental spirit in every undertaking and, while placing unique value upon worthy attainment, emphasizes the tentative character of all aims and achievements contributes an important quality to the kind of human living which is unfavorable to the production of fanatics. But an inescapable element of the problem has to do with the reconstruction of social institutions, especially of those harsh economic and social conditions which drive many otherwise normal human beings periodically or permanently into fanatical states and projects.

M. C. Otto

See: BELIEF; INTOLERANCE; PROSELYTISM; REFORMISM; INTRANSIGENCE; PERSECUTION; AGITATION; MESSIANISM; ABCETICISM; CHAUVINISM; INQUISITION; WITCHCRAFT; LYNCHING.

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FAR FASTERN PROBLEM. The roots of the far eastern problem lie in the last decade of the eighteenth century; before the twentieth century opened it had become a recognized potential cause of war. In 1904 the war came, with Russia and Japan the antagonists and China's Manchurian provinces the stake. The victory of Japan solved but one phase of the problem, which while relatively less important today than twenty years ago remains still one of the chief sources of international friction.

Until late in the eighteenth century European influence in the Far East was slight and insecure. The hold on India exercised through the British East India Company was loose and devoid of organic political or economic connection with the homeland. Spasmodic European efforts to open up relations with China and Japan had met with little success. The Spanish and English had failed entirely. The Portuguese had a trading post at Macao on the south China coast, the Dutch had one in southern Japan, Russia was permitted to send merchants to Peking at regular intervals, the Dutch were established securely in the East Indies and the Spanish in the Philippines. After 1720 foreigners were permitted to conduct a limited trade at Canton with the "cohongs" (a few Chinese firms specifically authorized by the Chinese government to deal with foreigners), but they could not enter the city, except a small area at stated intervals. Otherwise the Far East was closed to Europe until the end of the eighteenth century, nor was there any great concern in the West that relations with the Far East were not closer. Such trade with the East as existed was in luxury commodities and while it provided profit to a limited number of individuals it had little effect on the economic and social structure of European countries.

With increasing industrialization in Europe the far eastern stake became a vital one. New markets were essential, and in India and China was half the world's population. Later, new sources of raw materials became essential and Asia offered an untapped supply. Still later, accumulations of capital seeking profitable outlet began to flow to Asia, where a whole continent invited developments in railways, mines, construction and manufacturing. England in the vanguard of industrialization led in these developments; British imperialism was a projection of the needs of Manchester, and British pressure on China was in proportion to the productivity of her textile mills. Similarly the passing of the American frontier and America's enormous development of industry were the signal for an awakening of the United States to potential developments on the western shores of the Pacific.

A mercantilist Europe seeking only an increased export trade encountered few complications; the issue was simply one of compelling first China and then Japan to permit the free entry of foreign goods. Between European powers there was normal commercial competition in discernment of demand and in price and quality of goods supplied. Complications set in only after industrialism had become more highly evolved, after the growth of national animosities in Europe and the exposure of China's vulnerability. Equipped with the wealth which industrialism yielded, armed with the weapons it had fabricated and driven by nationalistic egoism, the Great Powers of Europe entered a race for world conquest. England was in the van. France, recovered from the devastation of the revolution and renewed in ambition with the accession of Napoleon III, resumed its traditional rivalry with England. A unified Germany entered late but with vigor and determination and Russia set out with equal vigor to achieve the mastery of Asia. Toward the end of the nineteenth century Japan by declaring itself a contestant for the stakes of the East disturbed the balance set by European partnerships, a balance entirely destroyed by the subsequent entry of the United States into the contest. The Far East had become a prize of world politics.

The first steps in the process of western aggression were taken by England in the last decades of the eighteenth century. The East India Company was consolidating its hold on India and had farmed out opium as a monopoly, whose proceeds were to be a pillar of the Indian fiscal structure for many years. Easy access to the China market was urgent; but just because opium, declared contraband by China, was playing an increasing role in foreign trade, the

Chinese policy of isolation, growing out of insularity and a sense of superiority as well as disgust with the excesses of individual European adventurers and the clear aim of European governments to conquer, was fortified. Although the opium trade flourished, the English were restricted to the Canton co-hongs and a heavy handicap was laid on all other trade. Two British diplomatic missions to China in 1793 and 1816 failed to secure the opening of formal diplomatic and commercial relations, and in 1839 the dispute came to a crisis when a Chinese commissioner confiscated all the foreign opium in Canton. War broke out as a matter of course (other disputes were also involved) and China was compelled in 1842 to sign the Treaty of Nanking opening five ports to foreign trade and ceding the island of Hongkong to England. The United States and France thereupon secured similar privileges, including a most-favored-nation clause, which was incorporated in a supplementary British treaty in 1843 and became subsequently the ground for numerous encroachments on China's sovereignty. The court of Peking did not regard its obligations with too much seriousness; and a sudden influx of foreigners to Canton led to numerous incidents, one of which precipitated another war in 1856. An Anglo-French fleet sailed up the coast to Tientsin and an expedition to Peking sacked an imperial palace. The Chinese government agreed to permit the establishment of legations at the capital, to open more ports to trade, to make explicit provisions for exterritorial rights, which had been vaguely stated in the earlier treaties, and to fix a conventional tariff of 5 percent. Also Christian missionary work and the opium traffic were legalized. China's helplessness was thus exposed and advantage was quickly taken of it. Russian sovereignty over territory north of the Amur River was recognized. France appropriated Cochin China, established a protectorate over Annam and after another war with China added Tonkin to form what is now French Indo-China. Great Britain occupied Burma, until then a tributary of China.

Meanwhile Japan had come upon the scene, first in one role and then another. Japan had been forced open by the United States, after Commodore Perry's naval expedition had appeared off Tokyo in 1853. Treaties opened two Japanese ports to trade, granted exterritoriality and set a conventional tariff. Although there were incidents, punitive measures and bombardments, on the whole Japan, with greater fore-

sight than China, went out to meet its fate. Less than twenty years after the country had been torn from isolation there began a transformation which placed Japan among the world's dominant nations. Feudalism and the shogunate, which had ruled the country while the emperor remained a venerated but powerless figure in Kyoto, were abolished and the court restored to power. Missions were dispatched to Europe and the United States to study western social organization, the technology of machine production and especially the technique of modern warfare. Railways were built, telegraph lines laid, modern banks established, universal education and military conscription decreed and a constitution adopted. Factories were established and above all a modern army and navy created. Japan's chafing at the derogations on its sovereignty and its imperial ambitions waxed with progress. Its leaders recognized China as fair game and in the eighties became involved in a complicated dispute with China in Korea, which, brought to a head by Japan in 1894, resulted in war and the startlingly swift collapse of China. Japan extracted a large indemnity, recognition of Japanese sovereignty in Korea (a diplomatic formula for recognition of Japanese paramountcy), Formosa and the Liaotung Peninsula on the south Manchurian coast. The last Russia had marked for its own, and now supported by France and Germany it "advised" Japan to relinquish it. In November, 1895, Russia obtained as a reward from China the right to build the Chinese Eastern Railway, a shortcut for the Trans-Siberian Railway across North Manchuria to Vladivostok, to station military guards along the right of way and to exploit mines on both sides—in effect a grant of the territory.

There ensued now the battle of the concessions. Germany obtained a lease on the territory surrounding Kiaochow Bay in Shantung province, Russia on the Liaotung Peninsula (together with the right to extend the Chinese Eastern Railway across south Manchuria to Dalny, thus foredooming the Russo-Japanese War), Great Britain on Weihaiwei on the north coast and France on the Kwangchow in the south. All the Great Powers proclaimed spheres of influence in China—Russia in Manchuria, Germany in the Shantung area, Great Britain in the Yangtze Kiang basin and France in the south. Great Britain was formally conceded the right to name the collector of the Chinese customs, which had been administered by foreigners for a generation. France obtained the right to supervise the

Chinese postal service. Then began financial penetration in earnest on lines already developed in north Africa: invasion by railways, by loans and by concessions for monopolistic exploitation of natural resources. Peking became a morass of international intrigue with diplomats and bankers bidding for the favor of Chinese officials and browbeating them. In the meantime China had been compelled to alienate areas in numerous cities as settlements and "concessions" for the residence of foreigners. These had expanded and developed as commercial centers, drawing off Chinese economic vitality and capital. China made a despairing protest in the Boxer uprising of 1900 but was quickly punished by an international expedition and forced to pay an indemnity of about \$330,000,000. The partition of China seemed imminent, when the United States, having recently acquired the Philippine Islands and an interest in the Far East, entered the arena and in the Hay notes pledged the powers to respect Chinese administrative and territorial integrity and to maintain the Open Door, i.e. equality of opportunity for all trading nations. The pledge was both taken and observed in a Pickwickian sense.

For ten years there had been in progress a diplomatic duel between Japan and Russia in Korea. When Russia now moved to foreclose on Korea, Japan struck out and victorious exacted revenge for the "advice" of ten years before by taking over Russia's rights in south Manchuria. Japan also tightened its hold on Korea and in 1910 formally annexed it, thus becoming a world power and a claimant for far eastern paramountcy. All the races of the East, electrified by this first humbling of a white by a non-white people since Kublai Khan, saw after two generations under the heel of the western invaders a glimmer of hope; the white man's prestige began to fade and a new factor, possibly the most important, was injected into the far eastern problem. Another was injected a few years later when the Manchu monarchy was succeeded by a Chinese republic, which while it has never functioned as such has been a forcing bed for seeds of nationalism now bearing fruit.

The World War opened a new stage in the history of the far eastern problem. The pressure on China was not lifted but its direction changed. With Europe preoccupied elsewhere Japan, an ally of Great Britain, entered the war early and took over Germany's leasehold in Shantung. In 1915 Japan presented its Twenty-one Demands, whereby it would have obtained possession until

the end of the twentieth century of south Manchuria and Kiaochow region. Because of strenuous opposition in China and the tacit disapproval of the United States Japan withdrew Group v of the Demands, which would have made a Japanese protectorate of China, and proceeded in less obvious ways to achieve the same end. It subsidized Chinese political factions with loans and obtained in return mortgages on Chinese national resources and for a time control of the Chinese government. With Siberia disorganized after the Russian revolution and the Bolshevik regime in disfavor with the Allied Powers, a joint Allied expedition to Siberia was arranged. Although it was agreed that each participant power would send only 7500 troops, Japan sent about 70,000 and in addition began to play the same politics with Siberian as it had with Chinese factions. The Armistice, although it came prematurely for her imperialistic plans, found Japan well on the road toward consolidating mastery over all eastern Asia.

The United States, irresistibly drawn toward and then across the Pacific, watched events in the Far East with disquiet and immediately after the Armistice began making its displeasure felt. At the peace conference President Wilson openly and strenuously objected to Japan's demand for the transfer to itself of all German territorial and economic rights in the territory surrounding Kiaochow Bay. Wilson's final acceptance of an informal Japanese promise to return the territory and retain only economic rights was disapproved in China and in the United States, and the Shantung provisions had much to do with the United States Senate's refusal to ratify the Treaty of Versailles. China refused to ratify and there arose in China a wave of virulently anti-Japanese sentiment, culminating in a boycott of Japanese goods. The presence of both Japanese and American troops in Siberia and pointed American inquiries as to when Japan proposed to reduce the number of its troops did not make for harmony. An Inter-Allied Committee was operating the Chinese Eastern Railway and there occurred a succession of conflicts, the Japanese seeking to use the railway to extend political and commercial influence and the Americans seeking to thwart them. With ominous clarity an issue emerged in the Far East with the United States on one side and Japan on the other. On the Japanese side there was a sense of frustration, for which the United States was held to blame. On the American side there was suspicion, anger at the march Japan had stolen on the world during the war and perhaps an unexpressed sense that an area marked by America for future exploitation was being closed.

The impending expiration of the Anglo-Japanese alliance brought the issue within the scope of world affairs and made it both concrete and inescapable. Simultaneously the United States, Great Britain and Japan had entered a naval race. On American initiative a conference was convoked to discuss limitation of naval armament, and on Great Britain's proposal the conference was extended to include political questions in the Far East. Thus Great Britain's choice between Japan and the United States could be merged in other decisions and lose its sharpness. The conference in Washington (November, 1921 February, 1922) was attended by nine powers having interests in the Far East. An agreement was reached setting a limit on the building of capital ships for a period of ten years and fixing a ratio of 5-5-3 for Great Britain, the United States and Japan. No such concrete action was taken, however, with regard to political issues. The cause of international rivalries in the Far East, the system best described as imperialism, was largely evaded or at most dismissed with statements of general principles. Fundamentally Japan's fight to leave the status quo untouched was, with British support on all major issues and without serious opposition by the United States, victorious. China demanded restoration of all its sovereign rights; that is, a nullification of the gains made by the Great Powers during seventy-five years. For this none of the Great Powers showed any disposition. Japan agreed to evacuate Siberia; the return of the Kiaochow region to China was settled; Great Britain and France agreed to return ports leased as naval bases and renounced their spheres of influence; and the withdrawal of foreign post offices on Chinese soil was conceded except for the leased areas. But all the important territorial leaseholds and settlements were retained, as were the privileges of exterritoriality and control of China's tariff. Finally, the nine powers joined in a new declaration of the principles which had hitherto bound them in theory to respect China's integrity. In a separate pact, which superseded the Anglo-Japanese Alliance, Great Britain, the United States, France and Japan pledged themselves to respect each other's rights and possessions in the Far East. This Four Power Pact also provided that no new fortifications or increase of existing fortifications be undertaken, exceptions being made for the Pacific coast of the United States and Canada, Panama, the Aleutian Islands, Hawaii, New Zealand, Australia and the then projected British base at Singapore. Essentially the agreement, by immobilizing Great Britain, the United States and Japan as far as naval bases were concerned, largely immobilized their navies with respect to aggressive action. Thus, while the Washington Conference touched the far eastern problem only in its superficial aspects, it had pronounced psychological effect, allaying tension between Japan and the United States and averting a naval race.

Other forces were in the making, however, which were to dwarf the Washington Conference to the proportions of a minor political incident. Until the World War only the results of the penetration of western military power and finance were to be seen in the Far East. But now the results of the penetration of western ideas and ways of life began to manifest themselves. The establishment of the republic in China had released new influences in the younger generation. The rise of Japan to the status of a world power, western education, the radiations from the foreign cities established on the coast, the movement of the world currents of the nineteenth century, especially the tides of nationalism and democracy, all were producing their effects in the Far East no less than in the Middle East and India. The Wilsonian doctrine of world democracy and self-determination for small nations had in the Far East an effect subversive of the established order. Moreover, the war propaganda of both sides wreaked moral devastation, for each convincingly pointed out the enormities of the other to the eastern peoples whose support they sought. The white man's prestige was fading fast. China's bitterness at the cynicism of the Versailles conference, at which it sat as one of the victorious Allies only to find that part of its territory had been secretly bargained away to another ally, and then its chagrin at returning empty handed from the Washington Conference provided a climax.

Meanwhile Russia had reemerged. The attempts to set up counter-revolutionary governments in Siberia had all been fiascoes. Japanese intrigues and the tactlessness of its military commanders turned Siberian sympathies antiwhite and pro-Moscow. A buffer state, the so-called Far Eastern Republic, was established in 1920 and in 1922 incorporated as part of the Soviet Union. The Soviet Union signalized its reentry into far eastern affairs in a unique manner by formally offering to cancel treaties concluded

between the czarist government and China and to renounce all imperialistic privileges and territories wrested from China. In 1923 Adolph Joffe, Soviet diplomatic representative in the Far East, came to an understanding with Dr. Sun Yat-sen, whose party, the Kuomintang, had overthrown the monarchy and was now remaking itself as the Nationalist party. Joffe repeated the Russian renunciation of imperialistic spoils and stated Russia's recognition of the unsuitability of communism to China. The Soviet Union, however, made only a vague promise about the status of outer Mongolia, which it was then and still is occupying, and also stipulated that its joint rights in the Chinese Eastern Railway be safeguarded. On this basis what was tantamount to an alliance was concluded. In the autumn of 1923 Michael Borodin was sent from Moscow to Canton as an adviser to the Nationalists with a group of Russian officers who helped establish a Nationalist military academy. Most of all, the Russians taught the Chinese to organize and spread propaganda and by 1926 a wave of Nationalist, anti-imperialist propaganda had swept the country. On its heels came the Nationalist armies, which early in 1927 held practically all China south of the Yangtze Kiang. The rallying cry of the Nationalists and their army was "Down with Imperialism"; their program was the cancelation of all the "unequal treaties." Antiforeignism was rampant; and although actual attacks on the persons of foreigners were few, foreign treaty rights were openly flouted. In March, 1927, after the capture of Nanking by the Nationalists there came the openly organized assault on foreigners and a number were killed, provoking Great Britain and the United States to send "defense forces" to Shanghai. The situation was explosive, but passed before a fuse was actually lighted.

What diplomatic requests at Versailles and Washington had failed to achieve force had achieved quickly, and the foreign position was shattered. Some elements in all the Great Powers would have welcomed intervention in China and the imposition of a "benevolent trusteeship." But there was little public response; public treasuries could ill support necessary armies of occupation and military administrations and responsible governments had to confess their helplessness and watch hard won spoils drifting out of their possession. Making a virtue of a weakness they issued statements recognizing the justice of China's "legitimate aspirations." They did nothing, however, to implement this recog-

nition and the crisis was escaped by a new development.

Despite Joffe's statement that China was not ready for communism, a Chinese Communist party had sprung up and allied itself with the Kuomintang. It was conducting an active propaganda, and the Communist leaders threatened by 1927 to become preponderant in the councils of the Kuomintang. In that year the Communist wing, with Soviet encouragement, made a formal effort to obtain substantive control of the Kuomintang Central Executive Committee and the break came. The Russians were evicted and the party formally severed relations with the Chinese Communists. Late in December, 1927, after an abortive Red coup in Canton, for which the Nationalist government at Nanking elected to blame Moscow, relations with the Soviet Union were broken, all consular and diplomatic representatives deported, and there began an intensive drive against Chinese Communists, including wholesale proscriptions, which drove them underground. The halt in the antiforeign campaign caused by the split in the Kuomintang was only temporary. In 1928 the Nationalists resumed their military drive, captured Peking, the capital and seat of the foreign legations, and again became peremptory. Military success was recognized by the relinquishment of foreign control over the Chinese tariff, the United States taking the lead in negotiating a new treaty. In January, 1930, China officially abrogated the right of exterritoriality. It did not, however, put the decision into effect and a few of the powers insisted on postponement or graduated abolition. In actual practise, except in the area occupied by foreign troops, the Chinese were taking jurisdiction by force majeure. In short, while vestiges of imperialistic control in the old form survive they do not function. The liquidation of all of them except the International Settlement of Shanghai, which will for a time remain a lone outpost of foreign aggression, seems near at hand.

Manchuria is still in a state of political, economic and social solution. Japan retains its leasehold of Kwantung on the Liaotung Peninsula, where it has developed Dairen into a great port and industrial center, as well as control of the South Manchuria Railway, economic suzerainty over all of south Manchuria and an unofficial but effective veto power on political action by Chinese authority. The Soviet Union has reasserted itself once again in north Manchuria, after being eliminated unofficially but completely from

Harbin and from the railway, despite the agreement of May 31, 1924, whereby the Chinese Eastern Railway had been restored to joint Soviet-Chinese management (China having an active voice in contrast to pre-war years). Chinese procedure in general in China proper as well as in Manchuria has been slowly to push the foreigner out while preserving juridical appearances. In north Manchuria emboldened by success it resorted to direct action, suddenly seizing the railway in May-July, 1929, deporting some Russian officials and arresting others. A Soviet punitive expedition compelled China to restore the status quo pending negotiations for a definitive statement of future relations.

There is every indication that the controversy is being taken out of the area of politics by virtue of Chinese mass emigration from the crowded and impoverished northern provinces inside the Great Wall to the undeveloped but fertile Manchurian plains. It is estimated that between 1925 and 1930 from 500,000 to 1,000,000 Chinese have gone north every year in what constitutes one of the significant and dramatic mass movements of recent times. They are establishing themselves on the land, in the towns and in the new towns arisen as a result of Russian and Japanese development. They are going into business, establishing factories, mills, modern banks and trading houses and seem in a fair way to capture the Chinese market proper. Most of all, they are building railroads. Since 1925 Japan and China have engaged in a railway war in Manchuria; Japan aims to drain off Manchurian products to Dairen via the South Manchuria Railway and China to draw them off into China proper, either to Tientsin, via the Peiping-Mukden Railway or to a new port planned for Hulutao. Again China is reversing the process which the aggressive West used against it before. Whereas the powers were content to leave China juridical sovereignty over its territory so long as they could by economic and financial controls wield real hegemony, now Japan is being left with juridical control of south Manchuria while China is proceeding to rule it economically. While Japan has adopted diplomatic policies based presumably on its need of an outlet for surplus population, in twenty-five years only about 200,000 Japanese have gone to south Manchuria. Whether Japan will be able to resist the constricting pressure of the Chinese mass, unlike all other peoples which have come into contact with the Chinese on their own soil, is highly problematical. Had the Chinese remained in a

state of handicraft production, economically decentralized, Chinese settlement of Manchuria would have given Japan a source of raw materials and a populous market. The prospect now is that Manchurian orientation will be toward China proper, economically and therefore politically.

The population question in Japan is only an ancillary phase of the far eastern problem, but it is a phase which provides an added element of friction to the contest between the United States and Japan over the future of China. Like all other Asiatic peoples, Japan has always bred beyond means of sustenance. With the annual excess of births over deaths estimated at over 800,000, the Japanese have sought the usual outlet through emigration. Since all the countries in the Pacific basin have been closed to Japanese immigrants by the Gentleman's Agreement with the United States in 1907 and congressional enactment in 1924 and by similar action on the part of Canada, Australia and New Zealand, there appears to be no solution for Japan's population problem save such as industrialization offers, with exports to pay for the necessary purchase of foodstuffs abroad. This in turn is dependent on the tenor of Japanese-Chinese relations, since the Asiatic mainland is the logical outlet for Japanese manufactures. Japanese policy from its rise in 1894 until after the Washington Conference was aimed at assuring this market to itself by conquest or at least domination. The result was a ferocious hostility in China: wherever a choice was possible the Chinese bought from anybody but Japanese. The diminishing power of the Japanese military party, a survival of the old feudal classes, has enabled the new commercial and financial classes to make themselves felt. With occasional intervals of relapse to the older policy Japan has pursued a line of conciliation since the conference. If good will prevails between Japan and China, Japan may find an outlet for its industrial products and a secure foundation for its new social and economic structure. It will not have a monopoly over China's natural riches or command its market. Like all other great powers which once had ambitions for mastery over China it will lose such advantages as inhere in monopolistic control. But these are dubious when compared with the development possible only under native autonomy. Japan will buy and sell in open competition. It will have the advantage over other countries which derives from geographical propinquity. An industrialized

China will buy more, not less, from Japan, since its demands will be increased by a more complex economic organization. It will be, as no materially undeveloped land can be, a market for heavy manufactures as well as cheap consumer's goods. That way, perhaps, lies not only peace between China and Japan but the elimination of the Far East as an area of international conflict and ultimately war.

There is more to the far eastern problem than China, but all other aspects are dependent; the trend of each will follow the magnetic drift of what happens in China and between the Great Powers and China.

The far eastern problem has evolved now into a general social rather than a diplomatic question; it is less a matter of imperialist politics than of broad social trends. The subtle phase of imperialism introduced with the development of economic and financial penetration passed with the emergence of nationalism in the East. The East has regained its political integrity at the price of losing its cultural identity. The West has lost its political control of the East as the result of a cultural triumph, the westernization of China and Japan. And the future disposition of forces in the Far East, the relation of the Far East to the whole world and of the component parts to one another, hang on the outcome of this westernizing trend.

Japan's pre-war transformation was exterior only, industrialism being superimposed on a feudal social structure. Only since the end of the World War have the full implications of industrialism made themselves felt. Only recently has an urban proletariat been formed and the labor problem begun to fester. Feudal loyalties and the harmony of the old system are shattered; the perquisites of the upper orders are challenged for the first time; class consciousness is growing as it has in the West. These disruptive forces are intensified with every year and their pressure is slowly compelling a ruling class to yield, as with universal suffrage and labor's right to collective bargaining. In other words, despite the rapidity of its transformation after 1870, Japan is only now beginning to feel the full influence of westernization. But whereas Japan succeeded in establishing a basis before starting on its transition to the new order, China did not. China is literally in flux, having cut itself from its past more deliberately and remorselessly than Japan, resolutely determined to make itself over on the modern pattern of mechanization. The dislocations of the new order are already manifest: there

are a labor problem, an industrial slum, a budding capitalist class, class conflict. Added to these are the results of the progressive sterilization of the old economy of handicraft production before the more virile and effective factory. With its old bases undermined before new ones have been laid, China's whole structure is swaying, as the breakdown in government, civil wars, banditry and general social ineffectiveness indicate. Nor has the break of the Kuomintang with Russia eliminated communism in China.

So long as unchanging economic conditions left China socially static there was no social problem to be reflected in political controversy. But with the first consequences of the introduction of factories and the disruptive effects of western ideas, submerged social discontents have come to the surface. Communist propaganda was not wholly exotic and its seeds fell on fertile soil. Since the World War there has been a growing element in China which has felt that the evils of industrialism, as manifested in the West, can be dealt with only by prevention. It does not want China to go through the cycle that Europe and America have followed since 1800. Part of this element lent sympathetic ears to Russian propaganda and went over wholly to the communist cause. A still larger part, among whom Sun Yat-sen must be included, refused to accept the whole of Marxist ideology. While accepting the principle of social control, it rejected economic determinism as the exclusive social motive force, the class struggle as the only way to solution and the dictatorship of the proletariat as the only instrument. There is another element which, repelled by the excesses following on the gulping of communist propaganda by illiterate masses in 1926, recoiled against any program of social control. While China is not yet sufficiently adapted to western political organization for ideas and programs to express themselves clearly in parties, the conflicting schools of thought are reflected in the political struggles which delay unification. Most of what is called communism in China is not programmatic or reasoned. It is rather an inarticulate protest against the cumulative suffering of the last twenty years. Communism has given it phrases to which to attach itself. But even if Russian communism were completely eliminated, social inequalities would continue to manifest themselves in political struggle.

There can be no real stability in the Far East until China has completed its transition or definitely failed. Whether China is to break up and

fall a prey to stronger powers or, rising to new heights of power, is itself to help reshape the whole world is conjectural. What remains a constant factor in world politics is that the Chinese, numbering almost one quarter of the world's population, are even today sufficiently vital so that they are expanding over Asia, north into virgin Manchuria, south and east along the coast as far as India. Everywhere from Canton to India whites rule somnolent native peoples, while Chinese direct economic life. They are the small traders in distant outports, the merchants, bankers and of late the factory owners in the cities. Should China be revivified by the dynamic of the machine it will once again share the mastery of the world. This will not, however, come about in the manner once visualized. The Chinese nation will not overrun the world by sheer displacement, by the lava flow of the excess of a population which reproduces at a rate beyond that of other peoples, especially the European races. While the application of science in China will tend to reduce the death rate, the creation of a literate urban industrial population with a higher standard of living and access to medical knowledge, including that of birth control, will tend to reduce the birth rate. The family system and the veneration of ancestors, which have been the moral and philosophical stimulus to large families, are already losing their compulsions. The curve of population in China as elsewhere will flatten. Machine production and preventive medicine will leave the Yellow Peril a figment of journalistic imagination. If China becomes a decisive force in the world, it will be because what is normally the largest race in the world, situated on a rich continent, has acquired the new instruments of power and wealth. But when it enters into the world exchange of commodities it will be as seller no less than as buyer. Western premises of unlimited industrial expansion by filling up the vacuum of the undeveloped parts of the world, which incidentally would remain each a continuing vacuum, must be drastically revised. While China's 400,000,000 people constitute the world's greatest unexploited market, Chinese manufacturers, merchants and bankers will exploit it themselves, making their own cheap products and with them also entering world competition. This is not to say that the industrialization of the East will not be an economic advantage to the West. Benefit will come not from continued increase of western exports as in the nineteenth century but in a wider diversification of exchange after the in-

dustrialization of the East is completed. The first stages will be costly to those countries whose economic structure is based on dumping of cheap products in such lands. For example, the growth of the textile industry in China and Japan and India has since the beginning of the twentieth century shattered beyond repair what was in the nineteenth century the basis of English economic supremacy, the export of textiles. As this process goes on, Great Britain will suffer from compulsory economic reorganization following from the scaling down of one of its principal industries. This fact takes on momentous significance when it is remembered that the West has already reached a stage in industrial development where overproduction threatens to become a chronic ill. It is a conclusion which follows inevitably from the rise of the modern western world with its need for new markets and its ability to seek them out through new means of communication; it follows automatically from the Treaty of Nanking in 1842, which broke China's isolation.

NATHANIEL PEFFER

See: Chinese Problem; Imperialism; Europeanization; Nationalism; Industrial Revolution; Intervention; Optum Problem; Commercial Treaties; Exterritoriality; Spheres of Influence; Open Door; Concessions; Forlign Investment; World War; Limitation of Armaments; Oriental Immigration; Communist Parties.

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FĀRĀBI, MUḤAMMAD IBN MUḤAMMAD IBN TĀRKHAN ABŪ-NASR AL-(c. 870-950), Mohammedan philosopher and political theorist. Of Turkish origin, al-Fārābi studied in Bagdad and afterwards resided in Damascus. He was known especially for his commentaries on Aristotle and other Greek writers and was a significant figure in the history of Moslem scholasticism. In several works he tried to reconcile the philosophies of Aristotle and Plato.

Al-Fārābi's political speculations are contained in a pamphlet on civic government, Assiyāsatu-l-madiniyyatu (tr. into German by F. Dieterici as Die Staatsleitung, ed. by P. Brönnle, Leyden 1904), and another on the model city. Risāla fī arā' ahl al madīna al-fādila (ed. by F. Dieterici, Leyden 1895, and tr. into German by him as Der Musterstaat, Leyden 1900). These treatises cover much the same ground; they deal largely with theology, physics and physiology. He regards the ideal city as an organism or hierarchy analogous to the human body; the sovereign, who corresponds to the heart, is served by functionaries who are themselves served by others, until a lowest class is reached which only serves. The sovereign should be perfect both morally and intellectually; and should no one man possess all the necessary qualifications, the sovereignty should be shared by as many as will together satisfy the requirements. The ideal city is one wherein the object of the association is the happiness of its citizens; this can be realized only when the soul is freed from the body. The inferior cities follow other aims, such as pleasure, wealth, victory, honor and liberty.

These speculations are reminiscent of Plato's Republic and Aristotle's Politics but by no means reproduce those works; indeed, al-Fārābi is unlikely to have understood them, since he had had no experience of republican government. Hence his cities seem purely imaginary, and he can adduce no illustrations either from the cities

of his own world or from those of ancient Hellas. His analysis of the virtues and talents which a sovereign should possess may have influenced later political speculation by Islamic writers, whose analyses are much the same.

DAVID S. MARGOLIOUTH

Consult: Carra de Vaux, B., Baron Avicenne (Paris 1900) p. 91-116; Macdonald, D. B., Development of Muslim Theology, Jurisprudence and Constitutional Theory (New York 1903) p. 162-65.

FARM. There are several current ideas, more or less conflicting, as to what constitutes a farm. The term itself derives from a verb meaning to lease and indicated originally any plot of land leased, and by extension any plot of land used, for agricultural purposes. The varying connotations which the term has had in different countries and periods furnish an interesting commentary on changing agricultural situations and ideals.

A farm is defined by the United States Census of Agriculture as: " . . . all the land which is directly farmed by one person, . . . either by his own labor alone or with the assistance of members of his household or hired employees. ... A 'farm' as thus defined may consist of a single tract of land or of a number of separate and distinct tracts, and these several tracts may be held under different tenures, as where one tract is owned by the farmer and another tract is hired by him. When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a 'farm.'" In some parts of the United States, more especially in the west, the word ranch is often used in place of farm, as in speaking of a chicken ranch. A ranch in the strict meaning of the word, however, is a range or large area, not necessarily enclosed, used for the raising of livestock by grazing. Another familia type of agricultural unit, the plantation, differs from a farm largely in its considerable size and the fact that it is operated as a single unit with respect to the crops grown, to the methods of control of labor and to the disposition of products.

These distinctions, however, are being slowly obliterated through changes in the nature of farming of all types. But in spite of the difficulty of definition one can outline the characteristics of the typical farm in different countries and periods. Farms in America, although they vary greatly as to type of production, size, tenure, amount and kind of labor employed and machinery and equipment used, have certain things

in common. For the most part the business organization is of the simplest sort, the function of management and ownership being combined. Farms operated by hired managers, or corporation farms, are still uncommon. Land, not labor and capital, is the most important factor of production. Practically all farms are to some extent self-sufficing; most of them supply a part and often a large part of the food, feed, labor and power needed in their operation. The size of the business as measured by the volume of sales and purchase is small.

In an attempt to characterize the typical American farm writers have frequently used the term family farm. This concept, however, has no precise meaning. To some it connotes the size of farm which will maintain the farmer and his family in accordance with the existing standard of living; others hold that it is that size of farm that will give full employment at productive labor to the farm family. Still others hold that the family farm is one of such size that the family does most of the work with some hired labor. It is recognized that the size of the family farm will vary according to the kind of people, standard of fiving, type of farming, topographical and climatic conditions. In some areas, notably on irrigated projects, the family farm may be a farm of very few acres, while in some localities such as the corn belt it may be as large as 160 to 320 acres. In other sections of the United States, especially in the semi-arid regions, it may involve several sections of land. Moreover, the family, the basis of the family farm, is constantly changing in size. The concept of family farm is therefore somewhat nebulous, but as an ideal it has had wide appeal.

The typical American farm differs in several important ways from English and continental European farms. In England the typical farm is tenant operated not owner operated. These tenant farms are comparatively large. Moreover, in contrast with America, where the owner himself assisted by his family does much of the farm work, in England the farm is more often operated by hired labor. The objective of the English tenant farmer is not ownership, but rather security of tenure. The chief reason for these differences is found in the relative abundance of cheap fertile land in America especially until about 1900 and the relative scarcity of land in England together with the fact that land in England early became an attractive investment for individuals and corporations; later, when farming became less remunerative, there was a desire

on the part of the rich to own land because of the social prestige that its ownership conferred. In America land has never been an attractive investment and ownership does not carry with it any social distinction.

In continental Europe a large proportion of the farms are operated by peasants. The farms are small and operated without the aid of hired iabor. In this latter respect the peasant farm of Europe is not unlike the typical American farm. Normally, however, it is much smaller and much more intensively cultivated than is the usual owner operated farm in America or the tenant farm in England. This is due largely to the relative abundance of cheap labor and the scarcity of land and partly to the laws and customs of inheritance which result in the partitioning of the land. The peasant farmer does not use modern machinery to any marked extent, although its employment has increased in recent years. Unlike the typical isolated American farm the peasant farms of Europe are usually clustered in villages, and many of the common rights of the manorial system are still in existence. It should not be understood, however, that all farms on the continent are small peasant farms. On the contrary, there are many large capitalistic farms, for in Europe as in America farming has been affected by recent developments in technical practises and improvements in farm machinery. In Soviet Russia the word farm is rapidly taking on entirely new meanings.

Neither should it be understood that tenant operated farms are an anomaly in the United States. In spite of the relative abundance of free land tenancy existed to a considerable extent even in colonial days, especially in the older settlements. Following the Revolutionary War tenancy became relatively less important. The federal government undertook the acquisition of a vast public domain which was used in the development of a class of landowning farmers. Tenancy, however, did not disappear and indeed since 1880, when the first census of tenancy was taken, has increased steadily.

The peculiar characteristics of pioneer farming, more especially the element of self-sufficiency which still exists to a certain extent, have led some to characterize farming as a mode of life. With the growing commercialization of agriculture this characterization has become, however, inadequate. Modern farming is as much a business as a mode of life. While the typical farm is still small and to a considerable extent self-sufficing, some farms today are producing

large quantities of products for sale and buying considerable quantities of seed, feed, fertilizer, machinery and other products annually. Furthermore, even if the sales and purchases are small, the organization and operation of the farm is necessarily affected by external economic forces, especially those that determine the price of the products which the farmer sells and the cost of the goods which he has to purchase. It is more appropriate therefore to consider farming in general as a quasi-business or a quasicapitalistic enterprise. The shift from the early self-sufficing to the modern quasi-commercial type of farming led to much disequilibrium and raised many problems.

In recent years the advance made in the technique of production and the increasing adaptability of farm machinery to practically all types of farming have tended to make the size of the farm an outstanding problem. Certain agricultural economists believe that the family farm must give way to a larger unit; in other words, they believe that the size of the farm is generally too small for maximum net returns, and their efforts have been concentrated in bringing this idea to the attention of farmers. In the United States the original size of the farm was determined not alone by economic conditions, but largely by legislation. For example, the 160acre farm common in the middle west is the outgrowth of the Homestead Act of 1862. It is now generally realized that in many areas 160 acres is not the most economical unit and that a much larger size should be the objective of most farmers. In areas where the land is level or gently rolling it is possible with the aid of modern machinery to cultivate several thousand acres profitably. Competent authorities have stated that in the corn belt, for example, the most economical unit is from 1000 to 1200 acres of land. Whether or not farms will generally become larger will depend on the executive ability of farmers and their opportunities for acquiring the necessary land and machinery. It has been estimated that such large farms will involve capital investment varying from \$50,000 to \$500,000.

Since the World War economic conditions, especially in the United States, have tended to emphasize the necessity of enlarging the size of the farm. The discrepancy between the price of farm products and the price of productive factors has emphasized the necessity of producing farm products at a much lower unit cost, and one of the methods of reducing unit cost is to

enlarge the size of the farm and engage in more extensive farming. The migration of farm population to the city has left the farmer without an adequate supply of cheap farm labor; this has tended to encourage him to use modern equipment which can be more successfully operated on large farms, and the financial difficulties which many farmers have experienced during the present depression have made the enlargement of farms more feasible and desirable. During the war and post-war periods many farmers fell heavily into debt. And when the collapse in farm prices occurred in the early part of 1920, many of these farmers found it impossible to meet their financial obligations and have since been forced to relinquish their farms to the mortgage holders, who are as a rule large mortgage or insurance companies. These companies are confronted with the problem of the disposition or use of such farms. Many farms are therefore for sale and are being purchased and combined into large operating units, while those retained by the mortgage companies are in some cases being operated in much larger units.

The corporation farm, however, is not likely to displace to any marked extent the small owner operated farm or family farm. In many sections of the United States the climatic and topographical conditions are decidedly unfavorable to the use of labor saving machinery. Not infrequently machinery cannot be used extensively because of the peculiar character of the crops grown. Often the labor available cannot without considerable training handle the type of machines best adapted to large scale farming. Finally, the small farmers can obtain through cooperative effort many of the advantages now possessed only by large corporation farms in buying and selling and in the use of machinery and equipment. For these reasons competent agricultural economists do not believe that revolutionary changes in the type of farm will soon take place in America. They are even less likely in the more stable agricultural communities of Europe. Whether or not the farm will maintain and perhaps increase its self-sufficiency as a producing and consuming unit or will be drawn ever further into the commercial system is more difficult to predict.

G. W. FORSTER

See: AGRICULTURE; PLANTATION; LATIFUNDIA; MANORIAL SYSTEM; PEASANTRY; LANDED ESTATES; FARM TENANCY; LAND TENURE; DRY FARMING; RECLAMATION; IRRIGATION; HOMESTEAD; LAND SETTLEMENT;

FARM MANAGEMENT; FARMERS' ORGANIZATIONS; RURAL SOCIETY; COUNTRY LIFE MOVEMENT.

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FARM BLOC, UNITED STATES. The Farm Bloc, insurgent and bipartisan, which arose in the Sixty-seventh Congress at the beginning of President Harding's administration, was the most significant political bloc which has yet operated in the United States.

Sporadic political agrarian movements have been numerous in American history; there had even been in the period from 1900 onward a loose and shifting grouping of congressmen interested in agrarian relief, but it was not until 1921 that a definitely organized legislative farm bloc came into existence. The movement, although aided by southern Democrats, was western in inspiration and grew out of the desire of senators and representatives from the agrarian regions to obtain remedial legislation. The economic consequences of the World War had brought about a depression in agriculture that ruined many farmers and placed many more on the verge of bankruptcy. Farm lands suddenly sank in value, the wages for farm labor rose, while the markets diminished and the prices offered for farm produce fell. Although it was pointed out in many quarters that the farmers' plight was but an aggravated aspect of a general slump, the agriculturists took the view that their situation demanded special consideration. Since improvement was looked for through the extension of cooperative marketing and of proper rural credit facilities, for which government aid in the amendment of laws and the appropriation of public funds was considered essential, the farmers looked to politics for the redress of their wrongs.

The Republican grain growers first supported Frank O. Lowden, working for his nomination

in the Republican party convention of 1920. Some of the western farmers regarded the organization of a third party as a better solution, but the vote polled by the Farmer-Labor party in the 1920 election was barely 1 percent of the total popular vote and the increase in later elections was not impressive. Expectation then centered upon the dominant Republican party: within its arena the western grain grower and allied agrarian interests would have to meet the eastern manufacturer and the business man. The recovery of power by the Republicans in 1920 meant a rivalry of urban and rural factions within the party for the adoption of policies basically opposed. Neither side was pleased with the arrangement, but in this situation the leaders of the grain growers of the northwest held the strategic position; they found allies in the agricultural leaders from the far west and the lower south. Thus a sectional alliance was created upon the basis of the common economic demand for agricultural relief. To the furtherance of this cause party ties were for the time being forgotten.

The Farm Bloc was actually formed on May 9, 1921, at a meeting of twelve senators held in the Washington offices of the American Farm Bureau Federation. In the Senate it came to be comprised of fourteen Republicans and ten Democrats. In the House the bloc organization was not so clearly defined. Although about one hundred representatives frequently acted together upon farm questions irrespective of party ties they could hardly be compared exactly with the group in the Senate. The organized legislators worked in close harmony with the organized farmers, who lent their active support and counsel through the American Farm Bureau Federation, the National Grange, the National Board of Farm Organizations and similar agencies.

It is impossible to state precisely all the bills enacted through the influence of the Farm Bloc. Senator Capper, the leader of the movement, lists those measures passed while the group was organized as follows: an amendment to the Farm Loan Act, increasing the capital by \$25,000,000; an amendment increasing the Farm Loan Bond interest rate to 5½ percent; an act to prevent gambling in grain futures; an act placing the great packing houses under the general supervisory and regulatory power of the secretary of agriculture; the prolongation of the powers of the War Finance Corporation; a measure providing for cooperative marketing facilities; and

an amendment providing for a representative of agriculture on the Federal Reserve Board.

Senator Capper stated that the bloc "undoubtedly speeded the progress toward better marketing and more justice in the distribution of the consumer's price between the producer and the distributor." The bloc at least forced the administration to consider the problems of agriculture, as in the national conference on the subject called by President Harding. Its success was achieved in the teeth of opposition from the "old guard" within the Republican party. Measures initiated by the bloc were later pointed to as achievements of the Republican party and the administration took credit to itself for them. Moreover, the business interests within the parties, unable to secure passage of their own measures, curbed the more radical tendencies of the farm group. Having secured certain palliatives, the Farm Bloc ceased to function as an organized entity. It met with reverses in both houses of Congress in 1924 and the presidential election of that year demonstrated the hopelessness of a third party. West and south failed to cooperate upon the schemes for farm relief projected in the sixty-ninth Congress. The immediate urgency of an economic crisis once passed, traditional party lines reappeared. Sectional differences among the agrarian interests again loomed large and the western farmer turned definitely to the Republican party, looking for relief through adjustment of the tariff and through schemes of price stabilization by the federal government.

The Farm Bloc served to emphasize the key position held by the western grain growers in the partisan alignment in the United States and to indicate the far reaching changes that might be brought about through an alliance of the west with the south. The bloc as a political instrumentality derived peculiar importance in this case from the fact that the economic interests represented were identified with definite sections dominated by a particular interest—agriculture. The history of the Farm Bloc indicates, however, that the bloc is not likely to emerge until the compromise of sectional demands within the political party fails and economic conditions render the need for special remedial action acute. The bloc remains under the presidential system a potential weapon useful only in extremities and then only for limited definite ends.

E. Pendleton Herring

See: AGRARIAN MOVEMENTS, section on United

STATES; BLOC, PARLIAMENTARY; FARMERS' ORGANIZATIONS; FARM RELIEF.

Consult: Capper, Arthur, The Agricultural Bloc (New York 1922); Holcombe, A. N., The Political Parties of Today (2nd ed. New York 1925) p. 312, 370-80; Herring, E. P., Group Representation before Congress, Institute for Government Research, Studies in Administration (Baltimore 1929) p. 122-24; Brown, G. R., The Leadership of Congress (Indianapolis 1922) p. 264-73.

FARM BUREAU FEDERATION, AMERI-CAN. This organization is one which in several important respects is markedly different from all other general farmer organizations, for it developed directly out of the activities of the educational extension forces of the state and nation. Those who unwittingly laid the foundation of the Bureau had no thought of starting a widespread farmer movement designed to promote and foster business undertakings, to shape and guide legislation pertaining to agriculture or to pry into such subjects as the tariff and taxation. The basis of the organization consisted of the county forces, committees or bureaus back of the county agricultural agent system which had grown up so rapidly and so powerfully just before the outbreak of the World War, and which during the war years under the stimulus of emergency food needs became all but universal the country over (see Extension Work, AGRICULTURAL).

The county agent at first had no other purpose than to bring to the farmer the results of scientific study and by contact and demonstration to induce him to use such information in the most practical way. These agents, originally responsible to the United States Department of Agriculture and the state agricultural colleges, were in many parts of the country soon supported largely by local groups of farmers and often by local chambers of commerce. Such county bureaus or committees had even before the war begun to take an active part in the work of agricultural improvement directed by the county agent. In some states, notably West Virginia, appointment of a county agent was made contingent on the organization of such a county bureau. The acceleration of this movement gave to the farmers of the country a new and much coveted weapon—a really nation wide series of organizations which could be brought together under a new head and for new purposes. Before the end of the war the county farm bureau leaders in several states had formed more or less coherent state organizations. The first such

State Federation of County Farm Bureau Associations was organized in New York in 1917; a second appeared in West Virginia in the same year and others followed rapidly. The only manifest purpose of these state organizations was the obvious one of promoting and systematizing extension work. But since they ostensibly possessed unused powers, it was not strange that someone should suggest a national organization of these state farm bureaus, as they were beginning to be called. In 1919 the president of the New York Federation called a meeting of the state bureaus then in existence. Twelve states were represented at the meeting held in February in Ithaca, New York, at which the preliminaries of the farm bureau organization were provided for and a meeting was called to convene in Chicago in November.

The Chicago meeting was not a peaceful one, for there appeared wide differences of opinion as to the main purposes to be accomplished by the new organization. The possibilities of such a nation wide organization of farmers had in the interval been more fully realized by militant agrarian leaders. In the east especially and to some extent in the south and west a sentiment prevailed favoring a broad educational program. But the middle west stood for an aggressive business program, the backbone of which appeared to be a renewed and general advancement of cooperative marketing, coupled with a militant legislative campaign. The outcome was a compromise which could easily be interpreted as a triumph for the middle western group, since to give aggressive marketing a place on the program was tantamount to placing it ahead of any social and educational program which could possibly be formulated. Just as even the Grange subordinated its social program to economic interests during its most aggressive and spectacular period, 1872 to 1876, so for several years the Bureau put its whole energy into marketing and legislative propaganda. In more recent years its efforts have been rather more symmetrically balanced among broad interests, yet clearly its primary purpose is economic.

In the first few years of its existence the membership of the Bureau increased with remarkable rapidity. It was claimed, and on good authority, that it was over a million (1,200,000) in 1921. The official reports do not account for such a number, but there are frequent instances of delinquent payments by the county bureaus to the national organization even though the members have paid. Thus there is a bona fide

membership somewhat larger than that shown by the receipts of the national Bureau. Since a membership includes the paying members' family, the Federation has been computed to represent three and a quarter times the number of its individual members. In 1921 the budget of the national organization was over \$300,000, while that of the Illinois Farm Bureau was over \$400,000. In Illinois the dues were \$15 per member; in a few states they were \$5, but the more usual figure has been \$10. Out of these fees the national organization ordinarily received half a dollar, the state about \$3.50, the local \$6. No other farm organization, except possibly the Non-Partisan League, has ever had so much money to spend. Apparently feeling that farmer organizations in the past had made the mistake of paying officers and employees too little the Bureau has had a long list of officials receiving salaries of from \$10,000 to \$15,000 a year.

The activities of the Bureau during the first few years after its organization were directed mainly to congressional lobbying and to efforts to start big cooperatives. The lobbying was ably done, and several important bills relating to credit, marketing and other subjects were engineered through Congress. But the main effort of the Bureau went into the formulation and launching of cooperative undertakings, most important of which was the ill starred United States Grain Growers, Inc. The plan for this organization was elaborate, and much money was spent in its preparation, but it had been planned by people with too little experience in the marketing of grain and it virtually never started. The experience of the Bureau in its other all inclusive marketing ventures was not flattering, but in less spectacular ways it has been influential and effective in promoting cooperative marketing. Cooperative marketing of wool and livestock has been especially successful. The Bureau also played a real part in the organization of many dairy cooperatives and of cooperatives for the buying and selling of farm supplies.

Rather tardily the Bureau joined the ranks of the supporters of the McNary-Haugen Bill, but in general it has not been a radical body. In 1929 and 1930 it did much effective work in connection with the schedules of the Hawley-Smoot tariff act. For several years the Bureau has inspired studies of taxation in its relation to the farmers, showing most commendable leadership in this field. It has aided notably in college ex-

tension work in several states, especially in Iowa.

Some question arose in the early years of its organization regarding the relationship of the Bureau, and especially of its local units, with the state appointed county agents. A fairly clear understanding was finally reached and embodied in a memorandum signed by the head of the Farm Bureau Federation and the director of the States Relations Service of the Department of Agriculture. According to this the county agent might advise the Bureau in the development of agricultural programs, as he would advise any other farmers' organization; but as a semipublic agent he could not withold similar service from non-members of the Bureau. Many local bureaus continued, however, to rely upon the county agents for effective leadership. Local and state farm bureaus also continued to cooperate in defraying the expenses of county agents and a distinctive feature of the Farm Bureau Federation has been its aggressive advocacy of extension work.

In 1931 the Bureau was the third farmer organization in size in the United States, having a membership of about a third of a million paying members. Its main strength is in the middle west, the leading states in membership being Iowa, Illinois, Ohio, Indiana; outside of this group it is strong in New York and California. The Bureau has worked amicably with the Grange, but in some states clashes with the Farmers' Union. In general its policy has been aggressive but cautious, and it clearly has stood midway between radicalism and conservatism.

B. H. Hibbard

See: Extension Work, Agricultural; Agrarian Movements; Farmers' Organizations.

Consult: Kile, O. M., The Farm Bureau Movement (New York 1921); Wiest, Edward, Agricultural Organization in the United States (Lexington, Ky. 1923); Hibbard, B. H., Marketing Agricultural Products (New York 1921); United States, Department of Agriculture, "A History of Agricultural Extension Work in the United States" by A. C. True, Miscellaneous Publication, no. 15 (1928) p. 151-71.

FARM COSTS. See FARM MANAGEMENT; FAM-ILY BUDGETS.

FARM LOAN SYSTEM, FEDERAL

LONG TERM CREDIT. The struggle of the farmer for cheaper money and easier credit has colored American agrarian history since the Civil War. The Greenback and free silver movements and the pressure for the liberalization of national bank legislation are indicative of the

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credit roots of agrarian unrest in the last quarter of the nineteenth century. By the close of the century the change in the character of agriculture, which was losing the features of a selfsufficient way of life and becoming an industry organized along business lines, gave particular force to farmers' complaints of the inadequacy of the existing mortgage credit facilities. The passing of the frontier with its plentiful supply of rich, unoccupied land, together with the increasing mechanization of agriculture, made the farmers increasingly feel their dependence upon financial institutions for the funds necessary to carry on their operations. Land values began a steady and consistent rise and farmers were compelled to borrow more money to get possession of land. In addition farmers frequently needed to borrow rather substantial sums of money to finance improvements on their farms or the purchase of machinery and livestock. The mortgage credit system comprising life insurance companies, private mortgage banks and in part commercial banks was found wanting on several counts. It was claimed that the customary term of farm loans was too short to allow for repayment out of the surplus yield of the land; that the method of repayment was haphazard; that the possibilities and conditions of renewal were uncertain; and that interest charges and commissions were higher than a good farm mortgage security under a specialized and mobile system of land credit should warrant.

The agitation for additional mortgage credit facilities attained national prominence during Taft's administration, but the Federal Farm Loan Act was not passed until 1916. In its final form the act represented a compromise between the cooperative and individualistic points of view. A group in Congress, influenced by a commission which it had sent to Europe to study the mortgage credit institutions there, favored nonprofit, cooperative land mortgage banks patterned after European models, organized, owned and controlled by farmer borrowers. Another group, influenced by the private farm mortgage banks already in existence, insisted that the cooperative method was not suited to American conditions and proposed the establishment of additional private mortgage credit institutions operated on a profit basis under government supervision. The act provided for Federal Farm Land Banks as the regional institutions of a nonprofit cooperative mortgage credit system; but in order to meet the opposition of the existing farm mortgage banks the act made it possible for

the latter to reincorporate into the new joint stock land banks, which could avail themselves of some important privileges under the new law while continuing to operate for private gain.

The administrative framework of the Federal Farm Loan system resembles somewhat the Federal Reserve system. At its head is the Federal Farm Loan Board, composed of the secretary of the Treasury, chairman ex officio, and six other members appointed by the president, one of whom is designated farm loan commissioner. The Board supervises the operations of the Federal Land Banks, the joint stock land banks and the National Farm Loan associations. It issues from time to time general rules and regulations governing their operation; through the examiners and appraisers of the Farm Loan Bureau it subjects the banks and associations to periodic examinations and passes upon the value of mortgages tendered as security for bond issues.

Under the act twelve Federal Land Banks were established in 1917, and in 1922 the Baltimore bank opened a branch in Porto Rico. The banks are limited in their lending operations to single districts, the boundaries of which were drawn in such a way as to equalize the credit demands made upon the banks and to provide for a diversity of agricultural conditions within each district. The original capital of the banks-\$9,000,000 in all---was supplied almost entirely by the government, but provision was made for redemption of government stock by the National Farm Loan associations as soon as the operations of the banks attained sufficient magnitude. The original directors of the banks were appointed by the government, but it was hoped that with the transfer of the stock to member associations a majority of the directors would be elected by them. Before that step was taken, however, the law was amended, and at present each bank is managed by a board of seven directors, three elected by the borrowers through their associations, three appointed by the Federal Farm Loan Board and one appointed by the Board from a list of nominees selected by the borrowers through their associations. The control of the Federal Land Banks is thereby virtually placed in the hands of the Federal Board at Washington, although the government retains only a small amount of stock in two banks.

The banks obtain the funds which they loan to the farmers by issuing and selling bonds, secured by the borrowers' mortgages, which are trusteed with the district Farm Loan registrar

appointed by the Farm Loan Board. The bonds are nominally issued as the obligation of a particular bank but are in effect the joint obligation of all the twelve banks. In marketing a part of these bonds the banks relied in the early years on the assistance of a syndicate of investment bankers and the support of the federal Treasury, which was authorized to purchase bonds not in excess of \$100,000,000 per annum. Since then, however, the bonds, which are tax exempt securities and are issued in small denominations, have attained a good reputation and are marketed directly by each bank locally and by a joint organization of the banks which maintains a fiscal agent in New York City. At present these bonds are widely held, many of them abroad.

At the base of the Farm Loan system are the National Farm Loan associations, cooperative organizations formed by farmers for the specific purpose of securing mortgage loans through the Federal Land Banks. The banks with the exception of the Porto Rico branch and a few isolated cases in the continental United States make all their loans through these associations. It takes a minimum of ten farmers to form an association, and these ten farmers must make application for a minimum amount of \$20,000 in loans. Upon its organization the association is assigned a definite territory, the farm population of which must apply for loans through the intermediation of this association. Its loan committee passes upon applications for loans, appraises the value of the underlying property and may reject the request or reduce the amount of the loan. In either case the decision of the association is final. If it approves the application, this is sent on to the bank, which in its turn sends an appraiser to inspect the property on which the loan is desired. Upon approval of the loan by the bank the association subscribes for bank stock to the amount of 5 percent of the loan and the borrower in his turn subscribes for an equal amount to the association stock. It also endorses the borrower's mortgage to the bank, but since the stock of the association carries only double liability the farmer members of the association are not jointly liable for one another's loans. The association employs a paid secretary-treesurer and is supposed to assist the bank in seeing that the borrowers make prompt payments of maturing instalments of the loans, of taxes and of insurance premiums on the mortgaged property. It was hoped that the associations would develop into live cooperative institutions which would formulate policy for the banks and exercise a

watchful control over them. These hopes were not borne out by subsequent developments. The associations at present vary in size from the legal minimum of ten members and \$20,000 in loans to a maximum of several million dollars in loans and a membership exceeding 1000. At the close of 1030 there were 4656 associations in existence.

The joint stock land banks have no organic relation to the other institutions in the Farm Loan system, but they must be chartered and are subject to supervision by the Board in Washington. They are private mortgage institutions and make loans directly to farmers. They secure their funds by issuing tax free mortgage bonds under the supervision of the Federal Farm Loan Board. These bonds are individual obligations of the issuing bank and no one joint stock land bank is in any way responsible for any of the obligations of another bank. The number of joint stock land banks grew rapidly from 1919 to 1923, but since then it has been declining continually because of liquidation and consolidation. These banks are assigned a definite territory upon their organization; at present there are more than ten states in the Union not served by such banks.

The regulations regarding the purposes, duration and interest charges on the loans as well as the value of underlying mortgages apply equally to Federal Land Banks and to joint stock land banks. Loans granted by these institutions must be used to liquidate existing mortgage indebtedness on farm land, to provide for the purchase of land for agricultural purposes or of equipment, fertilizers and livestock necessary for the proper and reasonable operation of the mortgaged farm and to finance buildings and improvements on the farm. Of the loans the mortgages of which were submitted to the Board for approval as collateral for bond issues from the inception of the system to the end of 1930, 77 percent were used for refunding existing mortgage indebtedness, 7 percent to repay loans not secured by farm mortgages and 11 percent for the purchase of land.

Loans must always be secured by first mortgages on improved farm real estate and cannot exceed 50 percent of the value of the land appraised for agricultural purposes and 20 percent of the value of the buildings thereon. Individual loans of the Federal Land Banks may run to a maximum of \$25,000, but the joint stock banks can make loans up to \$50,000. The banks are permitted to charge the borrowers a rate of interest 1 percent in excess of the rate on their bonds, but under no conditions may they charge

TABLE I

LOANS OF LAND BANKS, 1918-30

	FED	ERAL LAND B	ANKS	JOINT STOCK LAND BANKS					
	LOANS OUTSTANDING DECEMBER 31 (in \$1,000,000)	New Loans Closed		NUMBER IN ACTIVE	Loans	NEW LOANS CLOSED			
		Number (in 1000)	AMOUNT (in \$1,000,000)	OPERATION DECEMBER 31	Ouistanding December 31 (in \$1,000,000)	Number (m 1000)	AMOUNT (in \$1,000,000)		
918	156		118	9	8				
919	294			30	60		ľ		
920	350			27	78				
921	433		69	25	85	0.9	9		
922	639	74.I	224	63	219	15.9	139		
923	800	60.1	192	70	393	27.4	199		
924	928	47.2	166	64	446	11.4	75		
925	1006	39.9	127	53	546	19.7	131		
926	1078	36.9	131	56	632	19.9	123		
927	1156	39-3	140	50	670	14.1	82		
928	1194	27.0	102	49	657	7.3	41		
929	1198	17.1	64	49	627	3.1	18		
930	1188	12.5	48	48	590	.9	5		

Source: Compiled from Annual Reports of the Federal Farm Loan Board.

more than 6 percent. The greater part of the loans has been made at 5-1/2 percent interest. The duration of the loans may not be less than five years nor more than forty years, but the typical maturity of a loan granted by the system is about thirty-five years. Loans must be amortized in semi-annual instalments, and the borrowers are given the privilege of advance repayment.

The loaning operations of the Federal Land Banks expanded rapidly in the first three years of their existence and came to an almost complete stop for about a year in 1920-21 when the constitutionality of the Farm Loan Act was tested. The next five years saw the most rapid growth of the banks; this is particularly true of the period from 1922 to 1924, when the increase in loans was in part due to the pressure by commercial banks for liquidation of farmers' indebtedness to them. Since the beginning of 1928 the volume of new loans made constantly declined, and since about the middle of 1929 new loans granted have not been as great as reductions in the old loans outstanding. The joint stock land banks were developing rather slowly in the early years of the system's existence, but from 1922 to 1926 the rate of their expansion at times exceeded that of the Federal Land Banks. The average size of their loans as compared with that of the Federal Bank loans indicates that they have been serving a somewhat more prosperous farming clientele. Since 1927 new loans granted by joint stock banks have seriously declined.

The system as a whole passed through a crisis in 1927: some of the banks were guilty of lax practises and low standards, and in a few cases abuses and mismanagement actually led to criminal prosecution. As a result the Farm Loan Bureau at Washington was reorganized and closer supervision and more regular examination of the banks and associations have been instituted. It was estimated that at the close of 1924 the Farm Loan system supplied 14.6 percent of the total farm mortgage credit in the United States; at the end of 1927 the share of the system amounted to 19.3 percent.

The underlying cause of the 1927 crisis was the increasing gravity of the foreclosure problem. Foreclosures first attained some importance in 1925, when the Spokane Federal Land Bank found itself unable to charge off all defaulted loans against reserves. The other Federal Land Banks agreed then to take over a part of the foreclosed real estate and to charge off the corresponding loans against their reserves. Since then the amount of foreclosures has become too large and the policy of not showing foreclosed real estate as an asset in the statement of conditions has been given up. At the close of 1930 the Federal Land Banks owned real estate valued at less than \$21,000,000, against which they had set up reserves of over \$8,000,000. The foreclosure problem has been more serious for the joint stock land banks. Three of them have been forced into receiverships. In the case of a good many other joint stock banks the public faith has been so shaken that they are no longer able to sell their bonds and make new loans. Several of them are really in process of voluntary liquidation, their outstanding bonds selling at a discount of from 40 to 50 percent of their face value.

The seriousness of the foreclosure problem indicates the abnormality of general agricultural conditions under which the system has been operating. Agriculture has passed through an enormous land boom, which has been followed by one of the most severe agricultural depressions in history. Whatever the system may have accomplished under more normal circumstances, its actual achievements are not particularly important. It is true that interest rates have been reduced and dependable long term credit is made available to those who have good security to offer. But contrary to the claims made for the system before its establishment it has not reduced farm tenancy, which is probably larger today than ever before. No back-to-the-land movement was initiated, but rather the movement away from the farms has continued unabated during the past ten years. Finally, foreclosures are increasing yearly in volume and number, and the general economic condition of the farmers is growing worse rather than better.

INTERMEDIATE CREDIT. The sudden and drastic decline of agricultural prices in the United States in 1920-21 led the country bankers to demand the repayment of a considerable portion of the large volume of bank indebtedness contracted by farmers during the World War and the land boom which followed immediately after. As a result there developed a grave credit stringency in the principal agricultural states. This led to the demand for the establishment of credit facilities that would bridge the gap between the Farm Loan system providing long term credit and the commercial banks, which could safely extend only short term loans. It was felt that some agricultural loans could not be self-liquidating unless their maturities ran from nine months to three years. To meet this need the Sixty-seventh Congress passed on the last day of its session an amendment to the Federal Farm Loan Act entitled the Agricultural Credits Act of 1923, which provided for the establishment of twelve Federal Intermediate Credit Banks. Although they were set up as adjuncts to the Federal Land Banks and were made subject to supervision by the Farm Loan Board, they constitute in effect a separate credit system and they have no organic connection or financial relations with the other banks of the Farm Loan system.

The Intermediate Credit Banks are owned by the federal government; their entire capital stock was subscribed by the federal Treasury. Each bank is capitalized at \$5,000,000, but by the end of 1930 only \$30,000,000 of the subscribed amount had been called by the banks. In return 50 percent of the net earnings of the banks are paid into the Treasury as a franchise tax. The funds necessary to carry on loaning operations are obtained through the issue of short term tax free debenture bonds secured by farm paper in the banks' portfolios. The maturities of the debentures may not exceed five years, but ordinarily they run from three months to a year. They constitute a joint obligation of the twelve banks, are issued under the supervision of the Board in Washington and are marketed by the same organization which handles the bonds of the Federal Land Banks. As they are very well suited to the investment requirements of the large commercial banks they are always readily marketable. The Intermediate Credit Banks are also privileged to rediscount their paper with the Federal Reserve Banks but have never taken advantage of this opportunity.

Intermediate Credit Banks do not deal directly with farmers. They make loans to cooperative marketing associations on warehouse and shipping receipts covering stable agricultural commodities. The types of commodities on which loans may be made by the banks are subject to regulation by the Farm Loan Board, but no loan may exceed 75 percent of the market value of the commodity offered as security. Cotton and tobacco have absorbed a considerable proportion of the loans made by the banks since their establishment. The paper of individual farmers comes to the banks through a local credit agency such as a commercial or savings bank, a trust company, a livestock loan company or an agricultural credit corporation. Agencies discounting with the Intermediate Credit Banks may not make a charge for their loans in excess of 2 percent (in the case of livestock loan companies 2-1/2 percent) of the interest paid to the banks on the rediscounted paper. This accounts in part for the fact that commercial and savings banks and trust companies scarcely avail themselves of the facilities offered by the Intermediate Credit Banks. Through the agricultural credit corporations, many of which are organized by the cooperative marketing associations, the Intermediate Credit Banks are able to make

agricultural production loans secured by liens on crops, work stock and farm equipment. The maturities of loans and discounts by Intermediate Credit Banks may not be longer than three years; the original limitation of minimum maturity to nine months was abolished in June, 1930. The interest charged may not exceed 1 percent of the interest paid on the debentures.

TABLE II

LOANS AND DISCOUNTS OF FEDERAL INTERMEDIATE

CREDIT BANKS, 1923-30

(IN \$1,000,000)

	OUIST.	ANS ANDING IBER 31	Discounts Outstanding December 31				
	Тотаі.	On Cotton	TOTAL	To Agri- CULTURAL CREDIT COR- PORATIONS	To Live- stock Loan Companies		
1923	33.6	16.3	9.1	4.2	3.8		
1924	43.5	13.6	18.8	9.8	8.0		
1925	53.8	23.4	26.3	15.3	10.4		
1926	52.7	25.7	39.7	23.8	15.6		
1927	32.0	14.9	43.9	22.5	21.2		
1928	36.2	23.1	45.1	21.0	23.8		
1929	26.1	12.0	50.0	21.0	26.9		
1930	64.3	39.1	65.6	30.4	32.8		

Source: Compiled from the Annual Reports of the Federal Farm Loan Board.

The Intermediate Credit Banks have rendered a very real service to the cooperative marketing associations of the country and have also given considerable aid to the livestock industry and to those agricultural sections where other banks were not adequate to take care of local credit needs. They have been most helpful in the south, west and in the spring wheat belt. It was estimated that in 1929 their discounts amounted to 2 percent of the total personal and collateral loans obtained by farmers. They have also been used to some extent as distributing agencies for credit assistance in flood and storm stricken areas. Should the Federal Farm Board succeed in its endeavor to get a large volume of agricultural products marketed through cooperative associations, the business of the Intermediate Credit Banks would no doubt increase, as these institutions are ideally adapted to financing cooperative marketing activities. At the present time, however, they are not doing a large volume of business, and there is little likelihood of their doing much more in the immediate future unless the cooperative movement in agriculture should attain greater proportions.

CLAUDE L. BENNER

See: AGRICULTURAL CREDIT; LAND MORTGAGE CREDIT;

CATTLE LOANS; AGRICULTURAL COOPERATION; AGRI-CULTURE, GOVERNMENT SERVICES FOR; FARM RELIEF. Consult: United States, Federal Farm Loan Bureau, Annual Reports, published since 1918; Engberg, R. C., "The Functioning of the Federal Land Banks," and Gile, B. M., "Functioning of the Federal Intermediate Credit Banks" in Journal of Farm Economics, vol. xiii (1931) 133-45 and 123-32; Country Life Commission, Report . . . 1908-09, United States, Senate, 60th Cong., 2nd sess., Senate Document no. 705 (1909); United States, Congress, "Report of the Joint Commission of Agricultural Inquiry," 4 pts., 67th Cong., 1st sess., House Report, no. 408 (1921) pt. ii; Lubin, David, The Rural Credit Measure (Rome 1914); Eliot, Clara, The Farmer's Campaign for Credit (New York 1927); Wright, Ivan, Farm Mortgage Financing (New York 1923); Putnam, G. E., The Land Credit Problem, University of Kansas, Bulletin, vol. xvii, no. 18 (Lawrence 1916); Myrick, Herbert, Federal Farm Loan System (New York 1916); Pope, J. E., Federal Farm Loan Act (Washington 1917); Wiprud, A. C., Federal Farm Loan System in Operation (New York 1921); Morman, J. B., Farm Credits in the United States and Canada (New York 1924); Benner, Claude L., The Federal Intermediate Credit System (New York 1926); Willis, H. Parker, The Federal Reserve System (New York 1923) ch. lxvi.

FARM MANAGEMENT as an economic function consists of the organization and operation of individual farms; as a discipline it consists of the development of scientific methods and techniques for the direction of such organization and operation. In virtually all societies the practise of farm management has been a matter of private economy as contrasted with public or political economy, and its motive maximum gain or maximum utilization of the productive resources and economic opportunities at the command of the individual farm proprietor.

The term management as used in agriculture has come to carry a broader meaning than is ordinarily given it in non-agricultural industry, where it generally applies only to operation and to some limited phases of the organization of a business, excluding the broad executive and financial responsibility comprehended under the term entrepreneurship. In agriculture, however, it has come to be applied to the whole range of responsibilities of both organization and operation: planning the financial structure of the business, making commercial contacts for both buying and selling, determining the production program and determining which and in what proportions productive factors are to be combined as well as current control and direction of farm labor and of technical operations, the administration of marketing processes and the keeping of records and accounts.

Since farm management in this sense is an essential function in farming it is as old as agriculture itself. In pastoral and feudal regimes and in general when farming was preeminently self-sufficing rather than commercial and when traditional methods were dominant, management had limited scope and opportunity. With the development of modern industry and of interregional and international trade agriculture has been brought into the commercial system, until a knowledge of business methods as well as of improved agricultural techniques has become a condition of profitable farming, and farm management an increasingly complicated art.

The hired farm manager or estate manager has been of some importance in the history of agriculture. He has appeared in every society characterized by large landed estates and absentee ownership—in Egypt, in the later Roman Empire, throughout mediaeval and modern Europe. Such hired managers have at times contributed to the science of farm management; more often, however, such management has been inefficient and unprogressive.

In the United States, where the family sized holding is the prevailing type, the number of farms operated by hired managers has always been comparatively small. In recent years, however, there has been a conspicuous development of a new type of farm management service. Companies have been formed for the purpose of planning and operating farms for owners who do not care to put them into the hands of tenants and who are not in a position to organize and operate them themselves. In the last decade such management companies have gained temporary importance in the disposition of farms acquired by banks or insurance companies as the result of mortgage foreclosures.

More important has been the development, particularly in European countries but also in the United States, of organizations rendering a limited amount of managerial service such as the keeping of records and accounts and the analyzing of such data for the guidance of farm proprietors. This service is in many countries a part of the government program of agricultural extension work; in Europe it has been largely fostered also by the agricultural societies. Such programs represent practical applications of a growing science and discipline of farm management.

The evolution of the function of farm management has resulted in the growth of systematic, analytic study of its underlying principles. Ar-

thur Young in England and Albrecht Thaer in Germany in the early nineteenth century were pioneer writers on the function of farm proprietorship: Arthur Young as preeminently the apostle of the new agricultural technique, Thaer as the formulator of principles and the founder of the science. Further development of the principles of farm management did not take place for several decades. After the Napoleonic wars English agriculturists were interested chiefly in the tariff controversy and, following the repeal of the corn laws, almost entirely in land tenure. In Germany, on the other hand, the attention of agriculturists turned to the application of natural science to agricultural technique. But the rapid opening of new and highly productive agricultural lands in America and other parts of the world in the latter half of the nineteenth century with the consequent flooding of European markets and depression of agriculture again directed general attention to the economic problems of the farmer. A group of German scholars, of which von der Goltz, Kraemer and Pohl were the most conspicuous, revived interest in the work of Thaer and carried forward the development of farm management principles and the application of farm accounting to the organization and operation of farms.

In the theoretical sphere problems of farm management merge into those of the broader study of agricultural economics (q.v.) and the development of the two has proceeded in a parallel course, often through the efforts of the same individuals. Thus Laur in Switzerland and Aeroboe in Germany, leaders in European farm management, are also outstanding agricultural economists. These two are at considerable variance in their conception of the farm management problem, particularly the theory and practise of farm business analysis. Aeroboc, who has held teaching and research positions in various German universities and has had successful experience in practical estate management, has for many years conducted a farm accounting service for the proprietors of German estates. His point of view in farm management is that of the large scale operator. On the other hand Laur, for many years professor of rural economics at the Zurich Polytechnic, who as secretary of the Union Suisse des Paysans has supervised an account keeping service for Swiss peasant farmers and conducted researches in farm accounting and farm management, takes the problems of the small farmer as his basis for analysis of farm management problems. On the technical side

Laur is an ardent supporter of detailed and independent cost accounting analysis of the various separate enterprises making up the farm business as the foundation for business analysis and production guidance, whereas Aeroboe conceives of the farm as a closely knit organism and regards the effort at financial analysis of the production of an individual crop or class of livestock as artificial and misleading. A similar variance in point of view is reflected by different groups of farm management specialists in Great Britain and the United States.

Farm management research and instruction in Europe have greatly developed during the last two decades. Germany has led the way not only in the study of farm management but in research into such special aspects as farm labor efficiency. In Great Britain a number of research establishments have been set up, the most notable of which is the Agricultural Economics Research Institute organized in 1913 at Oxford University. The prevailing type of investigation in these institutions is the study of production costs, although many projects of broader scope are being prosecuted. Other western European countries including Denmark, Sweden and Norway are developing substantial programs of farm management research. In at least half a dozen European countries something approaching Laur's system of record keeping is in operation, either officially as a part of government service or privately on a commercial basis.

Especially interesting are the recent developments in Soviet Russia. In the earlier years farm management research centered about the problem of the organization of peasant farms. Chayanov's (Tschajanow) work, Die Lehre von der bäuerlichen Wirtschaft (Berlin 1923, tr. from Russian by F. Schlömer), is probably the outstanding Russian contribution in this field. From some points of view the most significant recent development in farm management has been the assumption of that function by the state as exemplified in Soviet Russia. The government has not only itself undertaken the organization and operation of vast tracts of land for the production of grains and livestock, but is taking an active part in the reorganization of peasant farming through its program of collectivization. Russian farm management investigators are vigorously at work on the new problems raised by state farming and collectivized agriculture.

In the United States the scientific attack on farm management problems through research and instruction is of much more recent origin than in Europe. In 1902 the Minnesota Agricultural Experiment Station in cooperation with the federal Department of Agriculture began a series of studies in the cost of production of farm products which has extended with minor interruptions to the present time, mostly under the direction of Andrew Boss. These studies have been based on more or less elaborate records of actual costs compiled by farmers with the aid of specialists. A little later the New York Agricultural Experiment Station under the leadership of G. F. Warren began the study of farm management through the survey method, which involved securing the farmers' estimates of income and expenses through personal interviews conducted by students or special agents. This method, which was adapted to the covering of a wide area by relatively few enumerators, was taken up by the United States Department of Agriculture upon the establishment of the Office of Farm Management in 1905 under the direction of W. J. Spillman and was carried on in various parts of the country. A new contact with general economic theory was given to farm management research by the work of H. C. Taylor, first at the University of Wisconsin and from 1919 to 1921 as chief of the federal Office of Farm Management. While this new influence raised a controversy which is still existent as to the relative validity of the cost accounting approach to farm management problems and the more generalized approach from the point of view of the business as a whole, the result has undoubtedly been a broadening of the program of farm management research.

By 1914 some form of research into the problems of farm management had been inaugurated in about 25 percent of the agricultural experiment stations of the United States. This research consisted largely in attempts to devise methods of cost analysis and some studies of the best combinations of products and of technical methods. The application of the results of this study was accomplished largely through the extension workers of the colleges and of the Department of Agriculture. The whole movement received a great impetus in the post-war period. The creation of a national extension service had provided the basis for an enlarged program; the discussion of price fixing during the war led to a new interest in cost accounting methods for farmers; while the agricultural depression made evident the need for increasing control of the economic aspects of farm life.

A survey of research in agricultural economics

made by the Social Science Research Council in 1927 revealed that in that year there were 125 farm management projects being conducted by state experiment stations and the federal Bureau of Agricultural Economics. A broad range of problems was covered in this research. It included cost of production studies, general studies in the organization and reorganization of farms, studies in farm practise, studies in the methods of farm business analysis and a rapidly growing program of type-of-farming studies in which the regional and local variations in farm economy are related to the numerous combinations of physical conditions and economic forces which shape and reshape agriculture. Research into the personal characteristics making for success or failure in the function of farm proprietorship has been begun. The problem of making the results of such studies serviceable to the individual farmer remains a serious one. Some students of the problem feel that all that can be done is to acquaint the farmer with methods of cost analysis and to allow him to make his own decisions as to changes in production policies; others advocate the elaboration of local programs of agricultural improvement by special farm management leaders and the presentation of such plans to all the farmers of a region.

One of the most significant developments of farm management research in the post-war period has been a concerted effort toward refinement of method, particularly in terms of quantitative analysis. There has also been a clarification of the objectives of such research. The outstanding objectives are now recognized as, first, the gaining of a clear and more adequate understanding of the problem which the individual farmer faces in attempting to make the most of his resources; second, aid in the broader problem of agricultural readjustment; and, third, the furnishing of adequate subject matter for instruction in secondary schools, in colleges and through a rapidly expanding extension service in the principles of farm organization and management.

C. L. Holmes

See: AGRICULTURAL ECONOMICS; EXTENSION WORK, AGRICULTURAL; FARM; LANDED ESTATES; FARM TENANCY; AGRICULTURAL LABOR; AGRICULTURAL MACHINERY; AGRICULTURAL MARKETING; AGRICULTURAL COOPERATION; SCIENTIFIC MANAGEMENT.

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FARM RELIEF. Farm relief measures can be defined as governmental arrangements, temporary or permanent in character, which are designed to alleviate economic distress of established farmers. Since the World War the series of depressions in prices of farm products has manifested marked severity and has been almost world wide. In the United States the condition of agriculture is reflected by the fact that the farmer's buying power was 19 percent less in 1925-26 than in 1919-20, while the buying power of others was increased, in some cases markedly. The recession in business activity during 1929-30 had as one of its first and most pronounced effects an increase in the disparity between the prices paid for farm products and the retail prices paid by farmers, the buying power of the farmers falling below the 1910-14 average by 30 percent. The disequilibrium between agriculture and industry has persisted both in the United States and elsewhere. In fact, in 1929 and after, some countries with important industrial populations, such as Germany, France and Italy, have used national policies more effectively than other countries to prevent low domestic prices in the case of staples such as wheat and rye.

Farm relief schemes existed in Europe during

the nineteenth century and earlier; in the eighteenth century the Prussian grain reserve organization did much to maintain prices, while reforms in land tenure in France and changes in protectionist policies to aid agriculture in various countries were effected throughout the nineteenth century. In general two methods were followed: attempts to change the direction of production toward products whose prices were less depressed were made in England, Holland and Switzerland, and manipulations of customs duties were prominent in France and Germany.

Post-war systems of relief have emphasized central agencies for stabilization of prices and control of the customs duties. Important European patterns of farm relief used since 1920 include two that are new or given new force in application. Germany, Sweden, Czechoslovakia, Latvia, France and Estonia have imposed requirements that home grown wheat and rye be used by millers in proportions ranging from 30 to 95 percent. Sweden, Latvia, Switzerland, Portugal and Spain have developed grain monopolies different from tobacco and other fiscal monopolies in that there is no expectation that the public treasuries will have increased net receipts.

An older European pattern has been used in behalf of some of the farm products of Austria, Czechoslovakia, Germany, Hungary, Latvia, Poland and Sweden. These have been given an export impetus by the use of export-import certificates, the legal principle of which, particularly in its most liberalized pre-war application in the German Einfuhrscheine, which were introduced in 1879, was used in formulating the original plan for export debentures in the United States. Agricultural products sent out with certificate benefit were replaceable by dutiable imports with duties canceled. Assignability of certificates made them resemble cash bounties to exporters with corresponding effects in increasing prices above world parity. These certificates, used in the several countries without provoking foreign reactions which have sufficiently specific reference to the export premium rates in question to be designated as either antidumping or directly retaliatory, have tended to alleviate the rigors of the protectionist regime in the case of the particular products. The general tendency in Europe is to abandon export duties and to increase import tariffs in an effort to protect farm products.

The American farmers' recent difficulties have arisen chiefly out of a lack of balance between

production and demand. On the one hand, stimulation of supply has resulted from favorable prices during the war, governmental encouragement, widespread farm mechanization and liquidation of certain classes of livestock, such as beef cattle. Adjustments to low prices of farm products have tended to include reduced production only as a last resort. On the other hand, domestic demand has been lessened by decline in the consumption of feed crops as a result of decrease in the number of horses and mules and the reduced use of corn as food, and by decline in per capita food and beverage consumption of cereals and in use of some other farm products, notably animal fats. Foreign demand has been altered because foreign low cost producers have been expanding output and because reduced purchasing power in Europe since the World War has cut off markets for farm products.

In the more comprehensive explanations of the economic disparities evident in American agriculture since 1920 various factors have been prominent, although there is little agreement as to the weight to be given them. High tariffs abroad and at home have united to reduce the exchange power of American farm exportables. Agricultural protective duties in the tariff act of 1930 designed to expand home production of farm products now imported have not been successful in diversifying the agricultural uses of land sufficiently to afford general price relief. It has been claimed that the result of the immigration policy of the United States is to keep high the wage costs to farmers and wage costs of domestic services and products which they buy. Effects of decreased immigration in maintaining per capita purchasing power in American cities have been emphasized as immediately helpful to non-export branches of agriculture, but it is possible that the higher wages resulting have been expended chiefly on non-agricultural products.

The post-war credit reversal by which goods exported from the United States are no longer needed to pay interest or instalments on large amounts of European capital has caused the large intergovernmental and other intercontinental debts to take a prominent place in the problems of American agricultural exports. On this side reduced willingness to receive foreign products, as evidenced by the increased rates in the tariff acts of 1922 and 1930 and refusal to cancel intergovernmental debts, has tended to make agricultural self-sufficiency a primary objective in net debtor countries, or at least to

give them added reasons for economic rapprochement with agricultural exporting countries more willing to accept their industrial goods in exchange.

Reclamation projects promoted under governmental stimulus as well as through the activity of private land development companies have led to a wide extension of farming on formerly unused land quite without respect to the protection of established agriculture either in the United States or in other countries. In some countries laws have been passed for redistributing land to users committed to more intensive cultivation. Taxes paid by farmers have increased two and one half times since 1914, while land prices and values of farm products have lagged behind, with the result that farmers pay a larger percentage of their income in taxation than all other groups. The majority of farmers in nearly every state have remained outside of any national general service farm organization, and likewise many farmers have kept aloof from cooperative commodity organizations. In the case of products entering international markets no more than the faintest beginnings of international action by farm organizations have been in evidence.

The seriousness of the situation from the standpoint of the nation as a whole has lain in the deterioration of the farm real estate in many cases, in the encouragement of considerable unprofitable shifting of farming personnel, plans and procedure, the passing of farm real estate titles to hands whose strength lies in non-agricultural sources of income, and the resultant reduction of the standard of living of a large part of the population.

In the United States Congress the bills brought to vote emphasized three main types of remedies. Import duties in the Fordney emergency tariff act of 1921, the Fordney-McCumber act of 1922 and the Hawley-Smoot act of 1930 were directed toward the protection of farm products. In 1921 the War Finance Corporation was reorganized for the purpose of assisting in the financing of the exportation of agricultural and other products; in 1923 the Federal Intermediate Credit Act was passed, and in 1929 the campaign for credit was given further expression in those features of the Agricultural Marketing Act emphasizing loans to agricultural cooperative associations. The third group of measures was designed to increase the power of exportable farm products to command dutiable imports and other items in exchange; emphasis

was placed successively on equalization scrip, equalization fees and export debentures. In the provisions of the Agricultural Marketing Act, however, the most drastic step taken was to authorize the organization of stabilization corporations for holding products during emergencies.

The Federal Farm Board was established July 15, 1929. During the first two years of its existence its emphasis, apart from price stabilization activities in wheat and cotton, was upon building up national sales agencies and regional associations to provide interconnections between the new agencies and existing or new local cooperative associations. National sales agencies established during this period include the Farmers' National Grain Corporation, Chicago; the National Wool Marketing Corporation, Boston; the American Cotton Cooperative Association, New Orleans: the National Livestock Marketing Association, Chicago; the National Pecan Marketing Association, Jackson, Mississippi; the National Bean Marketing Association, Denver; and the National Beet Growers' Association, Greeley, Colorado. The end of the second year of Board operation found these agencies functioning with various degrees of vigor, but without exception they were still far short of full commodity control. During these first two years prices of most farm products continually slumped to lower levels. While the holding of surpluses in a year of marked rise in prices might bring price benefits sufficient to pay carrying charges, in prolonged periods of falling prices such holding brings inevitable losses to the accumulating agency and is not likely to promote price recovery.

The principal problems in the stabilization process have arisen from the difficulty of creating scarcity and the tendency to aid prices in other countries where foreign competitors without joining in the costs of applying the method have benefited at the same time that an overabundant supply is heaped up in the United States. Under the stabilization operations the tendency was to shut off exportation of milled products more sharply and promptly than that of related raw materials. For a stabilizing country to reduce its share of the milling by-products, preferably kept cheap for the sake of its livestock and dairy industries, could have both agricultural and industrial disadvantages. Any marked tendency to confine foreign sales to the more highly competitive unmilled grain rather than flour has the seeds of handicap for the

stabilization corporation when it proceeds to reduce its holdings.

The methods of stabilization corporations stand in contrast with those implicit in scrip, fee and debenture plans, designed to offset export handling charges on both the processed and unprocessed products and to seek national prices above world parity through adjusted national scarcity. The equalization fee, a fundamental feature of the more far reaching McNary-Haugen bills, would provide that surpluses above domestic consumption be exported at world prices, any losses engendered by the difference between world and domestic price being recouped by a differential loan assessment, or equalization fee, on each pound or bushel sold domestically. The domestic price would thus be influenced by the import duty and the amount of the equalization fee. Under some plans the assessment would be made by paying the producers in the form of scrip, whose redeemable value would be determined after operating costs and losses had been calculated. The debenture plan would provide customs credits having the same economic effect as a cash bounty on exports of agricultural products, the debentures being used by importers in the payment of customs duties. Domestic prices would thus be raised but little less than by a cash bounty. The domestic allotment plan provides for world parity prices to producers for their exports and for this price plus a considerable portion of the tariff duty for goods marketed domestically. Allotments as to the amount sold in the home market would be made to producers. These three plans all aim to "take advantage of the tariff" on farm products, but they differ among themselves in that the equalization fee, scrip and cognate domestic allotment plans would finance reimbursements for foreign sale losses through compulsory levies on the marketed units of product selected for benefit, while export debentures would cause the difference to be made up through increased dependence upon general taxation. Questions of constitutionality apply with special force to all proposals involving compulsory levies. The desirability of adding a sales tax upon any of the units of a product for which net price enhancement is sought can be questioned also in terms of the limits to which regressive burdens should be placed upon producers and consumers. Questions of using general taxes to support export premiums arise less as legal than as economic problems in the case of export debentures.

Recognition of need for concerted interna-

tional action has been most in evidence in the case of rubber, sugar, wheat and other products, although the International Wheat Conference of March-April, 1931, failed to recommend any quota plan for production or exports. No other plans have reached the point of development of either the Stevenson rubber or the Chadbourne sugar plans. International agricultural conferences confined mainly to European countries have given some impetus toward special trading agreements between exporting and nearby importing countries. The individualism of nations in their attitude toward agricultural products having international markets seems to make adequate collective action remote. Without such action, however, expansion of production and exports may proceed apace in Russia and other countries and even be aided by restrictions applicable elsewhere. This applies not only to restrictions as to plantings and breedings, to exports of products in raw, semimanufactured or final form, but also to restriction designed to turn a part of the production toward use as animal feeds in the case of bread grains or otherwise to affect class price advantages for portions of certain crops. Effort along these lines in one country without corresponding procedure in others is as likely as not to be futile or even worse.

Even where equalized participation of the various countries could be assumed, it appears that immediate relief in the case of one type of commodity is likely to be based at least in part upon making more abundant the competitive supplies of farm products available for some other use. Most farm relief efforts if required to be maintained over long periods may cease to have more than a redistributing effect as between different commodities and different countries. In the process of shifting, however, agriculture in a weak country or in a strong country lacking a disposition to protect it from external or internal disadvantages may participate in the national dividend less fully than in other countries more able and disposed to take vigorous steps in its behalf.

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See: AGRICULTURAL POLICY; AGRICULTURE; AGRARIAN MOVEMENTS; FARMERS' ORGANIZATIONS; FARM BLOC, UNITED STATES; TARIFF; VALORIZATION; SUGAR; RUBBER: FOOD GRAINS.

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FARM TENANCY

GENERAL AND HISTORICAL. Farm tenancy is one form of division of function in agriculture. As such it has existed in some form in most developed agricultural systems. It is often difficult to distinguish actual cash tenancy from mere contracts for labor, under which the remuneration of the worker is supplied partly in land for his cultivation, or from métayage, or share tenancy, under which the tenant pays as rent a fixed or varying share of the crop. The difficulty is greatest when one is dealing with historical phenomena, but even under contemporary conditions one class shades off into another and they are finally distinguishable only on legal principles. Tenancy in its more advanced forms is created by a lease which differs from the mere contract under which the cropper, the share tenant and the métayer work and hold land in that during its term it confers a limited title in the land itself and in the higher forms confers exclusive possession for the time being. Tenancy is also distinguishable from "cropper" systems or other labor contracts by the degree of interest of the tenant in the land and by the degree of interest of the owner in the labor of the worker or occupier. The owner has little control over the labor of a cash tenant, whereas he often supervises quite closely and to some extent controls the cropper and even exercises general direction over the operations of the métayer.

Farm tenancy may arise and has arisen from many economic and social causes, the chief of which perhaps are these: the inability of the owner to make economic use of land; the unwillingness of the laborer to work for wages; the inability of the cultivator to provide capital for both cultivation and ownership; and generally the economy of division of function in the supply of capital and direct management or labor between owner and cultivator. While there have been cases in which the previous appropriation of land excluded cultivators from the privileges of ownership and led to their exploitation, the continuance of tenancy systems cannot be attributed merely to such conditions. From Roman days to contemporary times some tenants at least have been comparatively rich cultivators.

In the early history of agricultural organization it is often difficult to distinguish between tenure which is effective possession and tenancy which is merely beneficial occupation. Systems of communal or group occupation and cultivation preceded individual ownership of land in most parts of the world. In England and in parts of northern Europe, for instance, group occupation and use continued for several centuries after the beginning of the Christian era. In various ways forms of communal occupation and use developed into individual occupation with or without actual possession or into effective possession with or without occupation and use or into the condition of use without possession which is tenancy. In Rome apparently changes from communal cultivation came through the granting of parcels of land to dependents (clientes) of the clan as tenants at will (precario) on condition of their paying to the group a share of their crops. At a later date grants of land in the form of tenancy were made by the state to cultivators. In England grants of land were early made to the church and to persons who could not themselves conduct cultivation and who

therefore let it out to tenants. In some cases tenancy resulted from the establishment of differences in economic and social status through conquest. The Athenians, for instance, often let conquered land which had been allotted to them by the state to the former owners or cultivators as tenants. In other cases, as in the Roman Empire and again in the United States of America, the development of forms of tenancy was due to the economic and social breakdown of systems of slavery. In economic systems characterized by the prevalence of small individual proprietorship changes in the relative positions of debtors and creditors have led to systems of tenancy. In many parts of the world tenancy developed as an outgrowth of feudal systems. This was to some extent the case in Japan. In India it developed more directly from the necessities of obtaining state revenue and from conditions of creditor and debtor. But in northern Europe all existing systems of tenancy developed through feudalism.

Under the feudal system all landholders were nominally tenants and no absolute rights of property were recognized except in the sovereign or the community or in the sovereign as the representative of the community. But the tenants in chief were of the status of petty rulers and in the position of effective ownership for many economic purposes, while the position of subservient (base) tenants varied from that of the serf, who was part landholder and part slave, to that of the socager, who owed his lord no menial services and was almost a freeholder. In England the servile tenants paid their dues in services and in kind from before the Norman Conquest to the beginning or the middle of the fourteenth century. Some rents were paid in cash or in fixed amounts of produce soon after the Black Death (1346-50), and by 1400 cash tenancy had emerged in both England and Scotland. Tenancy leases had appeared in France and Flanders at the end of the thirteenth century. But produce rents continued side by side with cash rents in England until the end of the eighteenth century and in some parts of Europe into the twentieth century. The payment of fixed rent in either cash or produce, as distinct from a share of produce and unaccompanied by any personal service, emerged as the distinctive feature of tenancy in the fifteenth century; rents were more commonly fixed and paid in cash after the influx of silver in the sixteenth century and after the development of the practise of collection of national dues and revenues in cash rather than in services or kind.

The different courses of feudal development and decay in the various countries of Europe gave rise to varied systems of land tenure and use. In parts of Italy and France, for instance, métayage followed the breakdown of the feudal system; and in other parts of France feudal elements in tenancy remained until the revolution established peasant proprietorship. In Holland and Belgium tenancy developed on a large scale, and in Great Britain it became almost universal. Belgian tenancy evolved from feudalism through métayage and cheptel (stock and land lease), a half way house between métayage and cash tenancy. The stock and land lease was also known in England but was not common there. The tendency toward the establishment of owner occupiers or yeomen farmers in England in the seventeenth and eighteenth centuries and their decay in the early part of the nineteenth century in favor of tenancy illustrate the devious course of historical changes in this field.

It must be clear that the economic position and the social status of tenants of farm lands have varied from country to country and from age to age. In the early days of tenancy in Rome it would appear that although the tenant was in a dependent position no great social difference arose between tenants and proprietors who were otherwise of about the same rank, and it was not until after the beginning of the Christian era that a clear distinction was made between colonus, who was a cultivator, and dominus, who was a proprietor. The political laws of England from the sixteenth to the early nineteenth centuries, especially the electoral law and custom, gave a higher status to the freehold owner than to the tenant, although the wealth and income of the latter might be much higher than that of the former. But by the latter half of the eighteenth century such economic and social inferiority of the tenant as lingered from feudalism had disappeared. The gentleman farmer might be a tenant, while the freeholder might be a peasant cultivator with little better income than the wage earner.

The economic position and the social status of tenants have varied with their personal or social origin and the degree of independence given them by their leases as well as with the size and productivity of their holdings and the resultant variations in their incomes. When the Roman landlord made his slave a tenant, with or without providing equipment for cultivation, the tenant was bound to retain a degree of inferiority; the same conditions recurred in the

southern United States; and when the German or English villein released from some of his feudal bonds became a tenant, a tinge of his former status still remained. But where there have been no social barriers between owners and cultivators most of the differences between owners and tenants have disappeared as the wealth and income of the two groups have become approximately equal. Nevertheless, in many and perhaps most parts of the world where progressive agriculture has been established the glamour of ownership has persisted.

The economic status and circumstances of the tenant vary closely with the extent of the property interests given by the contract or lease and with the customs under which he cultivates. The mere cropper, or share, tenant may have no economic interest in the land apart from its contribution to the current crop. He may be "here today and gone tomorrow"; the owner gives him orders and supervises his activities. But the cultivator under a lease has definite rights which are protected by law or custom and often both. There are indeed forms of tenancy in which the tenant's interests in the holding are as large as those of the owner of the soil. Under the Ulster system of tenant right the tenant provided buildings and permanent equipment for farms, and his right to compensation for improvements sometimes represented more than half the total capital value of the holding. Farm tenants in the French speaking regions of Belgium propose their successors to their landlords, having previously come to an agreement with the proposed incomer on the subject of valuation of the outgoer's improvements. The "Evesham custom" in Worcestershire, England, gives the tenant the right to dispose of his interests to an incoming tenant subject to the owner's acceptance of the incomer, which is rarely refused. Similar practises exist by custom and usage in Picardy. Customs or laws giving such rights in effect reduce the fundamental owner to the position of a receiver of ground rents.

Various degrees of property interests and of security of tenure are given to tenants under their contracts or leases. The common forms of tenancy have been tenancy at will, tenancies from year to year, tenancies for terms of years and perpetual leases. Tenancy at will, known to Roman law as precarium, might be terminated at any time by the will of either of the parties. The legal system of England, as of most other countries in which tenancy at will has arisen, has always tended to show disfavor to this form as

being contrary to the public interest and likely to be harsh on the tenant. Tenancies from year to year, in practise for one year and then from one year to another until notice to terminate is given by one of the parties, are theoretically short term leases. But in practise agreements for tenancies from year to year may subsist for long periods. There are well authenticated cases of continuous occupation of one farm by one family for two or three generations under such agreements in England. Leases for periods in Great Britain usually run for five, seven, fourteen or twenty-one years with provisions for renewal, but leases for the longer periods have tended to disappear. On the whole it is probable that tenancies subsist for longer periods under the year to year agreements than under leases for periods of years. The average period of occupation of one farm by a farmer in England has been about fifteen to sixteen years, which is longer than the average period of occupation for one farm by farmer owners in the United States. In Belgium the duration of leases is dependent upon the type of crop or cropping system followed. For arable land it may be one year but is more commonly three years and extends to six or nine years. Grassland is commonly let for one year but also for three, six or nine years. But tenancies do not necessarily terminate with the termination of current leases and may subsist for long periods. Owners and tenants entering into verbal agreements leave to law and custom the duration of the tenancy and conditions other than rent. Tenants by emphyteusis, holding perpetual leases, have been hardly distinguishable from owners in some parts of Europe.

Where systems of tenancy have long been established, systems of tenant right develop either under the law or by usage and custom and sometimes by both. Roman law contained provision for the protection of the interests of both tenants and owners. Where tenancy developed from feudalism, some customs of the manors attached to base tenures were transferred to cash tenancy systems; but the new system of tenancy also required new customs especially as agricuitural practises developed and became more elaborate. In England there was a steady growth of practise and custom during the eighteenth century and the early part of the nineteenth, when customs having the effect of law began to be recorded. Disputes between owners and tenants arising from changing conditions led to closer examination of the rationale of existing customs. In 1875 Parliament passed the first Agricultural

Holdings Act, which gave general legal foundation for tenant right in certain improvements; and since 1880 the general body of law of tenant right as embodied in statutes and judicial decisions has greatly extended and developed. In England the law overrides provisions in individual leases; in Belgium, on the other hand, where also an extensive body of tenancy law and custom has been built up, the lease is the prime source of legal rights regulating relations between owner and tenant and the provisions of leases sometimes override the fundamental law. On the whole there has been less development of custom and law governing conditions of tenancy where it has grown out of a general system of cultivation by small owners, but almost everywhere some accepted usages and common (although not necessarily legally recognized) customs tend to regulate relations between owners and tenants.

Controversies between owners and tenants have frequently centered round the subjects which in the nineteenth century became known as the three F's: fair rents, fixity of tenure and freedom of cropping, to which was added later freedom of sale of produce; but in some localities and periods the political and religious freedom of tenants has also caused trouble. Demand on the part of tenants for fixity of tenure or stability of rents has sometimes arisen from changes in economic conditions which tended to raise the rental value of land. More often, however, fixity of tenure or alternatively provision for compensation for improvements made by the tenant became necessary as agricultural practises developed and traditional systems no longer sufficed. The demand for freedom of choice in the rotation of crops arose especially where the production of new "cash" crops was profitable to cultivators. But owners were unwilling to depart from traditional rotations which were known to preserve the fertility of the soil. Demand for freedom of sale of crops arose from the same circumstances. In Great Britain the questions of security of tenure, of freedom of cropping and sale of crops, have been settled by statute law and some degree of fixity of tenure has been secured to tenants by provision for compensation for disturbance on grounds other than those of bad husbandry. In Scotland and in Ireland some rents are fixed under statute law by procedure of a semijudicial character. Where tenancy systems are general and strongly established there is no absolute fixity of rents. In Great Britain and Holland, for instance, many adjustments of

rents are made in periods of economic depression without termination of tenancies, either through the fixing of new rents or through remission of a portion of the fixed rent for a period of time. But the question of "fair" rents appears almost chronically under all tenancy systems. Excess rents may easily prevent tenants from getting their due earnings or profits, and in some localities and periods there has been general exploitation of tenants.

Criticisms of general systems of tenancy have been made on many grounds; it is claimed, for example, that they fail to induce full economic use of land or alternatively that they tend to its uneconomic exploitation; that they are economically unjust to tenants; that they tend to restrict the personal liberty of tenants; and that they tend to economic or social instability. Arthur Young's aphorism that "the magic of ownership turns sand into gold" has probably done untold damage. The general view, in some countries a result of presumption or general principle, in others possibly of experience, is that ownership of land is economically and socially more beneficial than tenancy; and in particular that ownership creates far greater incentive to economic effort and enterprise than the most secure form of tenancy. The economic and social effects of tenancy, however, are very largely conditioned by the legal and political environments amid which they exist. Where conditions of tenancy are governed by adequate laws, customs or usages and where these evolve and expand with developments in agricultural practises, systems of tenancy may yield economic and social results equally beneficial to those of any system of ownership cultivation. In some respects such systems are economically more elastic than peasant proprietorship and on occasions they tend to be more rapidly adjusted to changes in general economic conditions. They are sometimes to be preferred to cultivating ownership where nominal ownership is accompanied by heavy encumbrance of mortgage debt. It has been said that from the agricultural standpoint the system of tenancy is more applicable to crops of which the cycle of production is completed within one year than to rotations of crops or to single crops which require a number of years for full realization of economic benefits. This view tends to confuse tenancy under which considerable and continuing interests in land are created and cropper or mere labor systems in which the interest in labor is greater than that in land. Only crude and undeveloped systems of tenancy

are inapplicable to intensive or complex farming practises. Tenancy has provided useful systems of division of function in the supply of capital, of management and of labor and under some circumstances has led to more effective use of capital and labor than could have been secured under any other system. It does not necessarily lead to economic, political or social instability or to waste of resources in land. The rise of radical or socialist movements for a time caused fears of the association of tenants with proletarian workers in more or less revolutionary movements. Such views were prevalent in France and Italy in the early twentieth century when syndicalist doctrines were gaining a certain foothold among the métayers. In contrast the class of small proprietors were assumed to be reliable supporters of the status quo. There is comparatively little in recent or contemporary experience to support these fears or views.

The most intricate of tenancy problems are those connected with the personal or political and religious liberty of tenants and with the development of social organizations and institutions in areas in which tenancy predominates. Where the tenants normally expect to remain as tenants, where they are attached to definite localities and where, as is usual in such circumstances, their interests are fairly protected by law or custom, there develop social institutions of equal efficiency with those established by communities or proprietors. But where, as in more recently developed countries such as the United States or some of the British dominions, the tenant regards his present occupation as a stepping stone to ownership, where he has little attachment to any locality and where, as is often the case, there is comparatively little protection of his interests by clearly recognized custom or by law, a low degree of development of social institutions is a natural corollary. Conflicts in regard to personal or political liberty tend to arise more often where owners and tenants are of different races or religions, but it is also natural that in periods of political stress owners of land should attempt to use their superior economic status to influence the views and activities of their tenants. Again, actual conditions in this sphere depend on general factors in the social environment, on the general political laws of each country and on the provisions for the protection of the tenants by law or custom. Where cash tenancy exists in the United States or in the British dominions little or nothing s heard concerning political or religious oppression, and in some parts of the continent of Europe the tenant is as free as the occupying owner.

A. W. Ashby

UNITED STATES. Farm tenancy refers to the status of the farmer who hires the farm which he operates, giving for the use of the land either a stated fraction of the crops or other products (share tenancy), a fixed money rental (cash tenancy) or sometimes a combination of the two. The share tenant may work under close supervision by the landlord, as is the case with the southern "cropper," although a large percentage of share tenants and most cash tenants receive little or no supervision except in the form of general provisions in the lease contract, such as a clause specifying the crop rotation to be followed. Farmers who own some land which they operate and hire additional land are classified in the United States census as "part own ers" rather than as tenants, although they control in the aggregate a considerable fraction (26.7 percent in 1925) of the total acreage of rented farm land.

Farm tenancy differs so widely in its nature and incidence in different parts of the country that it is hardly possible to generalize in very specific terms for the United States as a whole. On the one hand, farm tenancy may be only a form of contract through which labor is kept on the farm to the end of the crop season; on the other hand, it may be a device through which a highly competent farmer with limited capital is enabled to put into operation the most efficient methods of farming. All types of tenancy have some points in common, nevertheless. The tenant must always work without the stimulus of land ownership, and the tenant farm usually suffers to some extent from the lack of an owner's care. Every tenant farmer is likely to feel that he is subject in some measure to the will of the landlord and that the products of his own enterprise accrue in part to the benefit of the landlord. All that is possible here is an examination of the extent to which American farms have been operated by tenants in recent years, with a very general survey of the different types of tenancy.

Farms were first classified by tenure in the Agricultural Census in 1880, when 1,024,601 farms, or 25.6 percent of the whole number, were returned as operated by tenants. There was a certain amount of farm tenancy even in colonial times, particularly in the older settlements,

but so long as free land was easily obtainable by going farther west, first across the Alleghenies, then into the Northwest Territory, then across the Mississippi, men without capital who wanted farm land were likely to seek such free land rather than to rent farms, except as a temporary arrangement.

Considerably more than one half of the tenant farms reported in 1880 were in the southern states, forming 36.2 percent of the whole number of farms in the south. The development of farm tenancy in the cotton states followed the breaking up of the old pre-Civil War plantations. After the emancipation of the slaves some of the plantations were worked by hired labor, but more of them were broken up into small holdings, each leased to a tenant. Many of the tenants who now operate these holdings are of a special type whose status is on the border line between that of a tenant and that of a hired laborer. These men, who are locally known as "croppers," supply little or nothing in the way of farm implements or livestock and work for the most part under close supervision; one might say that they differ from hired farm laborers only in that they receive their wages in the form of a share of the crop rather than in the form of a monthly or weekly wage. Nevertheless, these croppers occupy their farms, averaging about 40 acres, under a rental contract or agreement, and for this reason they are included in the total number of tenants recorded in the farm census. Croppers are of numerical importance only in the southern states, where they formed more than four tenths of all tenant farmers in 1930 -- about one third of the white tenants and considerably more than one half of the colored tenants.

In general, a larger percentage of the tenants in the south work under the supervision of the landlord or his representative than elsewhere. The tenant farms in the south, even omitting the holdings of the croppers, are smaller and lower in value than the farms operated by owners, whereas in the north and west the average value and average acreage of the tenant farms are considerably in excess of the averages for owner farms.

Even outside the south, farm tenancy had developed to a considerable extent in 1880, as indicated by the census figures. In Illinois 31.4 percent of the farms were operated by tenants; in Missouri 27.3 percent; in New Jersey 24.6 percent; and in Iowa 23.8 percent. The average for all the northern states taken together, how-

ever, was only 19.2 percent and for the western states 14.0 percent.

In 1890 the percentage of farms operated by tenants in the United States as a whole had increased to 28.4 (as compared with 25.6 in 1880) and in 1900, to 35.3. The rapid increase between 1890 and 1900 was partly if not mainly the result of the disappearance of free land; for by 1900 practically all of the desirable farm land available for homesteading had been taken up.

The percentage of tenancy in 1910 was 37.0; in 1920, 38.1; and in 1925, 38.6. These figures would indicate that during the first quarter of the present century tenancy was no longer making rapid growth. As a matter of fact, however, these changes in the percentage of tenancy for the country as a whole were the net result of large increases in certain states, partly offset by decreases in other states. Between 1920 and 1925, for example, the net increase in the number of tenant farms was only about 8000, but this was the resultant of an increase of about 150,000 tenant farms in 23 states, nearly offset by a decline of 142,000 in the number of tenant farms in 25 other states.

Between 1925 and 1930, however, the number of tenant farms increased from 2,462,208 to 2,664,365—an increase of 201,757, or 8.2 percent, while the whole number of farms declined slightly (from 6,371,640 in 1925 to 6,288,648 in 1930). The percentage of tenancy was thereby increased from 38.6 to 42.4. The number of tenant farms increased in 32 states, the total increase in these states amounting to 241,340, from which is to be deducted the decrease in 16 states, amounting to 39,583. In 9 of the 16 states showing a decrease in the number of tenant farms there was a still greater decrease in the total number of farms, so that the percentage of tenancy shows an increase in 41 states in all The increase in tenancy during the last five-year period is therefore much more general as well as much greater in absolute amount than in the preceding five-year period. Many factors have contributed to this situation; one which has acted quite generally has been the agricultural depression, which has forced many farmers who held their land under mortgage into the tenant class.

There appears to have been throughout the whole period a rather close relation between the agricultural development of the several states and the advent of growth of farm tenancy. In the New England states, for example, farming was old before the supply of free land farther

west even approached exhaustion. As a result of this situation, supplemented by the fact that much of the New England farm land was of poor quality and therefore not very attractive to a tenant, the percentage of tenancy in these states never attained a very high level; and it has been declining since 1900 (except for slight nominal increases in 1930 as compared with 1925). In the middle Atlantic states also the maximum percentage of tenancy was attained in 1900, since which time there has been a continuous and ather rapid decline. In three of the states of he east north central division, Ohio, Indiana and Michigan, the maximum was reached in 1920, with appreciably lower figures in 1925 and 1930; in Illinois, while the 1925 percentage was lower than the 1920, the 1930 figure is slightly higher; and in Wisconsin there has been a continuous increase up to 1930. All of the states of the west north central division except Missouri show a continuous and fairly rapid increase in the percentage of tenancy, North Dakota presenting a rather spectacular increase from 2.1 in 1880 to 35.1 in 1930.

The growth of tenancy in the three southern divisions has been maintained with local irregularities since 1880, all three divisions starting with relatively high percentages (35 or more) in that year and showing in 1930 percentages uniformly higher than any of the northern or western divisions or states. In 1925, to be sure, 8 of the 16 southern states showed a percentage of tenancy lower than in 1920, but in all except Delaware and Maryland this loss was more than

made up by the increase which appeared in 1930.

In the mountain division the percentage of tenancy has increased rapidly from 7.4 in 1880 to 22.2 in 1925 and 24.4 in 1930. In the Pacific division the percentage of farms operated by tenants has fluctuated considerably, being in 1925 slightly less than in 1880 (15.6 as compared with 16.8) but increasing in 1930 to 17.7, or slightly more than the 1880 figure.

The trend of farm tenancy in the several geographic divisions and sections is indicated by the figures in Table I.

In the census reports tenants are classified on the basis of the form in which the rent is paid, the simplest classification showing only share tenants and cash tenants. The most detailed classification is that of the 1920 census, which is summarized in Table II. Croppers and standing renters (tenants paying as rent a stated quantity of product) were tabulated separately only for the south, the relatively small numbers of cases found elsewhere being included respectively with share tenants and cash tenants. Even this classification does not indicate the variety of relationships which may exist between landlord and tenant.

For an appreciable percentage of all American farm tenants tenancy represents a step on what has been termed the agricultural ladder, by which a young man starting as a farm laborer becomes successively a tenant, an owner subject to mortgage and finally an owner free from mortgage debt. The statistical evidence support-

TABLE I

Percentage of All Farms in the United States Operated by Tenants, 1880 to 1930

Geographic Division or Section	1930	1925	1920	1910	1900	1890	1880
United States	42.4	38.6	38.1	37.0	35.3	28.4	25.6
New England	6.3	5.6	7.4	8.0	9.4	9.3	8.5
Middle Atlantic	14.7	15.8	20.7	22.3	25.3	22.1	19.2
East north central	27.3	26.0	28.1	27.0	26.3	22.8	20.5
West north central	39.9	37.8	34.2	30.9	29.6	24.0	20.5
South Atlantic	48.1	44.5	46.8	45.9	44.2	38.5	36.1
East south central	55.9	50.3	49.7	50.7	48.1	38.3	36.8
West south central	62.3	59.2	52.9	52.8	49.1	38.6	35.2
Mountain	24.4	22.2	15.4	10.7	12.2	7.1	7.4
Pacific Pacific	17.7	15.6	20.1	17.2	19.7	14.7	16.8
North	30.0	28.0	28.2	26.5	26.2	22.1	19.2
South	55.5	51.1	49.6	49.6	47.0	38.5	36.2
West	20.9	18.7	17.7	14.0	16.6	12.1	14.0

Source: For figures from 1880 to 1920, Goldenweiser, E. A., and Truesdell, L. E., Farm Tenancy in the United States, p. 23; for 1925, United States, Census of Agriculture, 1925, p. 4-5; figures for 1930 compiled from preliminary reports of the United States Census of Agriculture, 1930.

TABLE II

Number of Tenant Farms by Type of Tenant, by Sections, 1920

Type of Tenancy	UNITED STATES	North	South	West
All tenants	2,454,804	779,218	1,591,121	84,465
Share tenants, including croppers	1,678,812	422,859	1,212,315	43,638
Snare tenants proper	1,117,721		651,224	
Croppers *	561,091		561,091	~~~
Share cash tenants	127,822	103,075	22,672	2,075
Cash tenants, including standing renters	585,005	225,463	324,184	35,358
Cash tenants proper	480,000		219,188	
Standing renters *	104,996	_	104,996	
Unspecified	63,165	27,821	31,950	3,394

^{*} Separately returned in the south only.

Source: Goldenweiser, A. E., and Truesdell, L. E., Farm Tenancy in the United States, p. 120-21.

ing the theory of the agricultural ladder is found in the classification of farmers by age and tenure, which is available for four censuses, 1890, 1900, 1910 and 1920. These figures show in general that a large percentage of the farmers under 35 years of age are tenants, while the percentage of tenancy declines rapidly as one goes on to the higher age groups. Specifically, in 1920 in the United States as a whole 75.8 percent of the farmers under 25 years of age and 56.5 percent of those from 25 to 34 were tenants, while only 16.5 percent of those 65 years of age and over were tenants. Another 1920 tabulation shows that of all owner operators of farms in the United States 44.3 percent had operated farms as tenants previous to becoming owners.

Except for those who are definitely looking forward to the ownership of the farms they occupy, the typical American farm tenant does not stay on one farm very long but moves from one to another. Of the whole number of tenants reported in the 1920 census, 43.4 percent had been on the farms where they were enumerated ess than 2 years, and 31.2 percent had been there from 2 to 4 years, leaving only 25.4 percent with a record of 5 years or more on the same farm. This practise of staying but a short time on one farm is the result partly of the prevailing type of lease, which usually runs for but one year, partly of the type of men who remain permanently in the status of farm tenant, and partly perhaps of the characteristically American desire for change.

The idea is widely current that farm tenancy is more likely to be found where farm land prices are high than where they are low. To some ex-

tent the statistics support this idea. Both the percentage of tenancy and the price of farm land are very much higher in Iowa than they are, for example, in New Hampshire or Montana. On the other hand, the percentage of tenancy in Alabama or Mississippi is even higher than in Iowa, although prices of farm land in these southern states are relatively very low. Leaving the southern states out of consideration, however, the correlation between land prices and the extent of tenancy in the different parts of the north and west seems to be fairly good. Theoretically the relation is reasonable. The higher priced land is usually more productive, thereby making it possible for a tenant to pay rent out of the returns from its operation; and, on the other hand, the high priced land is more difficult to purchase, thereby compelling would be farmers to rent the land at least for a time for lack of the capital requisite for its purchase.

Furthermore, the amount of rent charged for the better grades of farm land is often relatively low as compared with the current rates of interest on farm loans. A tabulation of the 1920 census returns for cash rent paid, in conjunction with the value of the rented farms, covering more than 30 percent of all the cash tenant farms in the country, showed that the annual rental formed only 3.54 percent of the value of the farms involved. In the state of South Dakota the cash rent represented only 2.52 percent of the value; in Nebraska, 2.59 percent; in Minnesota, 2.86 percent; in Iowa, 2.88 percent; and in Illinois, 2.97 percent.

Until rather recently the price of farm land had been increasing so rapidly and so generally that such land could be considered a good investment from the point of view of its price increase alone. The purchaser of farm land, in other words, not only had the use of the land, but also received the increase in its value, this latter speculative element amounting in many localities over a period as long as 20 years to an average annual income in excess of the 3.54 percent return referred to above. The tenant of course got nothing but the use of the land in return for his rental payments, while the land-lord received the increment in value in addition to the rent.

Under present conditions the future course of farm land prices is very much in doubt. With improved methods of farming and with declining demand for certain products, especially those formerly grown as food for farm work stock, there would seem to be too much farm land already under cultivation. Under such conditions one would hardly look for any very great increase in farm land prices in the immediate future. Whether this disappearance of the speculative advantage of farm ownership will result in extensive further increases in tenancy remains to be seen.

Tenancy has certain general effects on the method of conducting farm operations. In the first place, the farm tenant is not likely to make improvements in the soil or in the farm buildings, since he cannot be sure of continuous use of them. Improved types of farm leases, desirable as they are, would overcome this difficulty only in so far as tenancy became more stabilized and the tenant less inclined to move from farm to farm. In the second place, he is likely to try to get out of the soil as much in the way of salable products each year as he possibly can, since he cannot be certain of another chance next year. On the other hand, the tenant who has carefully considered the relative advantages of buying and hiring a farm and has decided to invest his capital in stock and equipment rather than in land may be better supplied with machinery and livestock than other farmers of equal initial capital who decide to purchase farms. He may even use more up to date methods; and many farm surveys have shown that tenant farmers under these conditions make larger incomes than owner farmers occupying similar farms in the same neighborhood.

Nevertheless, there seems to be current among the rural inhabitants of the United States a strong prejudice in favor of ownership as against tenancy. Ownership does possess certain very definite advantages, chief of which is perhaps the fact that the owner unless he is too heavily mortgaged has assurance of continuous control of his farm. There are also certain intangible features, certain incentives, which enable—or compel—a man to work more diligently on his own farm than he would ever do on a rented farm.

Farm tenants in general have a decidedly lower social standing than farm owners. This fact is perhaps largely chargeable to the short term contracts under which farm land is usually rented in the United States and to other incidental conditions which might be remedied through improved forms of rental contracts and rental practises. As matters stand, however, the tenant farmer lives in a poorer house; he has no incentive to make improvements in the residence since it is not his; and the landlord likewise has no incentive to make improvements so long as the tenant will worry along with conditions as they are. Tenant farmers take less part in the organized activities of the locality in which they live; they accumulate less adequate household equipment, especially when frequent moves are in prospect; and in general they profit less from those collective activities which distinguish an enterprising community from a backward one. Without doubt the less enterprising men gradually drift into the class of tenants or remain there permanently in place of advancing into ownership, so that the social condition of the tenant group as a whole is to some extent the result of this adverse selection.

An important modifying factor in the farm tenancy situation, especially in the northern and western states, is the fact that a considerable percentage of the tenants are closely related to their landlords, the percentage running as high as 40 in the state of Wisconsin and materially higher in individual counties. This percentage is based on the results of a question carried on the 1925 farm census schedule, which read: "Do you rent this farm from your own or your wife's parent, grandparent, brother, or sister?" For the United States as a whole, excluding the south, close relationship to the landlord was returned in 1925 by 26.6 percent of the cash tenants and 29.1 percent of the other tenants.

This relationship, which is doubtless partly responsible for the low rent paid by many cash tenants, should receive serious consideration in other connections. Many of the undesirable features which are currently charged to farm tenancy must surely be modified in these cases.

The farm rented from the operator's father or father-in-law is likely to come into his possession eventually by inheritance, even though he does not accumulate sufficient capital to purchase it on a strictly business basis. The tenant on a farm of this type is just as likely to be a permanent resident as if he were already the owner, and his place in the social activities of the neighborhood is likely to approximate that of an owner.

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Sce: Land Tenure; Landlord and Tenant; Landed Estates; Plantation; Latifundia; Colonate; Serfdom; Farm; Peasantry; Absentee Ownership; Land Speculation; Mortgage; Land Mortgage Credit; Land Settlement; Small Holdings; Land Reform; Agrarian Syndicalism; Agrarian Movements.

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FARMER LABOR PARTY, UNITED STATES. See Parties, Political; Agrarian Movements.

FARMERS' ALLIANCE. The Farmers' Alliance, the second effort in the United States at national organization of farmers for defense and advancement of common interests, had its origin in farmers' clubs, which by the middle of the ninetcenth century had been organized in virtually all parts of the country and by 1858 had begun to federate on state lines. In the newer sections of the west and southwest, where law and order were not established, cattle and horse thieves committed constant depredations and settlers were often in danger of losing title to their lands because of litigation instituted by so-called land sharks. The first objective of these clubs was protection against such dangers, but they soon came to serve other functions, such as promoting agricultural education and providing social activities. Some also practised cooperative buying and selling.

During this period western farmers gave financial support to the construction of rail-roads to transport their products to eastern markets. For many years, however, freight rates were high and railroad regulation became s

burning issue. Furthermore, interest rates in the west and southwest ran as high as 15 to 20 percent. But the greatest cause of farmers' discontent from 1865 to 1896 was the steady decline of the price level, which was interpreted to mean that farmers were being exploited in various ways by manufacturing, transportation, merchant and financial groups through unfair trade practises and the enactment of unfavorable legislation. Middlemen were charged with combining to depress the prices of farm products. These conditions created widespread discontent and caused farmers to seek relief through organization.

After the decline of the Grange in 1876, the south and a large part of the west were without any but local organizations, and the Farmers' Alliance, in process of development at the time the Grange had attained its largest growth, expanded to fill the need. On the basis of copies of organization plans carried from Kansas into Texas and western New York two alliances were founded. The Texas Alliance was by far the more virile of the two organizations. It spread rapidly eastward over the Gulf states and into other parts of the country and soon became the dominant farm organization of the United States, the result in large part of the energetic and effective leadership of Dr. C. W. Macune. While it was secret in character, its members were all of one degree, a much simpler plan than that of the seven degrees used by the Grange. It excluded Negroes and included women and although supposedly limited to farmers had in its ranks many political aspirants and professional persons seeking the patronage of a large organization. Its legislative program included demands for the abolition of national banks and the issue of treasury notes according to need as a medium of exchange.

To gain new territory the leaders of the Texas Alliance did not depend alone upon organizing new local alliances but consolidated with other organizations wherever possible. Thus in 1887 a consolidation was effected with the Louisiana Farmers' Cooperative Union, the name of the combined organization becoming the National Farmers' Alliance and Cooperative Union of America. In 1888 a second consolidation was effected, this time with the National Agricultural Wheel, which had previously absorbed the Brothers of Freedom. These latter organizations originating in Arkansas had by 1887 spread to seven other states. The Wheel brought 500,000 members into the Alliance,

which now became known as the Farmers' and Laborers' Union of America.

Strong efforts were made to effect a union with the Northwest Alliance, the outgrowth of the New York Alliance, which was dominant in Iowa, Nebraska and Minnesota and in 1880 had an estimated membership of 400,000. While the legislative programs of the two alliances were similar, the non-secret, loosely organized character of the Northwest Alliance and its policy of admitting Negroes to full membership made consolidation impossible. Organizers were therefore sent out to capture the Northwest's territory for the larger organization, which by 1890 was truly national in scope, with an estimated membership of 2,000,000. In addition other organizations, such as the Farmers' Mutual Benefit Association of Illinois and the National Colored Farmers' Alliance of the South, were subsequently brought into the Alliance family by means of a joint confederation committee whose task was to determine policies to be executed by the respective associations. Its name now became the National Farmers' Alliance and Industrial Union.

Finally a loose combination was effected with the Knights of Labor, whereby common action of the congressional lobbying committees of the two organizations was secured on the questions of national banks, a subtreasury system, the prohibition of dealing in futures of "all agricultural and mechanical" products, the free coinage of silver, the abolition of alien ownership of land, the opening to settlers of land held by large corporations, the prevention of the use of the taxation power to build up one interest or class at the expense of the other, the limitation of state and national revenue to cover expenses, the issue of fractional paper currency to facilitate exchange through the mail, government ownership of railroads and means of communication.

Up to 1890 the Alliance, fearing dissension and destruction, consistently avoided partisan politics. In 1886 it resolved "that as citizens we have a right to belong to any organization, political party, or church, we may see proper, but as a Farmers' Alliance we will not consider such subjects within our body." The failure of some of the old projects, such as that for cooperative credit to carry the farmers through the planting season, and the rise of the demand for government warehouses coupled with the scheme of issuing Treasury notes secured by farm products delivered to the warehouse, prob-

ably influenced some leaders to support political action. The Alliance's attitude definitely changed with the success realized from the decision of the national convention held at St. Louis in 1889 to support candidates who favored Alliance demands. As a result of this, they elected several governors and United States senators, and some thirty congressmen in the fall of 1890. Despite the continued opposition of Macune, sentiment grew through the west and northwest in favor of establishing a political party devoted to farmers' interests. At the Alliance convention held at Cincinnati in 1891 a party was launched whose platform, modeled on Alliance programs, demanded "free coinage of silver, abolition of national banks, loans on land and real estate, sub-treasuries, income tax, plenty of paper money, government control of railroads, election of President, Vice-President and Senators by direct vote, non-ownership of land by foreigners, revenue of the state and nation limited to expenses, eight hours' work, and universal suffrage." Against the adoption of the eight-hour plank vigorous objections were made that farmers often work as long as "sixteen hours and never less than twelve." After the convention of 1892 the Alliance disintegrated almost precipitously and became rapidly transformed into the People's party.

EDWARD WIEST

See: Agrarian Movements, section on United States; Parties, Political, section on United States; Farmers' Organizations; Grange.

Consult: Wiest, Edward, Agricultural Organization in the United States (Lexington, Ky. 1923); Periam, J., The Groundsvell, a History of . . . the Farmers' Movement (Cincinnati 1874); Butterfield, K. L., "Farmers' Social Organizations" in Cyclopedia of American Agriculture, ed. by L. II. Bailey, 4 vols. (New York 1907–09) vol. iv, p. 289–97; Hicks, J. D., and Barnhart, J. D., "The Farmers' Alliance" in North Carolina Historical Review, vol. vi (1929) 254–80; Farmers' Alliance History and Agricultural Digest, ed. by N. A. Dunning (Washington 1891); Nixon, II. C., "The Cleavage within the Farmers' Alliance Movement" in Mississippi Valley Historical Review, vol. xv (1928) 22–33; McVey, F. L., The Populist Movement (New York 1896); Morgan, W. Scott, History of the Wheel and Alliance (Hardy, Ark. 1889).

FARMERS' ORGANIZATIONS. There is a natural history to the somewhat anomalous fact that the prevalence and permanency of farmers' organizations have never been identical or coequal with the need for them. The need for rural organization has varied with changing economic and social conditions, while farmers' conscious-

ness of their need for organization has depended to a very great extent upon the degree to which the system of agriculture in which they engage has developed from isolation toward commercialization. Among primitive and even among pioneer farmers the predominant types of association are kinship, neighborhood, village and other groups based on sociability. Among highly commercialized farmers economic types of organization such as cooperatives for buying and selling, mutual insurance and cooperative credit organizations predominate. Farmers' political associations have generally followed upon the recognition of economic issues-a stage reached only when farming has definitely attained the status of commercialized agriculture.

At all times farmers' organizations have exhibited a great diversity of form and in most cases a marked looseness of structure and purpose. Early rural associations were only to a slight extent class organizations, although a very definite awareness of group disabilities has existed in many unorganized rural communities. Cleavages between landowner, tenant and laborer have at times resulted in the formation of mutually antagonistic farmers' organizations, and impermanence has characterized most large scale associations of farmers. Localism and individualism explain many of the difficulties of agrarian organization; these two factors have not disappeared, but their operation has been modified by modern industrial and commercial culture. One can trace, however vaguely, a certain line of development in the history of farmers' organization. The basis for such generalization may well be sought in a rapid survey of the prevailing types of rural associations to be found throughout the world today. In the Orient kinship, tribal and village associations are still the characteristic forms of rural organization.

While there are associations such as the cooperative credit societies in India, the village community (q.v.)—containing, of course, others than cultivators of the soil but existing chiefly for them—prevails everywhere and comprises the chief type of rural organization. In China the family system overshadows every other type of social and economic organization. It dominates agricultural organization to an even greater extent than it does other aspects of life. In some sections of the country, chiefly north China, there are now appearing some cooperative enterprises, notably village banks. A folk school movement patterned on the Danish is also gaining slight headway in China and it is possible that

the development of cooperative societies will follow naturally in the path of this movement.

In Japan there were a few semicooperative farmers' organizations in the early nineteenth century, and in the twentieth century there has taken place under government supervision a rapid expansion of cooperative societies based on European models. Other than this rural organizations are few, probably because of the fact that small proprietors are geographically interspread with thousands of tenants. The possible formation of a sort of tenant labor union is indicated by growing disputes between landlord and tenant in recent years.

In South Africa there have been for many years practically no farmers' organizations. There, as in some South and Central American countries, the farming class and its interests have been overshadowed by mining and industrial as well as by intense political and racial issues. As a consequence the farmers have been sharply divided, and where they have as a class combined to any extent for concerted action it has been through political party manoeuvres or to obtain governmental aid. In recent years, however, rural cooperative credit, purchase and sales organizations have been developed on a small scale.

In Australia and New Zealand the history of rural organization has been more like that of the United States and Canada. In Australia wheat and wool pools (cooperative marketing organizations) have wielded great influence. In New Zealand a powerful union of farmers aided the Reform party to power. In both countries labor parties, including in their ranks many farmers, have grown to influential status; and in both countries political parties and legislation have been freely used to uphold the causes of the farming class, as in the case of compulsory cooperative marketing of wheat in Australia.

In most of the South and Central American nations volunteer organizations of cultivators have been few and unimportant. The existence of large estates, haciendas or latifundia, owned by great landlords and companies and farmed by tenants has not been conducive to volunteer organization. In the western states of South America the village type of organization has continued, and although in many cases a system of peonage has developed this has neither destroyed the old neighborhoods and villages nor resulted in class consciousness of sufficient intensity to develop farmer class organizations.

It is in Europe and North America that farmers have developed a class consciousness suffi-

cient to stimulate rural organizations to something approaching nation wide scope. Even so the kinds of organization in these countries are so diverse as to make generalizations concerning types and causes difficult. The Raiffeisen societies in Germany and the Luzzatti banks in Italy make these nations outstanding in rural credit organization. Denmark, Switzerland and Ireland are best known in the fields of commodity cooperative marketing associations. In France there has been some slight development in both cooperative credit and marketing, but for the most part farmers' organizations in that country are technical brotherhoods or fraternities of producers. The mutual aid societies of France are little more than agencies through which social insurance funds are administered and supervised. There are also such social organizations as farm wives' circles and country fovers in France, the Swiss Peasants' Union in Switzerland, the Prévoyance Sociale in Belgium and some art and educational societies in Ireland.

The broad generalization may safely be made that in recent years social and fraternal rural organizations in Europe have had no success comparable with that of the economic institutions, unions and cooperatives, which have developed in many cases into great business enterprises. An outstanding contrast is presented by development in the United States, where until very recent years there has been little progress in cooperative organization and there have been only sporadic and transient attempts at political organization. In the prairie provinces of Canada and in the fairly recently occupied areas of the United States, where commercialized agriculture has predominated from the beginning of settlement, both economic and political organizations of farmers have been more frequently recurrent; but in other sections of North America either the universal neighborhood or large fraternal organizations have chiefly prevailed. Practically all of the large farmers' organizations, such as the Grange, the Farmers' Alliance, the Farmers' Union and the American Farm Bureau Federation, have attempted at one time or another to set up and operate business cooperatives of various kinds. The great majority of these business ventures not only failed but, together with political involvements in most cases, pulled the general farmers' organizations down with them.

There are two probable chief causes for the fact that European rural organizations have been for many years dominantly economic and rural

organizations in the United States until recently dominantly social and fraternal. First, farm life in the United States up to 1900 was chiefly pioneer life, and farming largely of a self-sufficient type. The commercial or market regime played a relatively small role in the average farmer's existence, and because of the favorable ratio of natural resources to population individual landownership was the dominant purpose of the great majority of those who farmed.

The second cause may be stated in more universal terms: probably in the history of rural organization in democratic societies general organizations have always preceded commercial and business societies. Throughout most of the world technical associations of breeders and producers, which remain of importance in all modern agricultural nations, probably represented the first step in class consciousness among farmers. In Scotland the Scottish Agricultural Organization Society began as a breeders' association. In the United States breed associations and agricultural and horticultural societies were almost universal before the first general farmers' organization, the Grange, was founded. Even earlier in some countries there were general mutual benefit types of rural associations. In France general organization preceded the syndicats. In Germany the general agricultural associations existed for almost one hundred years before specialized societies came into existence, and in Canada the farmers were organized into a social and educational society before the various provincial wheat pools were founded. In Ireland a definite organized educational movement was carried on antecedent to the organization of the purchasing and selling organizations.

The more highly specialized business organizations of farmers may perhaps be envisaged as the end product of a social process which may be called a farmers' movement. This movement has started with all types and kinds of rural societies and farmers' associations-fairs, technical improvement associations, fraternal societies and direct protest organizations based upon a discontent concerning rural status or a belief that farmers and even rural society were failing to "hold their own" in developing culture. In each instance, unless the organization of farmers eventuated in an uprising or revolt, such as the peasants' revolts of Europe, these associations and societies have slowly felt their way toward an attack upon the credit, price and market problem. Such clearly appears to have been the case in the United States and Canada and evidences are not lacking that it has been the case in European and even in oriental countries.

An even broader generalization is that rural organization everywhere and in all times and places has concerned itself with the problem of obtaining a relatively higher standard of living for its constituency. In primitive and pioneer rural society standards of living are self-contained because farm folk have no means of comparison and no occasion to compare their standards of living with those of other segments of society. They therefore content themselves with social and fraternal associations. As soon as they obtain a means and method of observation of other classes they become aware of other standards of living and begin seeking to attain them. In a society so dominantly commercial as western civilization the means to a higher standard of living is almost universally sought through an adjustment to the price and market regime. If this generalization be true, one would expect oriental rural life, with the exception of Japan, to be still dominated by family, clan, neighborhood and village organizations; pioneer and near pioneer rural societies such as those in the United States, Australia, New Zealand and South Africa to be in a transition era; and those in the older, more industrialized and commercialized areas of Europe to have developed highly commercialized farming and strong rural business organizations. In general, such are the conditions which actually exist.

Since class political organization generally, if not always, awaits class economic organization, it is understandable why European nations have agrarian parties; why the commercialized wheat areas of the United States and Canada have nurtured a number of farmer political ventures; and why the granger legislation of the seventies, the Greenback and Populist episodes of the eighties and nineties and the Farm Bloc in the Congress of the United States have all been concomitants of farmers' economic upheavals The stability and permanency of farm political organizations are therefore indirectly dependent also upon the degree to which farming in any area of the world has reached the stage of commercialization.

CARL C. TAYLOR

See: AGRARIAN MOVEMENTS; AGRICULTURAL SOCIETIES; COOPERATION; AGRICULTURAL COOPERATION; MUTUAL AID SOCIETIES; AGRARIAN SYNDICALISM; AGRICULTURAL LABOR; EXTENSION WORK, AGRICULTURAL; AGRICULTURA, GOVERNMENT SERVICES FOR; FARM RELIEF; GRANGE; FARMERS' ALLIANCE; FARMERS' UNION; FARM BUREAU FEDERATION, AMERICAN;

CHAMBERS OF AGRICULTURE; BOYS' AND GIRLS' CLUBS; WOMEN'S ORGANIZATIONS; COUNTRY LIFE MOVEMENT; RURAL SOCIETY.

Consult: Taylor, Carl C., "Farmers' Movements as Psychosocial Phenomena" in American Sociological Society, Papers and Proceedings, vol. xxiii (1928) 153-62; Coulter, John L., "Organization among the Farmers of the United States" in Yale Review, vol. xviii (1909) 273-98; Wiest, E., Agricultural Organization in the United States (Lexington, Ky. 1923); Rice, S. A., Farmers and Workers in American Politics (New York 1924); Pearson, Raymond A., Agricultural Organizations in European Countries, New York State, Department of Agriculture, Bulletin no. 66 (Albany 1914); Schindler, Axel, "The Organization of German Agriculture" in Scottish Journal of Agriculture, vol. x (1927) 144-55; Roche, Léon, "Les associations agricoles au Danemark" in Journal d'agriculture pratique, vol. xlii (1924) 96-99; "Belgium, the Agricultural Associations according to the Latest Official Statistics" in International Review of Agricultural Economics, n.s., vol. iv (1926) 277-82; Gaudot, G., "Le Boerenbond Belge" in Journal d'agriculture pratique, vol. xxxix (1923) 517-18; Jones, C. L., "Agricultural Organizations in Spain" in United States, Bureau of Foreign and Domestic Commerce, Commerce Reports, vol. iii, no. 154 (1919) p. 26-34. For European farmers' organizations see also brief descriptive articles in International Review of Agriculture from 1910 to date.

FARMERS' UNION. This, the third general organization created by the farmers of the United States, whose full name is the Farmers Educational and Co-operative Union of America, was founded in 1902 at the little town of Point, Texas. Among its founders were Newt Gresham and others who had been organizers and leading officials in the Farmers' Alliance, which had precipitously disintegrated in 1892, when together with the Knights of Labor it organized the People's party.

Although for more than a decade prices of farm products had risen more rapidly than those of non-agricultural products and the farmer's position had therefore been improving, per capita farm income was still relatively very low. Farmers condemned the demand for cheap food at the expense of their standard of living and hoped to improve conditions through the Union in part by the enactment of favorable legislation, but more especially by developing sound cooperative enterprises and the building of a credit structure to finance farm operations and return all profit to the farmers. Membership is limited to the white rural population and may include farm tenants as well as owners, country mechanics, physicians, clergymen, and newspaper editors who support Union policies. Women are eligible but pay no dues. Persons

actively engaged in banking, merchandising or the practise of law are ineligible on the theory that they extract large profit from the farmers and are unfriendly to the development of cooperative marketing and credit systems.

Like the Alliance and the Grange before it, the Farmers' Union grew rapidly when "joining" was a novelty and large benefits from organization were anticipated. By 1905 state unions had been established in Texas, Arkansas, Alabama, Georgia and Louisiana. In 1910 its total individual membership was about 121,800, with its greatest strength in the Gulf states. In 1919 it had more than 140,000 members, but by 1930 the total had fallen to 91,109. In 1930 the Union was strongest in Oklahoma, Kansas, Nebraska, Iowa, the Dakotas, Colorado and Montana. The dreaded reaction experienced by its forbears has affected the Farmers' Union, especially in the south, where it has almost completely disappeared. The instability of farm organization in the south is attributed to inefficient leadership and general lack of interest, probably due to the presence of a large proportion of tenant farmers, whose interest in a long term welfare program is difficult to maintain. Moreover, such projects as cooperative enterprises face great difficulties in a racially divided region.

From its beginning to 1917 the Union was a secret order. Opposition to secrecy developed because at first the national body rigidly controlled the ritual. Later special permission was granted to the Nebraska and Kentucky unions to devise rituals to suit local needs. Lack of uniformity finally led to the abandonment of secrecy. Democratic and religious arguments were made in favor of an open organization and a business manual was finally adopted in place of the ritual.

Following the lead of the Farmers' Alliance the Union has always maintained friendly relations with the more established labor organizations. Its national convention receives fraternal delegates from the American Federation of Labor, and in 1921 it stated the relation of organized agriculture to organized labor as follows: "The farmer is both a producer and a consumer. The laborer is both a producer and a consumer. Each is the principal customer of the products of the other." Officials state that they seek labor support for a legislative program beneficial to both groups, such as the curbing of trusts, prohibiting the dealing in futures or the enactment of satisfactory tax measures.

The Union contends that agricultural ills can be remedied only through a fundamental change of the economic order. The farmer himself must go into business and retain all profit that now accrues to those who furnish his supplies and market his products. The Union's outstanding activity has therefore been the promotion of cooperative enterprise, including the purchase of essential farm supplies, the sale of farm produce, the conduct of fire, livestock, hail and life insurance companies and of plants for manufacturing farm products for the market (creamerics, pickle factories, etc.).

The Farmers' Union Exchange operates in the northwest as a cooperative buying agency and for some years has taken the entire output of the North Dakota state prison industries and half the output of the Michigan state prison industries for distribution directly to the farmers. The Farmers' Union Terminal Association, a grain marketing agency also operating in the northwest, handled 16,000,000 bushels in 1928. The Farmers' Mutual Fire Insurance Company, organized in 1925, had insurance in force in 1930 amounting to \$55,000,000. The Farmers' Union Mutual Life Insurance Company, organized in 1922, had \$12,500,000 of insurance in force in 1930.

It was as the result of a suggestion made in 1915 by the Union's president that the National Board of Farm Organizations, a clearing house for national agricultural problems and a united front lobbying agency of all farm organizations, was created.

EDWARD WIEST

See: AGRARIAN MOVEMENTS, section on United STATES; FARMERS' ORGANIZATIONS; FARMERS' ALLI-ANCE.

Consult: Barrett, C. S., The Mission, History, and Times of the Farmers' Union (Nashville, Tenn. 1909); Fisher, C. B., The Farmers' Union (1 exington, Ky. 1920); Wiest, Edward, Agricultural Organization in the United States (Lexington, Ky. 1923). See also publications of the Farmers' Union, including proceedings of its national conventions, its manuals and reports.

FARR, WILLIAM (1807-83), English statistician. Farr was born of humble parentage and owed his chance of professional training to a friend. In 1829 he studied medicine under Orfila and Louis and hygiene under Andral in Paris, where he received his first impetus to the study of medical statistics. Upon his return to England he eked out his scanty earnings in medical practise by giving lectures on hygiene

and medical jurisprudence. In 1839 he entered the newly organized national General Register Office, with which he was associated until his retirement in 1879.

Farr is rightly regarded as the founder of the English national system of vital statistics. For over forty years he supervised the actual compilation of English vital statistics, introduced methods of tabulation which have stood the test of time and a classification of causes of death which has been the basis of all subsequent methods. On the basis of national statistics he compiled life tables still used in actuarial calculations and formulated practical lessons as to the causation and prevention of disease which have been a most powerful factor in determining the course of sanitary history and the triumphs of public health. He used most effectively comparisons of general and specific death rates in different parts of the country as pointers toward local reform and stated the laws governing the course of an epidemic disease, thus helping to lay the foundation of epidemiology.

Farr's most important works are in the form of comments and discussions contained in the annual reports of the registrar general of births, deaths and marriages and in the decennial supplements to these reports, for which he was mainly responsible. A large number of his observations are reproduced in a memorial volume issued by the Sanitary Institute of Great Britain, entitled *Vital Statistics* (ed. by N. A. Humphreys, London 1885).

Farr's influence extended to the continent. He took a prominent part in promoting international cooperation in the field of vital statistics, and if the study of this subject owes more to English data and observations thereon than to those of any other country during the nineteenth century, it is due chiefly to the work of William Farr.

ARTHUR NEWSHOLME

Consult: Newsholme, Arthur, "William Farr, the Father of English Vital Statistics" in De Lamar Lectures, 1925–26 (Baltimore 1927) p. 203–20; Lukas, F. G., "William Farr" in Statistische Monatsschrift, vol. ix (1883) 496–500.

FASCISM. It is difficult to isolate by abstract analysis the distinctive feature of Fascism. Viewed either negatively or positively, it has elements in common with other systems of national organization. If defined simply as a negation of liberalism and parliamentarianism it is inadequately differentiated from communism

and other ideologies which manifest an equal antipathy to these older democratic tenets. Its analogy with varied types of administrative organization is strikingly indicated by the application of the very questionable term "international Fascism" to those ephemeral dictatorships which here and there during the aftermath of the World War practically displaced systems of popular representation, as well as by the present day use -especially among communists and social democrats -of the term as a derogatory epithet, a political catchword devoid of scientific precision. If, on the other hand, Fascism be defined positively as the unlimited sovereignty of the state over all phases of national activity it approximates the nationalisme intégral of a group as different as the Action Française.

It is only when viewed as a peculiarly Italian phenomenon that the essence of Fascism becomes clearly delineated. In its philosophy, its origins and development, its political structure and cultural aspirations, it is an integral part of the Italian matrix. The ideology of Fascism viewed historico-genetically is a peculiar fusion of syndicalist theory and the doctrines of Italian nationalism. While the former has gradually receded into the background, the latter has supplied the movement with its central intellectual pillar, the idea of the national state. The nation becomes transfigured into a corpus mysticum, an unbroken chain of generations, armed with a mission which is realized in the course of the historical process. The duty of the individual is to elevate himself to the heights of the national consciousness and to lose completely his own identity in it. He has individual rights only in so far as they do not conflict with the needs of the sovereign state.

This conception of the Fascist state, which is essentially a vigorous revival of the idea of nationalism as first developed during the French Revolution, is at the same time a repudiation of the political organization of the national state as set up during the century following the revolution. The rejection by the Fascists of Rousseau's dogma of popular sovereignty automatically invalidated the doctrine of natural rights as well as the infallibility of majority rule. "Broken up and dissipated among millions of citizens preoccupied as a general rule with their own private needs, popular sovereignty was distorted and can no longer be considered a practical expression of organic statecraft." The actual administration, in which "the entire life of the nation is concentrated," must be entrusted to a

limited number of persons constituting an organic unity. The action of the "dynamic" state must be, in contrast to that of the parliamentary system, "quick, sure, unanimous, conscious, responsible." Parliamentarianism was felt to be not only unwieldy but also by reason of the absence of a common outlook between modern parties ineffective; it ignored the "social forces" within the nation and had failed to cope adequately with the political and economic crisis in Italy during and after the war. Against the domination of Parliament and the majority principle Fascism advanced, as is indicated in the preceding quotations, the claims of the élite. Unquestionably it is here that the connection often exaggerated and often groundlessly denied -manifests itself with Georges Sorel's philosophy of history, which sharply emphasizes the significance of the élite as the embodiment of the genius of a people, an institution or a class. Even when Fascism at a later stage of its development attempted to strengthen its position by harnessing the democratic forces of the state, as expressing themselves in the plebiscite, it was still acting consistently with its basic emphasis on the élite.

The idea of the sovereignty of the state is the very kernel of Fascist social and political theory. The contrast with the French Revolution as well as with the pluralistic conception of the state is apparent in the thesis that although the groups—the attività sociali, associations intermediate between state and individual—are to be recognized by the state they are to be strictly subordinated to serving the interests of the state. This conception leaves no room for class struggle, even were Fascism less emphatic in its insistence on the solidarity of capital and labor in the production process over and above their antagonism in the division of the social product. If all the vocations of the country were organized into one great syndicate, the postulate or state sovereignty would lead directly to an "identification of the economic system with the state," the peculiarity of which would consist in the fact that it would still be unwilling to renounce the dynamic force of private initiative. The legislation which sprang from these ideas will be considered later.

The historical beginnings of the Fascist movement are comprehensible only in the light of the severe political and economic crisis into which the World War had plunged Italy. Victory brought the realization of her irredentisa aims, but in all her nationalist aspirations which Fascism 135

went beyond this she was disappointed. She had emerged from the war without colonies; the Adriatic Sea, mare nostrum, was in other hands. Although the Austrian Empire had been shattered, the presence of the Slavic flank on the east constituted a new threat, which with additional consolidation might prove more dangerous than the old.

In addition to the discontent over the peace treaty there arose a great number of economic and financial difficulties. The productive forces of the country were in part destroyed, in part turned as a result of the war into false channels; the balance of trade and the state budget revealed enormous deficits; the debt to the Anglo-Saxon countries mounted still higher in spite of the termination of the war. On the other hand, the assets, so important in normal times, from "invisible" exports—the savings sent back to the mother country by emigrants, the revenue from tourists and commercial shipping—had sunk to almost nothing. Fortunes and income decreased to a great degree.

Impressed by the profound moral depression created throughout Italy by the international and economic situation the socialist parties, whose radical wings had persisted even after the def. at at Caporetto in their antiwar agitation and in the general situation in 1918 had found excellent material for propaganda, decided with encouragement from Moscow that the hour for action had arrived. An unbroken succession of strikes swept over the peninsula. Although concentrated more especially in the industrial and agricultural regions of northern Italy they radiated to the south, as far even as Apulia and Sicily. The political fate of Italy might have been different had there not intervened between the southern latifundia with their thick layer of agrarian proletariat and the northern Italian industrial area a broad intermediate zone inhabited chiefly by small property owners and tenant farmers essentially middle class in their material interests as well as in their intellectual and moral outlook. Socialism was to pay dearly for the advances which it made among these groups in the intensity of the subsequent antisocialist reaction. The valley of the Po was to be commemorated by Mussolini himself as the cradle of the Fascist movement. Even to the present time Fascism has not denied its agrarian origins. One of the most important sections of its legislation, the Bonifica integrale, is expressly designed to increase the number of small landholders.

In March, 1919, Benito Mussolini, who had

been one of the first to advocate the entry of Italy into the war on the side of the Entente, organized his fasci di combattimento as bearers of a Napoleonic will to power dedicated to a nationalistic syndicalist program, which contained in addition other heterogeneous elements. The social composition of these groups revealed from the beginning a significant peculiarity of the movement. It cut, as it were, vertically through Italian society and from all strata recruited its followers, who ranged from former service men to syndicalist agitators and workers, to students, to followers of d'Annunzio. The embryonic movement acquired a broader significance when in the course of time Mussolini dropped the trimmings of syndicalism and carried his agitation successfully to the urban and rural middle classes, who gradually attached themselves to the original inner nucleus of shock troops. Finally, with the adherence of members from the upper classes of society, such as the large landowners of the south and the industrial bourgeoisie of Lombardy, the problem of financial support for the party program became less acute. Thus the movement, which at first made no pretenses to formal party organization, consisted merely of the dynamic military minority and the larger group of loosely knit followers.

Mussolini's political tactics during the two years preceding his march to Rome on October 28, 1922, contributed in two significant respects to the later success of Fascism. First of all he carefully avoided saddling the movement in its infancy with a formal program. He consistently made it clear to the people that he relied not upon laboriously prepared and meticulously contrived programs, with which Italy in its political life was surfeited, but on an intuitive comprehension of the situation at hand and a rough and ready solution of it in the interests of the nation. This substitution of charismatic arbitrary leadership in place of a rigid program, which is in full accord with Italian political tradition, made it possible during the early struggles to enlist as active followers or at least as sympathetic observers recruits from all sections, although their only common meeting ground might be an enthusiasm for the national idea, combined with an antipathy to parliamentarianism and international socialism.

A second and more important feature of Mussolini's tactics during this preparatory period was the gradual penetration of Italian administrative and political machinery with his followers and the institution on a broad scale of volunteer emergency groups which were set up in time of strike—most successfully, in the attempted general strike in the beginning of August, 1922—to keep the essential industries running. Where the state and especially the local representatives adopted a hostile attitude toward the new movement, the party proceeded to supersede them with its own organs—and thus to organize the "state within the state," the état postiche of the French Revolution.

Italy had capitulated even before the Fascist march on Rome. This gradual "methodical" conquest of the state was a part of Mussolini's revolutionary tactics and at the same time an indication of the empirical nature of Fascist development, which had characterized the entire movement up to that point. The interesting fact should be remembered that many of the most important Fascist institutions—the constitutional position of Mussolini, the Great Fascist Council, Balilla and Avanguardia as organizations for the education of youth—were set up first under the pressure of some immediate situation and only later given constitutional sanction.

The contention that Fascism constitutes a coup d'état rather than a revolution depends upon the definition that is given to these two terms. If Marx' narrow definition be accepted and the term revolution be applied only to an overthrow of the ruling class by the ruled and to the establishment of a communistic society, then it is immediately clear that Fascism can raise no such claim. A more realistic definition of revolution, however, would include all those situations in which the tension within a state has reached a point where it is no longer possible to maintain a balance through normal meansthe broader significance of the revolution depending, of course, on how fundamental are its effects.

It is impossible to understand the transformation of the Italian state resulting from the Fascist revolution except by an analysis of the party organization with its concentration of authority and its hierarchic membership. The Fascist party cuts through the horizontal layers of society, which with the aid of the arbitrary state government hold it together like a clamp. Just as in Soviet Russia, the party seeks through a host of auxiliary groups—associations of teachers, students, railroad men and the like—to extend to all spheres of modern life. Concentration of authority and hierarchy of membership imply that all the reins of party activity come together eventually in the hands of Mus-

solini. All nominations are traceable directly or indirectly to him, and throughout the varied ramifications of the party machine the will of the leaders as a general rule prevails over the component organs. Mussolini controls the decisions in the Great Fascist Council: the secretaries of the provincial and local associations control the activities as well as the membership of the governing bodies. It is a consequence of the aristocratic concept of the élite—as well as an expression of the contempt for the democratic principle of election—that the selection of leaders all along the line takes place through nomination from above. The party hierarchy does not proceed upward from the will of individual voters-not even theoretically, as is the case in Russia—but has its origin among the leaders, whence it permeates downward. An inevitable corollary of this authoritarian hierarchic structure is the unqualified duty of obedience incumbent upon all members. Every individual who wishes to enter the ranks of the Fascists must take an oath which binds him "to obey without question the commands of the Duce ... and when necessary to shed his blood for the Fascist revolution." Thus the political structure of the party must be visualized in order to understand the transformation of the Italian state as a result of the Italian revolution.

After the march to Rome and especially after the incisive legislation accompanying the establishment of the "intensified" dictatorship of 1925, Italy must be regarded as a one-party state just as Soviet Russia is a one-party state. The process of fusion of party and state was accomplished in various ways. On the one side the state itself was well adapted to the structure of a hierarchic authoritarian party. The executive power of the state became so strong both in content and in structure that it completely overshadowed the legislative and passed over into the newly created capo del governo, Mussolini. The complement of this process was the centralization of the entire administration, which although not carried out at one stroke ultimately eliminated local autonomy in province and community. A second means of fusion was through the constitutional overlapping of party and state. The beginning of this evolution was made when Mussolini proclaimed himself head of the party and at the same time president of the ministry. Further important steps in this direction were the amalgamation of the party militia into the state guard, court recognition of Fascist unions and administration by government appointees of

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the youth organizations founded by Fascism. The conclusion of the development was reached in the constitutional erection of the Great Faszist Council, a body which first assembled for the solution of actual questions on the eve of the march to Rome and which was afterward perpetuated as the highest corporate organ of the party. Its manifold competences—such as its noteworthy collaboration in the founding of the second chamber, its expressions of opinion regarding such constitutional questions as the succession to the throne—are overshadowed from a political point of view by that particular one according to which in case of the death of Mussolini it is to submit to the monarch the nomination of his successor. Since the nominee will become equally capo di stato e duce del' fascismo, the central function of the council may be defined as the perpetuation of the party-state regime beyond the lifetime of Mussolini.

According to Fascist theory the corporative, or guild, state is the visible expression of the supremacy of the state over the economic and social groups within the nation. The nature of this complex structure does not lend itself to brief analysis. The problem is made even more difficult by the fact that the corporative state is still in process of gradual transformation as well as by the impossibility of forming as yet an exact opinion as to how far the legal machinery set up for its realization has altered the actual features of the Italian economic system.

It is significant for an understanding of the corporative state that through it the state administration allies itself with private enterprise and the preservation of the capitalistic order. The former is declared to be the "most practicable and feasible means for serving national interests"; the latter, the best adapted "method of production." In striking contrast to the laissez faire doctrines of economic liberalism, Fascism sets forth—most explicitly in article IX of the Carta del lavoro, the basic labor constitution of the movement—the right of the state to intervene in the process of production whenever private initiative is unequal to the task at hand or when political interests are at stake. Although of course an emergency administration of inadequately cultivated landed property has hitherto taken place only seldom, an interventionist policy has manifested itself in the limitations on free choice of domicile with a view to restricting the supply of industrial labor, in the discouragement of new factories in large cities and in the decisive state regulation of small merchants.

The most thoroughgoing interventionism of the corporative state is in regard to the freedom of labor. A syndicalist structure incorporating the various vocations of the nation is designed to regulate all relationships involving labor. Although this is accompanied by a campaign of moral and national education among the mem bers the regulations are rigidly binding upon all. Consistent with the emphasis on the supremacy of the state is the effort to transcend the disastrous economic and political effects of class conflict by emphasizing the solidarity of capital and labor in the production process. Actually of course there is still a sharp division between labor associations and employers' associations, leaving the way open to a clash of interests. But since all strikes and lockouts are outlawed, such disputes are to be settled only by arbitration groups or in the last resort by the state magistrature del lavoro. According to the labor constitution wages should be determined by three considerations—not always easy to establish—the necessities of life, the potentiality of production and the profits of labor. The critical point in the development of the corporative state is whether the joint associations composed of both capitalists and workers—the corporations, described in article vI of the Carta del lavoro as "unified organizations of all productive forces"-can actually exert a wide influence in regulating the individual production processes. If this aim is accomplished, the resulting economic system would constitute an economic autonomy under state leadership, a type of plan-capitalism, with flexible state intervention always in the background—a system which is far different from the unwieldy state socialism on the German pattern.

A further analysis of the political features of the corporative state reveals that in the composition of its membership it is hierarchic, just as the party and the state are, and that in the last analysis its activities are equally inspired and directed by Mussolini. The higher associations, the confederations and federations, control and direct the lower. At the pinnacle of this broad framework are the ministry of corporations and the national council of corporations, which at the time of its inauguration was designated by Mussolini as the economic general staff of Italy.

But the corporative state does more than round out the supremacy of Fascist authoritarianism. The confederations are entrusted with the important function of drawing up a list of candidates for the second chamber, which ultimately, after amendments by the Great Fascist Council, is submitted to a vote of the people. Under the institution of a "sovereign dictatorship" which controls all expressions of public opinion, the chief function of the Chamber of Deputies is to keep alive the contact between the public and 'he administration and in the process to disseminate and interpret for the benefit of the people the essentials of Fascist policy. And since the majority of deputies emanate from the state recognized vocational associations, the body of popular representatives is capable of providing expert support to the work of economic legislation.

In the supervision of the cultural as well as of the economic life of the state Fascism has manifested its characteristic tendency to put into circulation again currencies which since the French Revolution had been withdrawn. A typical illustration of this conservatism is the educational reform of Giovanni Gentile. His philosophy of "actualism," which has permeated Fascist political and social theory, repudiates the abstract and rational approach of Rousseau as destructive of the personality of the pupil formed by family and religious training. The development of this personality according to Socratic precept is accepted as the true goal of Fascist education, which at the same time consistently emphasizes tradition as one of the great cultural forces. "Popular tradition, so long as it remains a living force among a people which cherishes the words of its ancestors, and the great national literature, which at all times has brought forth masterpieces of poetry, and faith, and knowledge: these, for all their greatness, are accessible even to the poorest."

Fascist school legislation has made religious education obligatory in state schools. Although the relationship of Fascism to the Catholic church is in many respects extremely complicated, it is unquestionably true that the two movements share in common, to a greater degree than at any time since the Risorgimento, many features—as, for example, an antipathy to liberalism and a close contact with the middle classes, especially the agrarian. It would be a mistake, of course, to ignore the political motives which operated on both sides in the rapprochement between the Curia and the king. But it would be equally unrealistic, in considering the monopolization by the Fascists of the social life of Italy—especially of the education of the young -and the irremediable resentment of the Curia, to forget that both groups deem it from time

to time expedient to pose in the eyes of the world as bitter adversaries.

Between the foreign policy of the Fascists and that of their predecessors there is no clear cut distinction. The international relations of a state are predetermined by its geographical location, the vitality and martial virtues of its population and to a less degree by its historical traditions. A very decisive transformation in the inner structure of a country may not find its counterpart in the diplomatic sphere.

Even the methods of Fascist diplomacy reveal little change. Italian politics has hitherto been empirical and realistic and therefore unusually elastic. If at the present time it creates in foreign countries the impression of rigidity it is because in Italy there is no public opinion apart from that controlled by the dictatorship.

What has changed is the vigor with which Fascist Italy makes her diplomatic claims effective. It should not be forgotten that one reason for the rapid expansion of the Fascist movement was the feebleness of Italian foreign policy directly after the war, and in addition that every government which emphasizes so strongly the idea of nationalism and of national mission is invariably committed to a vigorous foreign policy.

Although hemmed in between the French and English holdings in the Mediterranean, Fascist Italy has succeeded by the penetration of Albania and the definitive conquest of Dodecanese in preserving and strengthening its political position in the Adriatic and the Aggean. While the attempt has been made to continue and deepen the traditional friendship with England, the relations with France have occasionally come sharply to a head. The attempted denationalization of numerous Italian settlers in Tunis, the political and economic influence of both powers in southeastern Europe, the difficult problem of naval armaments, have proved the most dangerous points in which the Franco-Italian rivalry has kindled during the last few years. Undoubtedly the position of Italy as a great power and its diplomatic self-dependence have been strengthened under the Fascist government. For the fate of Europe the most critical consideration is whether the Fascist regime in the pursuit of its national aspirations will be successful in reconciling the internal strain caused by its political and national ideology with a peaceful foreign policy.

ERWIN VON BECKERATH

See: GOVERNMENT, section on ITALY; NATIONALISM; SOVEREIGNTY; STATE; REVOLUTION; FORCE, POLITICAL;

DICTATORSHIP; SYNDICALISM; FUNCTIONAL REPRESENTATION; NATIONAL ECONOMIC PLANNING; LABOR; EMPLOYERS' ASSOCIATIONS; AGRARIAN SYNDICALISM; EDUCATION; YOUTH MOVEMENTS; PAPACY.

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FASIIION. The meaning of the term fashion may be clarified by pointing out how it differs in connotation from a number of other terms whose meaning it approaches. A particular fashion differs from a given taste in suggesting some measure of compulsion on the part of the group as contrasted with individual choice from among a number of possibilities. A particular choice may of course be due to a blend of fashion and taste. Thus, if bright and simple colors are in fashion, one may select red as more pleasing to one's taste than yellow, although one's free taste unhampered by fashion might have decided in favor of a more subtle tone. To the discriminating person the demand of fashion constitutes a challenge to taste and suggests problems of reconciliation. But fashion is accepted by average people with little demur and is not so much reconciled with taste as substituted for it. For many people taste hardly arises at all except on the basis of a clash of an accepted fashion with a fashion that is out of date or current in some other group than one's own.

The term fashion may carry with it a tone of approval or disapproval. It is a fairly objective term whose emotional qualities depend on a context. A moralist may decry a certain type of behavior as a mere fashion but the ordinary person will not be displeased if he is accused of being in the fashion. It is different with fads, which are objectively similar to fashions but differ from them in being more personal in their application and in connoting a more or less definite social disapproval. Particular people or coteries have their fads, while fashions are the property of larger or more representative groups. A taste which asserts itself in spite of fashion and which may therefore be suspected of having something obsessive about it may be referred to as an individual fad. On the other hand, while a fad may be of very short duration, it always differs from a true fashion in having something unexpected, irresponsible or bizarre about it. Any fashion which sins against one's sense of style and one's feeling for the historical continuity of style is likely to be dismissed as a fad. There are changing fashions in tennis rackets, while the game of mah jong, once rather fashionable, takes on in retrospect more and more the character of a fad.

Just as the weakness of fashion leads to fads, so its strength comes from custom. Customs differ from fashions in being relatively permanent types of social behavior. They change, but with a less active and conscious participation of the individual in the change. Custom is the element of permanence which makes changes in fashion possible. Custom marks the highroad of human interrelationships, while fashion may be looked upon as the endless departure from and return to the highroad. The vast majority of fashions are relieved by other fashions, but occasionally a fashion crystallizes into permanent habit, taking on the character of custom.

It is not correct to think of fashion as merely a short lived innovation in custom, because many innovations in human history arise with the need for them and last as long as they are useful or convenient. If, for instance, there is a shortage of silk and it becomes customary to substitute cotton for silk in the manufacture of certain articles of dress in which silk has been the usual material, such an enforced change of material, however important economically or aesthetically, does not in itself constitute a true change of fashion. On the other hand, if cotton is substituted for silk out of free choice as a symbol perhaps of the simple life or because of a desire to see what novel effect can be produced in accepted types of dress with simpler materials, the change may be called one of fashion. There is nothing to prevent an innovation from eventually taking on the character of a new fashion. If, for example, people persist in using the cotton material even after silk has once more become available, a new fashion has arisen.

Fashion is custom in the guise of departure from custom. Most normal individuals consciously or unconsciously have the itch to break away in some measure from a too literal loyalty to accepted custom. They are not fundamentally in revolt from custom but they wish somehow to legitimize their personal deviation without laying themselves open to the charge of insensitiveness to good taste or good manners. Fashion is the discreet solution of the subtle conflict. The slight changes from the established in dress or other forms of behavior seem for the moment to give the victory to the individual, while the fact that one's fellows revolt in the same direction gives one a feeling of adventurous safety. The personal note which is at the hidden core of fashion becomes superpersonalized.

Whether fashion is felt as a sort of socially legitimized caprice or is merely a new and unintelligible form of social tyranny depends on the individual or class. It is probable that those most concerned with the setting and testing of fashions are the individuals who realize most keenly the problem of reconciling individual freedom with social conformity which is implicit in the very fact of fashion. It is perhaps not too much to say that most people are at least partly sensitive to this aspect of fashion and are secretly grateful for it. A large minority of people, however, are insensitive to the psychological complexity of fashion and submit to it to the extent that they do merely because they realize that not to fall in with it would be to declare themselves members of a past generation or dull people who cannot keep up with their neighbors. These latter reasons for being fashionable are secondary; they are sullen surrenders to bastard custom.

The fundamental drives leading to the creation and acceptance of fashion can be isolated. In the more sophisticated societies boredom,

created by leisure and too highly specialized forms of activity, leads to restlessness and curiosity. This general desire to escape from the trammels of a too regularized existence is powerfully reenforced by a ceaseless desire to add to the attractiveness of the self and all other objects of love and friendship. It is precisely in functionally powerful societies that the individual's ego is constantly being convicted of helplessness. The individual tends to be unconsciously thrown back on himself and demands more and more novel affirmations of his effective reality. The endless rediscovery of the self in a series of petty truancies from the official socialized self becomes a mild obsession of the normal individual in any society in which the individual has ceased to be a measure of the society itself. There is, however, always the danger of too great a departure from the recognized symbols of the individual, because his identity is likely to be destroyed. That is why insensitive people, anxious to be literally in the fashion, so often overreach themselves and nullify the very purpose of fashion. Good hearted women of middle age generally fail in the art of being ravishing nymphs.

Somewhat different from the affirmation of the libidinal self is the more vulgar desire for prestige or notoriety, satisfied by changes in fashion. In this category belongs fashion as an outward emblem of personal distinction or of membership in some group to which distinction is ascribed. The imitation of fashion by people who belong to circles removed from those which set the fashion has the function of bridging the gap between a social class and the class next above it. The logical result of the acceptance of a fashion by all members of society is the disappearance of the kinds of satisfaction responsible for the change of fashion in the first place. A new fashion becomes psychologically necessary, and thus the cycle of fashion is endlessly repeated.

Fashion is emphatically a historical concept. A specific fashion is utterly unintelligible if lifted out of its place in a sequence of forms. It is exceedingly dangerous to rationalize or in any other way psychologize a particular fashion on the basis of general principles which might be considered applicable to the class of forms of which it seems to be an example. It is utterly vain, for instance, to explain particular forms of dress or types of cosmetics or methods of wearing the hair without a preliminary historical critique. Bare legs among modern women in

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summer do not psychologically or historically create at all the same fashion as bare legs and bare feet among primitives living in the tropics. The importance of understanding fashion historically should be obvious enough when it is recognized that the very essence of fashion is that it be valued as a variation in an understood sequence, as a departure from the immediately preceding mode.

Changes in fashion depend on the prevailing culture and on the social ideals which inform it. Under the apparently placed surface of culture there are always powerful psychological drifts of which fashion is quick to catch the direction. In a democratic society, for instance, if there is an unacknowledged drift toward class distinctions fashion will discover endless ways of giving it visible form. Criticism can always be met by the insincere defense that fashion is merely fashion and need not be taken seriously. If in a puritanic society there is a growing impatience with the outward forms of modesty, fashion finds it easy to minister to the demands of sex curiosity, while the old mores can be trusted to defend fashion with an affectation of unawareness of what fashion is driving at. A complete study of the history of fashion would undoubtedly throw much light on the ups and downs of sentiment and attitude at various periods of civilization. However, fashion never permanently outruns discretion and only those who are taken in by the superficial rationalizations of fashion are surprised by the frequent changes of face in its history. That there was destined to be a lengthening of women's skirts after they had become short enough was obvious from the outset to all except those who do not believe that sex symbolism is a real factor in human behavior.

The chief difficulty of understanding fashion in its apparent vagaries is the lack of exact knowledge of the unconscious symbolisms attaching to forms, colors, textures, postures and other expressive elements in a given culture. The difficulty is appreciably increased by the fact that the same expressive elements tend to have quite different symbolic references in different areas. Gothic type, for instance, is a nationalistic token in Germany, while in Anglo-Saxon culture the practically identical type known as Old English has entirely different connotations. In other words, the same style of lettering may symbolize either an undying hatred of France or a wistful look backward at madrigals and pewter.

An important principle in the history of fash-

ion is that those features of fashion which do not configurate correctly with the unconscious system of meanings characteristic of the given culture are relatively insecure. Extremes of style, which too frankly symbolize the current of feeling of the moment, are likely to find themselves in exposed positions, as it were, where they can be outflanked by meanings which they do not wish to recognize. Thus, it may be conjectured that lipstick is less secure in American culture as an element of fashion than rouge discreetly applied to the check. This is assuredly not due to a superior sinfulness of lipstick as such, but to the fact that rosy cheeks resulting from a healthy natural life in the country are one of the characteristic fetishisms of the traditional ideal of feminine beauty, while lipstick has rather the character of certain exotic ardors and goes with flaming oriental stuffs. Rouge is likely to last for many decades or centuries because there is, and is likely to be for a long time to come, a definite strain of nature worship in our culture. If lipstick is to remain it can only be because our culture will have taken on certain violently new meanings which are not at all obvious at the present time. As a symbol it is episodic rather than a part of the underlying rhythm of the history of our fashions.

In custom bound cultures, such as are characteristic of the primitive world, there are slow non-reversible changes of style rather than the often reversible forms of fashion found in modern cultures. The emphasis in such societies is on the group and the sanctity of tradition rather than on individual expression, which tends to be entirely unconscious. In the great cultures of the Orient and in ancient and mediaeval Europe changes in fashion can be noted radiating from certain definite centers of sophisticated culture, but it is not until modern Europe is reached that the familiar merry-go-round of fashion with its rapid alternations of season occurs.

The typically modern acceleration of changes in fashion may be ascribed to the influence of the Renaissance, which awakened a desire for innovation and which powerfully extended for European society the total world of possible choices. During this period Italian culture came to be the arbiter of taste, to be followed by French culture, which may still be looked upon as the most powerful influence in the creation and distribution of fashions. But more important than the Renaissance in the history of fashion is the effect of the industrial revolution and the rise of the common people. The former in-

creased the mechanical ease with which fashions could be diffused; the latter greatly increased the number of those willing and able to be fashionable.

Modern fashion tends to spread to all classes of society. As fashion has always tended to be a symbol of membership in a particular social class and as human beings have always felt the urge to edge a little closer to a class considered superior to their own, there must always have been the tendency for fashion to be adopted by circles which had a lower status than the group setting the fashions. But on the whole such adoption of fashion from above tended to be discreet because of the great importance attached to the maintenance of social classes. What has happened in the modern world, regardless of the official forms of government which prevail in the different nations, is that the tone giving power which lies back of fashion has largely slipped away from the aristocracy of rank to the aristocracy of wealth. This means a psychological if not an economic leveling of classes because of the feeling that wealth is an accidental or accreted quality of an individual as contrasted with blood. In an aristocracy of wealth everyone, even the poorest, is potentially wealthy both in legal theory and in private fancy. In such a society, therefore, all individuals are equally entitled, it is felt, so far as their pockets permit, to the insignia of fashion. This universalizing of fashion necessarily cheapens its value in the specific case and forces an abnormally rapid change of fashion. The only effective protection possessed by the wealthy in the world of fashion is the insistence on expensive materials in which fashion is to express itself. Too great an insistence on this factor, however, is the hall mark of wealthy vulgarity, for fashion is essentially a thing of forms and symbols not of material values.

Perhaps the most important of the special factors which encourage the spread of fashion today is the increased facility for the production and transportation of goods and for communication either personally or by correspondence from the centers of fashion to the outmost periphery of the civilized world. These increased facilities necessarily lead to huge capital investments in the manufacture and distribution of fashionable wear. The extraordinarily high initial profits to be derived from fashion and the relatively rapid tapering off of profits make it inevitable that the natural tendency to change in fashion is helped along by commercial suggestion. The increas-

ingly varied activities of modern life also give greater opportunity for the growth and change of fashion. Today the cut of a dress or the shape of a hat stands ready to symbolize anything from mountain climbing or military efficiency through automobiling to interpretative dancing and veiled harlotry. No individual is merely what his social role indicates that he is to be or may vary only slightly from, but he may act as if he is anything else that individual phantasy may dictate. The greater leisure and spending power of the bourgeoisie, bringing them externally nearer the upper classes of former days, are other obvious stimuli to change in fashion, as are the gradual psychological and economic liberation of women and the greater opportunity given them for experimentation in dress and adornment.

Fashions for women show greater variability than fashions for men in contemporary civilization. Not only do women's fashions change more rapidly and completely but the total gamut of allowed forms is greater for women than for men. In times past and in other cultures, however, men's fashions show a greater exuberance than women's. Much that used to be ascribed to woman as female is really due to woman as a sociologically and economically defined class. Woman as a distinctive theme for fashion may be explained in terms of the social psychology of the present civilization. She is the one who pleases by being what she is and looking as she does rather than by doing what she does. Whether biology or history is primarily responsible for this need not be decided. Woman has been the kept partner in marriage and has had to prove her desirability by ceaselessly reaffirming her attractiveness as symbolized by novelty of fashion. Among the wealthier classes and by imitation also among the less wealthy, woman has come to be looked upon as an expensive luxury on whom one spends extravagantly. She is thus a symbol of the social and economic status of her husband. Whether with the increasingly marked change of woman's place in society the factors which emphasize extravagance in women's fashions will entirely fall away it is impossible to say at the present time.

There are powerful vested interests involved in changes of fashions, as has already been mentioned. The effect on the producer of fashions of a variability which he both encourages and dreads is the introduction of the element of risk. It is a popular error to assume that professional designers arbitrarily dictate fashion. They do so Fashion 143

only in a very superficial sense. Actually they have to obey many masters. Their designs must above all things net the manufacturers a profit, so that behind the more strictly psychological determinants of fashion there lurks a very important element due to the sheer technology of the manufacturing process or the availability of a certain type of material. In addition to this the designer must have a sure feeling for the established in custom and the degree to which he can safely depart from it. He must intuitively divine what people want before they are quite aware of it themselves. His business is not so much to impose fashion as to coax people to accept what they have themselves unconsciously suggested. This causes the profits of fashion production to be out of all proportion to the actual cost of manufacturing fashionable goods. The producer and his designer assistant capitalize the curiosity and vanity of their customers out they must also be protected against the losses of a risky business. Those who are familiar with the history of fashion are emphatic in speaking of the inability of business to combat the fashion trends which have been set going by various psychological factors. A fashion may be aesthetically pleasing in the abstract, but if it runs counter to the trend or does not help to usher in a new trend which is struggling for a hearing it may be a flat failure.

The distribution of fashions is a comparatively simple and automatic process. The vogue of fashion plates and fashion magazines, the many lines of communication which connect fashion producers and fashion dispensers, and modern methods of marketing make it almost inevitable that a successful Parisian fashion should find its way within an incredibly short period of time to Chicago and San Francisco. If it were not for the necessity of exploiting accumulated stocks of goods these fashions would penetrate into the remotest corners of rural America even more rapidly than is the case. The average consumer is chronically distressed to discover how rapidly his accumulated property in wear depreciates by becoming outmoded. He complains bitterly and ridicules the new fashions when they appear. In the end he succumbs, a victim to symbolisms of behavior which he does not fully comprehend. What he will never admit is that he is more the creator than the victim of his difficulties.

Fashion has always had vain critics. It has been arraigned by the clergy and by social satirists because each new style of wear, calling

attention as it does to the form of the human body, seems to the critics to be an attack on modesty. Some fashions there are, to be sure, whose very purpose it is to attack modesty, but over and above specific attacks there is felt to be a generalized one. The charge is well founded but useless. Human beings do not wish to be modest; they want to be as expressive—that is, as immodest—as fear allows; fashion helps them solve their paradoxical problem. The charge of economic waste which is often leveled against fashion has had little or no effect on the public mind. Waste seems to be of no concern where values are to be considered, particularly when these values are both egoistic and unconscious. The criticism that fashion imposes an unwanted uniformity is not as sound as it appears to be in the first instance. The individual in society is only rarely significantly expressive in his own right. For the vast majority of human beings the choice lies between unchanging custom and the legitimate caprice of custom, which is fashion.

Fashion concerns itself closely and intimately with the ego. Hence its proper field is dress and adornment. There are other symbols of the ego, however, which are not as close to the body as these but which are almost equally subject to the psychological laws of fashion. Among them are objects of utility, amusements and furniture. People differ in their sensitiveness to changing fashions in these more remote forms of human expressiveness. It is therefore impossible to say categorically just what the possible range of fashion is. However, in regard to both amusements and furniture there may be observed the same tendency to change, periodicity and unquestioning acceptance as in dress and ornament.

Many speak of fashions in thought, art, habits of living and morals. It is superficial to dismiss such locutions as metaphorical and unimportant. The usage shows a true intuition of the meaning of fashion, which while it is primarily applied to dress and the exhibition of the human body is not essentially concerned with the fact of dress or ornament but with its symbolism. There is nothing to prevent a thought, a type of morality or an art form from being the psychological equivalent of a costuming of the ego. Certainly one may allow oneself to be converted to Catholicism or Christian Science in exactly the same spirit in which one invests in pewter or follows the latest Parisian models in dress. Beliefs and attitudes are not fashions in their character of mores but neither are dress and orna-

ment. In contemporary society it is not a fashion that men wear trousers; it is the custom. Fashion merely dictates such variations as whether trousers are to be so or so long, what colors they are to have and whether they are to have cuffs or not. In the same way, while adherence to a religious faith is not in itself a fashion, as soon as the individual feels that he can pass easily, out of personal choice, from one belief to another, not because he is led to his choice by necessity but because of a desire to accrete to himself symbols of status, it becomes legitimate to speak of his change of attitude as a change of fashion. Functional irrelevance as contrasted with symbolic significance for the expressiveness of the ego is implicit in all fashion.

EDWARD SAPIR

See: IMITATION; CUSTOM; CONFORMITY; CONVENTIONS, SOCIAL; TASTE; DRESS; ORNAMENT; FURNITURE; SYMBOLISM; LEISURE; ARISTOCRACY; CLASS; PLUTOCRACY; GARMENT INDUSTRIES; CONSUMPTION; RISK.

Consult: Boehn, Max von, Die Mode: Menschen und Moden im neunzehnten Jahrhundert, vols. i-v, vii (Munich 1919-20), tr. by M. Edwardes, 4 vols. (rev. ed. London 1927); Kroeber, A. L., "On the Principle of Order in Civilization as Exemplified by Changes of Fashion" in American Anthropologist, n.s., vol. xxi (1919) 235-63; Elster, Alexander, "Mode" in Handwörterbuch der Staatswissenschaften, vol. vi (4th ed. Jena 1925) p. 603-14; Lowie, R. H., Are We Civilized? (New York 1929) ch. x; Stern, Norbert, Mode und Kultur, 2 vols. (Dresden 1915); Bradley, H. D., The Eternal Masquerade (London 1922); Veblen, Thorstein, The Theory of the Leisure Class (New York 1899) ch. vii; Troeltsch, Walter, Volkswirtschaftliche Betrachtungen über die Mode (Marburg 1912); Clerget, Pierre, "Le rôle économique et social de la mode" in Revue économique internationale, Brussels, vol. ii (1913) 126-42, tr. in Smithsonian Institution, Annual Report (1913) 755-65; Sombart, Werner, Wirtschaft und Mode (Wiesbaden 1902); Nystrom, Paul H., The Economics of Fashion (New York 1928); Raushenbush, Winifred, in New Freeman, vol. i (1930) 10-12, 323-25; Hurlock, E. B., The Psychology of Dress (New York 1929); Flügel, J. C., The Psychology of Clothes (London 1930).

FASTING is a reduction in the quantity of food taken, even to total abstinence. It must not be confused with the avoidance of certain victuals as being harmful, as when a Fijian mother avoids rich food for fear her child might contract a disease. Such an act is on a par with the avoidance of sugar by a modern patient with diabetes and is dieting, not fasting. Neither should fasting be confused with food tabus, such as the Jewish tabu on pork, the food tabus of Polynesian chiefs and the vegetarianism of the high caste Hindus.

True fasting is one of the most common incidents of ceremonies which are designated by the terms sacrament, sacrifice and consecration. It is invariably the prelude to such ceremonies. Thus by fasting the king prepares for his installation, the priest for his ordination, the knight for his knighthood, the initiate for his initiation, the neophyte for baptism, the communicant for the mass, the bride and bridegroom for marriage and the adolescent girl for the new life ushered in by her first menses. These are ceremonies that enact death and rebirth or are derived from such ceremonies. They begin with a period of quiescence, which appears to represent the state of non-existence preceding conception. Fasting is merely a part of this quiescence; all activities are suspended as far as is physically possible. This view is borne out by the fact that fasting is common after a death, when the mourners undergo fictitious death in sympathy with the deceased (I Samuel XXXI: 13; I Chronicles X: 12).

Rebirth is not limited to persons but extends to things. Nature has at intervals to be renovated in whole or part. These ceremonies of renovation occur when special circumstances arise, such as droughts, excessive rain, settlement in a new home and renewal of sacred things. Some are seasonal, occurring at the vernal and autumnal equinoxes. Fasting precedes the building of a new temple and the issue of a new code (Exodus XXXIV), a visit to a temple (Herodotus II: 40), the making of a new fire and rain making. Fasting is observed in the Solomon Islands by a man who crosses the sea for the first time, for he is apt to lose his soul and a new one has to be provided on his return (Ivens, W. G., Island Builders of the Pacific, Philadelphia 1930, p. 231-35). Seasonal fasting occurs at sowing time (Thesmophoria at Athens), on planting a new garden (Solomon Islands) and before harvest time. The fasting that precedes the rebirth of nature after winter survives in the substitution of unleavened for leavened bread during the Passover week among the Jews, the thirty days' Ramadan among the Mohammedans and the forty days' Lent in the Christian church. It has been reinterpreted in accordance with the ethics or theology of these religions, as in the case of Lent, which has attached itself to the death and resurrection of Christ. Such prolonged fasts cannot be complete but are often observed by day only. This is the Mohammedan practise and was the Christian until the twelfth century. It can be traced back to the Hebrews (Judges XX: 26; I Samuel XIV: 24) and explains the long fastings ascribed to Moses and others (I Kings xix: 8). Fijians fast by day after the death of a chief probably because the mourners identify themselves with the spirits of the underworld, whose night is day. The great seasonal fasts being associated with the death of the god are accompanied by similar inversion.

Since fasting is a necessary introduction to ceremonies which aim at fertility it becomes directly associated with the power to produce crops and progeny. Thus fasting by itself is held to be conducive to rain as a condition of fertility. Fasting and austerities in India have supplanted the ritual to which they were originally the preface and afford power over the gods by whom prosperity is given. The technique of fasting has been developed there to an extent unknown elsewhere. Refinements have been invented and classified under technical terms, such as specific designations for reducing full diet by degrees to nothing and for the practise of increasing daily from complete abstinence to full diet. Hindu ascetics by going into a trance can fast for incredibly long periods, a practise which has not yet been scientifically investigated.

The same process by which fasting became associated with the control of nature also connects it with sin. Renovation ceremonies are undertaken when the weather has been upset by moral lapses; thus Indian legend tells of a twelve-year drought caused by the usurpation of the throne by a younger brother. Similar interpretations of droughts are found in the Old Testament. Fasting acquires the character of a penance as part of a process which removes the sin, an association which is facilitated by the loss of appetite which fear and regret automatically produce and the loss of spirits consequent on fasting. The idea of penance became strongly attached to fasting among the Jews but more so among the Christians. In the Old Testament penitential fasting retained some of its original character as part of a fictitious death; it is done in "sackcloth and ashes" and is described as mourning (Daniel IX: 3). The prophets in accordance with their ethical bias insisted on a penitent state of mind (Joel II: 12-13). In the Christian church penance is stressed as all important. Fasting is also brought through association into direct relation with rebirth. Tertullian said that Christ when fasting "was initiating the new man" into a "severe handling of the old" and that fasts were to be the weapons for battling with the more direful demons.

In all these ways fasting has been modified

from its original significance and has acquired new associations which offer a favorable condition for reinterpretation. St. Augustine justified the fast before Communion on grounds of precedence. An objection has also arisen to mingling the sacrament with gross food, which has led to displacement. Charlemagne enjoined fasting for two or three hours after Communion, a change which did not take root because the introductory character of fasting is too strongly impressed by tradition and psychologically suits the preference for working up to a climax. An attempt was made by the Church of England to justify fasting in regard to abstinence from meat as benefiting the fishing and shipping trades; but utilitarianism is not sufficient inducement for the enforcement of fasting.

Reinterpretations modify practise. For instance, it is thought by some that penance can be achieved if only one abstains from certain appetizing victuals. Rigorous fasting which is difficult or even dangerous ceases to be absolutely necessary. This selective fasting comes to bear a superficial resemblance to food tabus with which it originally had no connection. Thus Tertullian confused the Jewish tabu on pork with fasting, arguing that when the Israelites came out of Egypt "certain things were prohibited as unclean, in order that man, by observing a perpetual abstinence in certain particulars, might at last the more easily tolerate absolute fasts" (De jejuniis, ch. v). Selective fasting was known to the author of *Daniel* (x: 3). The early Christian church witnessed a great many varieties: xerophagists abstained from all juicy and moistened food; in the fifth century some, probably under Indian influence, abstained from things that had life; others ate fish only, others fowl as well; and others no eggs or fruit. Out of this chaos the Roman church gradually evolved uniformity varied by local custom and has generally accepted the distinction between meat and fish. Thomas Aquinas justified this distinction on the ground that fish excites the passions less than meat. In the Church of England fasting is in abeyance except in the High Church party, where it is sometimes reduced to the renunciation of some particular indulgence.

Fasting provokes conflict between will and appetite. Selective fasting gives the subconscious continual opportunities to assert itself by violating the spirit while observing the letter. Thus in some countries Good Friday, which is the most obligatory fast, has become an occasion for epicurean fish dinners. Theology is perpet-

ually striving to maintain the reality of the fast, which the appetites are striving to circumvent; this results in casuistry and a host of minute regulations, such as those stating that a drink of water does not break the fast and that wine does if taken for pleasure but not if taken to quench thirst. The hour at which food can be taken has gradually been placed earlier in the day; small collations have been allowed not to count. The present practise of the Roman Catholic church is defined: "The ecclesiastical fast consists in the abstention from food and certain kinds of food, which is observed in the manner prescribed by the Church. . . . The ecclesiastical fast consists, as it were, of three parts, to wit, 1) a single meal in twenty-four hours with the addition of a small evening collution; 2) abstention from flesh and milky foods; 3) limiting the time for taking food" (Gury, J. P., Compendium theologiae moralis, 2 vols., Rome 1880; vol. i, pt. ii, praeceptus ecclesiae 6). Under the heading of flesh come all animals "living and breathing on earth"; therefore such animals as fish, frogs, snails and turtles are not forbidden. These principles are interpreted with wide latitude. "The Church has only one aim in the discipline of fasting, that of helping us the better to practice the law of God and to progress in a Christian life. If it happens by accident that the observance of fasting, far from serving that end, impedes it . . . it ceases to be binding" (Thouvenin, A., "Jeûne" in Dictionnaire de théologie catholique, vol. viii, 1924, cols. 1411-17). Thus if fasting prevents a person from carrying out his work efficiently it must be dispensed with and none but the leisured are bound to fast. The Buddhist church has experienced the same conflict but has decreased the daily afternoon fast of the priests only to the extent of not counting condiments as food.

The decay of fasting corresponds with the loss of its usefulness. It has undoubtedly played a useful part in building up self-control. To realize this one must consider that the children of many less civilized races are subject to little discipline and are much indulged. The fast imposed by the ritual demands a degree of self-control to which they are little accustomed and which proves its value in war and on similar occasions. It may produce a self-satisfaction through the self-control derived from it which may become a motive for fasting and which has become associated with the name of Pharisee **Luke XVIII: 10-12; Isaiah LVIII).

societies advance the tendency is toward

excessive regulation of life so that any superfluous exercises in self-control add to the burden of repression and are discarded. At the same time certain psychological types tend to exaggerate practises of self-repression. The phenomenon called by Freudians "transference from below upwards" doubtless plays a part in fasting, as sex and eating are connected psychologically. The proximity of the stomach to the anus induces a feeling of disgust in introspective minds. Tertullian for example described man as "stuffed with meats . . . fermenting for the purpose of excremental secretion" (*De jejuniis*, ch. vi). Similar views are expressed in Buddhist writings.

Unpleasant as fasting may be when first practised, carried beyond a certain point it produces pleasant sensations of mental activity, lightness and supersensuality, for the sake of which it may be cultivated. Mysticism interprets this as a liberation from the flesh and drawing near to God. Comparable to this is the practise of fasting for the purpose of inducing visions during the quest for guardian spirits by North American Indians.

A. M. Hocart

See: ASCETICISM; HOLIDAYS; INITIATION; SACRAMENT; SACRIFICE; DEATH CUSTOMS; FERTILITY RITES; HUNGER STRIKE.

Consult: Thurnwald, Richard, "Fasten" in Reallexikon der Vorgeschichte, vol. iii (Berlin 1925) 191-92; Sumner, W. G., and Keller, A. G., The Science of Society, 4 vols. (New Haven 1927-28) vol. ii, p. 642-43, 1180-82; Westermarck, Edward, "Principles of Fasting" in Folk-lore, vol. xviii (1907) 391-422; Arbesmann, P. R., Das Fasten bei den Griechen und Römern, Religionsgeschichtliche Versuche und Vorarbeiten, vol. xxi, pt. i; Freiberger, Miroslav, Das Fasten im alten Israel (Zagreb 1927); The Ordinances of Manu, tr. from the Sanskrit by A. C. Burnell (London 1884); Tertullianus, Q. S. F., "De jejuniis" in Migne, J. P., Patrologia latina, vol. ii (Paris 1844) cols. 953-78, tr. by S. Thelwall as "On Fasting" in The Ante-Nicene Fathers, ed. by Alexander Roberts and James Donaldson, vol. iv (New York 1899) p. 102-15; Duschesne, L., Les origines du culte chrétien (2nd ed. Paris 1898); Gury, J. P., Compendium theologiae moralis, ed. by Antonio Ballerini, Aloysius Sabetti, and T. B. Barrett (33rd ed. New York 1931) ch. vii; Kelly, J. P., The Jurisdiction of the Simple Confessor, Catholic University of America, Canon Law Studies, no. xliii (Washington 1927) p. 170-72, 198-202; Clift, J., "Fasting" in British Archaeological Association, Journal, n.s., vol. xv (1909) 157-70.

FATALISM is the belief that underlying the events of nature and human life there is an inscrutable and relentless necessity. It is found in early cultures as an unsophisticated acknowl-

edgment, emotionally grounded, that man's desires are involved in a universe which outruns his powers to understand or to control. In this conception the working of fate was not that of an all inclusive mechanism. It was rather the somber, dreadful phase of chance corresponding to the favorable phase of luck or fortune. When in later cultures an ultimate, all ruling fate was enthroned the somber quality remained: fate was ruthless and from man's point of view irrational. In doctrines of predestination theistic religions softened the ruthless quality by subsuming the fact of inevitable necessity under the will of God, whose plan also included the fulfilment of the highest hopes of man. Necessity thus remained, but in a form emotionally acceptable. Scientific philosophies of determinism removed the irrational aspect of fate by interpreting necessity in terms of ordered sequences of cause and effect which included in the causal chain the desires and decisions of men. Within all these systems, however, as in all absolutisms, theistic or impersonal, there is the essential quality of fatalism rationalized and refined.

The idea of fate is probably rooted psychologically in the fact of evil and the inevitability of death. Fate loomed in early mythologies as a dark presence beside or behind the gods who were man's kindly helpers. It is not without significance that the words for fate in early cultures are so intimately connected with experiences of disaster and death. All the Indo-European peoples had the idea of a power or powers which at birth fixed the "share" of the individual in life and determined his destiny (Moirai, Parcae, Norns, etc.). The Slavs and Celts retained the idea of fate in its simplest form. The Greeks, especially the tragic poets, developed it into an inexorable power above the gods; Plato thought of it as a predetermined order and the stoics defined it as a deterministic rational system of the universe. Oracles, divination and astrology were at once practical expressions of the belief and a means of fostering it. In India the earlier ideas of fate (kala, deva) yielded to the cosmic causal law of karma which holds sway over gods and men. All forms of Hinduism—Sankhya, Vedantism, Buddhism, Jainism and the popular religions (Vaishnavism, Shaivism)—assume this determinant of destiny and build their programs of salvation on a method of breaking the causal chain which everlastingly revolves the wheel of rebirth. Through all the culture history of China also runs the idea of fate or destiny. As early

as the fifth century B.C. the philosopher Micius complains that all the "moderns" are fatalists. Chinese fatalism is grounded in the ultimate cosmic order, the tao, which finds practical expression in ming as the decree of heaven. Fate feeds on tragedy and the futility of human effort; and the age of the philosophic development of the doctrine of the tao was a troubled period in the history of China. Taoism does not demand a practical fatalism but it was so used by Chinese sages ancient and modern. Chucius (1130-1200), whose influence still lives in China and Japan. was frankly fatalistic. The stress placed on fatalism in orthodox Islam is unusual for a theistic religion. Usually religions which develop the idea of an absolute personal God lose the concept of fate in His all controlling will. Resignation to the will of God is substituted for acceptance of fate and functions in exactly the same way. But in most cases the logic of theism which would develop the implications of the absolute divine will is obscured by the social necessity of insistence upon responsibility and freedom. In the case of Islam, however, God's absolute will is stressed and the practical attitude finds expression in the fatalistic conception of kismet.

In strict logic the tendency of absolutes, whether in philosophy or religion, is to yield a cosy quietism in times of social stress and security in individual difficulties. This is especially true of the belief in fate, which in practise serves chiefly as a means of adjustment to irremediable conditions. Moral failure loses its power to crush, material loss becomes tolerable, if both can be attributed to a force beyond human control. In the midst of evils from which there is no escape the doctrine of karma or kismet may serve as an opiate. When danger is extreme or death imminent fatalism conveys security and consolation. For soldiers in battle fatalism yields not only splendid courage but poise and peace. This was the service of Zen Buddhism to the samurai of old Japan and of Moslem fatalism to the soldiers of Allah. For the social process the importance of fatalism lies in the ease with which it may serve as a way of escape from responsibility for social maladjustments. Conditions of unresolved wretchedness are fertile soil for the fatalistic attitude. In many cases the anaesthesia of fatalism combines with the rigidity of long established patterns of social behavior and the interests of privileged classes to produce the quietistic resignation which results in toleration of social wrongs and incapacity for experimental change.

But the approval and resignation with which an attitude of fatalism may regard social stagnation may also be transferred to social change. Fate is blind; it gives solace, not guidance. The same fatalism that may serve to entrench autocracy or the privileged position of a caste will justify successful revolution. Heaven's decree (ming) was the best and sufficient authority for many changes of dynasty in ancient China. Fatalism therefore does not necessarily act as a barrier to progress. Human desires drive to their goal with little regard for fatalistic theory when the doors of opportunity are opened. So long as tools and technique for the mastery of nature are lacking, so long as there is no effective solution for the social problems of poverty, sex injustice, insanity, crime and war, the attitude of resignation—be it to fate or the will of God is the shortest way to peace of mind. The swiftly changing Orient, however, offers convincing evidence that fatalistic ideas are not insurmountable barriers to progress when practical techniques are attained. That fatalism functioned as a method of acceptance of the fait accompli without prejudicing future action is further evidenced by the fact that the social group, even when the most deterministic philosophic principles were assumed, never released the individual from responsibility for moral conduct in terms of the approved code. Hinduism, stoicism, Christianity and Islam each in its own way adjusted the inescapable determinism to the demands of social morality. Even when fate was taken logically, as by the Ajivikas in India, Yang Chu in China of the fifth century B.C. and the Sufis in Islam, it was in the interest of action and courageous joy in living.

Faith in a blind and irrational fate tended to disappear in high cultures of long historic duration. The idea was usually replaced by doctrines of determinism with an absolute God or a philosophic ultimate as dictator of human destiny. In either of these traditional forms the fatalistic attitude is difficult to maintain in the modern world. The source of its vitality in the past was human helplessness in the midst of inscrutable and inescapable evils. Under the double attack of scientific knowledge and man's increasing mastery of his environment the foundations of fatalism were shaken. Science has made man at home in the universe, pointed the way to the sources and nature of social disorganization, clarified the mechanism of maladjustments and put into man's hands the instruments of control. With power to change the face of the world and

to escape the fears which troubled the prescientific centuries, man has gained confidence in his ability through intelligence to shape his own destiny. The blind faith in science and the machine which has dominated the last quarter century is an exact antithesis to the quietism of fatalism. The supernatural and mysterious elements underlying fate have vanished. Man sees himself as a changing purposive organization of desires integral with an endlessly complex flowing stream of events. Order in nature, the continuity of heredity, social controls in custom and institution, and learned patterns of response weave themselves together into a new conception of life in society. Fatalism in the old sense has small place in this scheme. The new determinisms—and they are many—are naturalistic and include man's purposive intelligence as an essential and effective element of the complex.

A. EUSTACE HAYDON

See: DETERMINISM; RELIGION; ETHICS; SCIENCE; DIVINATION; STOICISM; BRAHMANISM AND HINDUISM; BUDDHISM; TAOISM; CONFUCIANISM; ISLAM.

Consult: Cicero, "De fato" in Scripta quae manserunt omnia, ed. by C. F. W. Mueller, 10 vols. (Leipsic 1878-97) pt. iv, vol. ii, p. 251-69; Nilsson, Martin P., Den grekiska religionens historia (Stockholm 1921), tr. by F. J. Fielden (Oxford 1925) p. 167-72; Thomson, J. A. K., Irony (London 1926); Cumont, Franz, Les religions orientales dans le paganisme romain (Paris 1906), English translation (Chicago 1911) p. 179-82; Engel, Wilhelm, Die Schicksalsidee im Altertum (Erlangen 1926); Stevenson, Mrs. Sinclair, The Rites of the Twice Born (London 1920) p. 195-97, 436-46; Warren, H. C., Buddhism in Translations (Cambridge, Mass. 1896); Schrameier, W. L., Über den Fatalismus der vorislamischen Araber (Bonn 1881); Macdonald, D. B., Development of Muslim Theology (New York 1903); Wieger, L., Histoire des croyances religieuses et des opinions philosophiques en Chine (2nd ed. Hien-Hsien 1922), tr. by E. C. Werner (Hien-Hsien 1927); Jackson, A. V. Williams, Zoroastrian Studies (New York 1928) p. 219-44; Luzzatti, Luigi, Dio nella libertà (Bologna 1926), tr. by A. Arbib-Costa (New York 1930) p. 211-27; Russell, H. N., Fate and Freedom (New Haven 1927) p. 3-57; Herrick, C. J., Fatalism or Freedom (New York 1926); Bermann, Gregorio, "El fatalismo y el determinismo en sociología ante les problemas actuales" in Nostro, vol. xxxiii (1919) 503-18.

FATIGUE from the practical social standpoint may be defined as a decrease in human working capacity due to increased work. Attempts to increase working efficiency in factory, classroom or elsewhere soon meet with the problem of fatigue. Since the amount of work done is most easily calculated in the number of hours worked, the study of fatigue is usually based upon the

measurement of the effect upon labor of periods of work of varying length. The earliest efforts to reduce fatigue in industry concentrated upon reduction of hours. Legislation in industrial countries gradually extended from one factory industry to another limitation of the hours of employment of women and children; trade unions fought consistently for shorter hours for all.

Isolated experiments conducted in individual factories, as in the Salford iron works in 1893 and the Zeiss optical works in 1900, showed that as hours were reduced to eight per day a rise occurred in the output per hour sufficient at least to maintain the daily output. Perhaps the first scientific recognition of fatigue as a factor of general economic, psychological and medical importance was the appointment in 1913 by the British Association for the Advancement of Science of a committee to investigate fatigue from the economic standpoint. In the original report of this committee (in British Association for the Advancement of Science. Report of the Eighty-Fifth Meeting, London 1916, p. 283-349) an analysis of all possible causes and conditions of industrial fatigue was outlined, and many output and accident curves collected in England and America were presented to show the course of fatigue from hour to hour of the working day and from day to day of the working week. In the case of output the curves were found to differ for different types of work; but in general there was a rise from the first to the second and sometimes the third hour of each continuous working spell, which was attributed to the effect of practise, while the distinct drop from the middle hours of the spell to the fourth or fifth was taken as an index of fatigue. In the case of accidents the curve was found to be rising almost continuously throughout the spell.

The twelve-hour day and night shifts worked by men and women in British munition factories during the World War made the question of hours one of national importance, and Lloyd George, Minister of Munitions, appointed the British Health of Munition Workers Committee. Among their important reports *Memorandum*, no. 12 (1916), provided the first instalment of an investigation by Dr. H. M. Vernon, in which he showed that in some operations the reduction of scheduled hours from between 67 and 75 per week down to about 55 not only did not reduce weekly output but sometimes increased it. This was due partly to a reduction in lost time (i.e. actual hours worked came nearer to schedule)

and partly to a greatly increased hourly rate of output.

Upon the entry of the United States into the war similar investigations by the United States Public Health Service in two large plants, one working a ten-hour, the other an eight-hour day, showed that hourly output and accident curves were different for different types of work. It was found that on work requiring muscular exertion the output fell and the accidents rose far more severely than on work requiring dexterity or mere operation of machines. Experiments made with rest pauses showed that they increased daily output in the ten-hour day; and the rhythm, or regularity of repetition, of machine operations was also found to affect fatigue in that output was best maintained throughout the day wherever work could be performed in runs of very regularly repeated operations with spontaneous rest intervals between those runs.

After the war the British Health of Munition Workers Committee was transformed into the Industrial Fatigue Research Board; and although many experiments with rest pauses continued to be reported, the causes of fatigue became definitely recognized as embracing more than merely hours of work. Numerous reports have been issued on such divergent factors as the vocational selection of workers, individual differences in output and in proneness to accident, atmosphere and lighting conditions and motion study and job analysis. Although variation of the hours of labor may be the outstanding factor affecting working capacity, any or all of the conditions of production may become responsible. These conditions can be divided into those connected with the work and those connected with the worker. Under the first head would fall hours and speeding of work, the type and method of work and the physical and social working conditions, e.g. air, light, noise, industrial hygiene and safety, type of foreman, incentives, security, personnel management and so on. Under the second head fall sex and age of workers, methods of selection and training and living conditionsa factor affected mainly by the amount of the wage received.

This broader conception of the possible sources of fatigue is of great practical importance today both in industry and in the life of the community generally. While hours of labor are gradually being reduced and the type of work called for is perhaps becoming less muscular in character, it cannot be said that industry is lightening such fatigue hazards as specialization

and monotony of work, machine set speeds, noise or insecurity of employment. The intensity, or tempo, of work is certainly increasing and with growing urbanization living conditions too are adding to the industrial worker's fatigue. The mere fact that in large cities workers must on the average live further from their work automatically substitutes hours of hustle and discomfort in crowded conveyances for hours of leisure and possible recreation.

Since work is becoming more mechanized and specialized and physically less heavy, many authorities tend to stress the growing importance of mental, or psychological, as against bodily, or physiological, fatigue. This mental fatigue refers not so much to a decrease in working capacity as a decrease, conscious or unconscious, in willingness to work, ranging all the way from the active ill will of sabotage through the disgruntlement, suspicion and unrest evidenced by strikes and restriction of output down to the mere feeling of boredom, weariness, monotony or dullness. Probably the inward state of the worker which in conjunction with long hours and other external factors causes a decrease in efficiency combines both mental and physical elements in a sort of equilibrium. Deliberately or by some defense mechanism the worker tends to adapt the energy with which he works to the length and difficulty of his task. Apparently the fatigue that results physically in lowered output and increased accidents toward the end of each working day or week will normally also result in a decreased willingness to work that checks any tendency to fatigue accumulating beyond the curative power of rest and sleep. Sometimes, however, in the everyday life of the community as in the industrial world the worker cannot heed the warning of increasing unwillingness. As transport and means of communication are speeded up and urban society becomes more closely knit and complex, the life of the individual becomes specialized and standardized and must run to schedule and routine to fit in with the time table of others. Keener rivalry and competition and such stimuli as bonuses and the glare of publicity spur men on. And as the dangers of exhaustion and overfatigue increase, there is continuously less opportunity for the simple forms of recuperation that country life affords.

It is difficult to obtain a definite measure of the effects of such conditions, but it is usually held that overfatigue lowers the resistance to disease and nervous disorders; and that while impoverishing initiative and thought mental fatigue produces a craving for artificial stimulants and narcotics. Culture also suffers, since the day's strain leaves a man too tired to appreciate anything above the level of vaudeville or the detective story. In industry the dangers, wastes and costs of fatigue even in the widest sense can be assessed more precisely. Labor turnover and lost time, whether due to physical or psychological conditions, may be added to the diminution in quantity, quality or economy of output and to the increase in accidents and sickness as possible results—and measures—of fatigue.

These results are socially costly over and above the pain and suffering often entailed. An employee on time wage loses pay whenever he loses time; one on piece wages whenever output falls. To the employer labor turnover necessitates the training of a new worker, during which time his output will be low in quality, economy and quantity; lost time or absenteeism involves disorganization and idle overheads. Occupational disease and accidents not only cause time to be lost but also involve payment of compensation and possibly a permanent loss to industry by maiming or death. Temporary sickness and ill health account for some six working days lost per employee per year; while permanent invalidism and premature old age, although they may not trouble the employer, definitely represent a cost that society has to carry. A diminished quantity of output obviously increases the employer's labor costs if payment is by time wages, and in all cases it increases the overhead cost of machinery, equipment and administrative staff not used to full capacity; to this expense poor quality or poor economy of output adds the cost of wasted raw material.

Methods of combating fatigue must necessarily take account of the conditions that have, on scientific investigation, been found responsible for it. In industry those conditions are mostly under the control of the employer; a wide variety of policies are open to him, which he can adopt separately or in combination. To avoid the more physical forms of fatigue he may reduce his total of hours, avoid overtime, introduce rest pauses or give annual holidays with pay; he may attend more closely to industrial hygiene and adjust the ventilation or noise of the plant; he may attract by higher wages and select by tests a more suitable type of employee; he may ease the strain of the work itself by motion study and the training of workers. 'To avoid mental fatigue and monotony the employer may allow more variety in the assignment of work, may select employees from among those impervious to monotony or may supply incentives and interests that will overcome the latent unwillingness to work. Recently the movements toward efficiency engineering, "safety first," socalled welfare, or health and recreation, work and, above all, the new science of industrial psychology have shown the way to some employers, who may rely for the actual plan of fatigue elimination either upon outside consulting experts or their own personnel management. Many employers still lag behind and minimum standards are still to be developed by the state or trade unions, if all industrial workers are to benefit by modern knowledge. In most of the advanced industrial states, however, the legal limitation of working hours, the special regulation or the employment of woman and child labor, the stringent standards of the sanitary codes and the requirement of precautions against accidents are indirect methods of dealing with some aspects of the problem of fatigue.

P. SARGANT FLORENCE

Sec: Labor; Industrial Hazards; Accidents, Industrial; Waste; Efficiency; Personnel Administration; Industrial Hygiene; Hours of Labor; Safety Movement; Labor Legislation and Law; Leisure; Recreation.

Consult: Dean, E. G., Bibliography on Industrial Fatique, supplement to the report of the Committee for the Study of Industrial Fatigue to the American Public Health Association (Minneapolis 1929); Cannons, H. G. T., Bibliography of Industrial Efficiency and Factory Management (London 1920); Koelsch, F., Physiologie und Hygiene der Arbeit (Leipsic 1931); Cathcart, E. P., The Human Factor in Industry (Oxford 1928); Atzler, E., and others, "Arbeit und Ermüdung" in Zentralblatt fur Gewerbehygiene und Unfallverhütung, supplementary vol. vii (Berlin 1927); Myers, C. S., Industrial Psychology (New York 1925); Florence, P. S., Economics of Fatigue and Unrest (London 1924); Collis, Edgar L., and Greenwood, Major, The Health of the Industrial Worker (London 1921) chs. v, viii; Vernon, H. M., Industrial Fatigue and Efficiency (London 1921); Durig, A., Die Ermüdung (Vienna 1916); Amar, J., Le moteur humain (Paris 1914), tr. by E. P. Butterworth and G. E. Wright (London 1920); Goldmark, Josephine, Fatigue and Efficiency (New York 1912); United States, Public Health Service, "Comparison of an Eight Hour Plant and a Ten Hour Plant" by Josephine Goldmark and M. D. Hopkins, Public Health Bulletin, no. 106 (1920); Vernon, H. M., "Output in Relation to Hours of Work," Great Britain, Ministry of Munitions, Health of Munition Workers Committee, Memorandum, no. 12 (1916), reprinted in United States, Bureau of Labor Statistics, Bulletin, no. 221 (1917) p. 31-46; Bogardus, E. S., "The Relation of Fatigue to Industrial Accidents" in American Journal of Sociology, vol. xvii (1911-12)

206-22, 351-74, 512-39; Great Britain, Industrial Health Research Board, Reports, published irregularly since 1919; National Institute of Industrial Psychology, Journal, published quarterly in London since 1923; Journal of Industrial Hygiene, published monthly in Cambridge, Mass., since 1919; Institut Lannelongue d'Hygiène Sociale, Notes et mémoires, published in Paris since 1919; Arbeitsphysiologie, ed. by E. Atzler and M. Rubner, published irregularly in Berlin since 1928; Offner, Max, Die geistige Ermüdung (Berlin 1910), tr. by G. M. Whipple as Mental Fatigue (Baltimore 1911), Phillips, Gilbert E., Mental Fatigue in Teachers College, Sydney, Education Society, Records, no. 40 (Sydney, N. S. W. 1920); MacMillan, D. P., and others, "Fatigue and Nervousness in School Children" in Fourth International Congress on School Hygiene, 1913, Transactions, vol. iii (Buffalo 1914) 299-383.

FAUCHER, JULIUS (1820-78), German economist and publicist. Faucher was one of the group of German economists known as the German Manchester school who in the middle of the nineteenth century under the influence of Cobden and Bastiat carried on vigorous propaganda in favor of a resolute liberal economic policy, especially in the matter of free trade. In 1846 with Prince-Smith and others he founded the first free trade club in Germany and was successively the editor of several free trade journals in Germany and in England. For a short time he assisted Cobden in the publication of free trade literature. In 1863 he started the journal of German free traders, the Vierteljahrschrift fur Volkswirtschaftspolitik und Kulturgeschichte, to which he contributed many articles. Faucher and his group contributed substantially toward the abolition of the many barriers that hampered the economic expansion of Germany. He was the leading spirit in the movement for a reform in urban land tenure. He held that the housing evil in the large cities was to be traced to land profiteering, which leads to the exploitation of building sites for tenement houses. The energy with which he set about improving housing conditions shows the injustice of the current opinion which charges the German Manchester school with indifference to the social problems created by industrialism.

WILHELM RÖPKE

Consult: Becker, J., Das deutsche Manchestertum (Karlsruhe 1907); Grambow, L., Die deutsche Freihandelspartei zur Zeit ihrer Blute, Abhandlungen des staatswissenschaftlichen Seminars zu Halle a.d.S., vol. xxxviii (Jena 1903); Bechtel, H., "Die ersten Kämpfe für eine Wohnungsreform" in Jahrbücher für Nationalökonomie und Statistik, vol. cxxii (1924) 813–26.

FAUCHILLE, PAUL (1858-1926), French international jurist and historian. Fauchille was not a professor; attracted by history and law, he became a writer. With Pillet he founded in 1894 the Revue générale de droit international public, which he directed alone from 1904 until the World War and in collaboration with La Pradelle until his death. He also edited the Recueil périodique et critique de jurisprudence from 1890 until his death. A member of the Institute of International Law, he impressed upon it the importance of the growing problems of the law of the air. His preparation of the Manuel des lois de la guerre maritime (Oxford 1913) for the Institute of International Law shows his interest in international codification.

Fauchille's great work is his systematic treatise on international law. In its final form the Traité de droit international public (4 vols., Paris 1921-26) may be regarded as the most comprehensive work of its kind of the present generation. It is over 4000 pages in length and grew from Fauchille's revisions of the Manuel de droit international public (Paris 1894) of Henry Bonfils, the dean of the University of Toulouse. After the World War Fauchille extended it to four volumes, of which the first three were devoted to peace and the last one to war and neutrality. Thus not only was Bonfils' scheme of classification based upon the analogy of private law discarded, but the manual had become an independent treatise deserving to bear only Fauchille's name as author. It is a work of a wide eclecticism welcoming new ideas. The personal feeling of the author is generally shown by the grouping of the numerous quotations, which form a veritable mosaic. No other work so well mirrors the changes in international law from the period of the Hague conferences to the present. Fauchille was constantly keeping his attention fixed upon emerging new problems. In his points of view he was free from national prejudice; he had no exaggerated notions of national sovereignty; he did not regard international law as necessarily a universal science but envisaged the possibility of continental bodies of international law, for he discussed the question whether there could be said to exist an American international law. Perhaps a pessimistic note may be traced in his conception of rules of international law as those for which nations demand obedience even though they may not render it themselves.

In 1921 Fauchille, Alvarez and La Pradelle founded the Institut des Hautes Études Inter-

nationales connected with the University of Paris, which has continuously developed along the lines laid down for it: instruction in international questions given in French to students of all nations by professors of all nationalities.

A. DE GEOUFFRE DE LA PRADELLE

Other important works: Du blocus maritime (Paris 1882), and La diplomatie française et la ligue des neutres de 1780 (1776-1783) (Paris 1893), which show Fauchille's great interest in the history and problems of international maritime law; La question juive en France sous le premier empire (Paris 1884), and Une chouannerie flamande au temps de l'empire, 1813-1814 (Paris 1905), which are examples of Fauchille's historical researches in the period of the First Empire; Louis Renault (Paris 1918), an examination of the life and work of the jurist whose disciple Fauchille was. Consult: La Pradelle, A. de, "Paul Fauchille, sa vic, son oeuvre," and Dollot, René, "Paul Fauchille, historien" in Revue générale de droit international public, vol. xxxiii (1926) 5-59, and 177-93.

FAVRE, ANTOINE (Antonius Faber) (1557-1624), French jurist. Favre was born at Bourgen-Bresse, educated at the Jesuit College in Paris and studied law at the University of Turin. After a short practise as attorney he was made provincial judge and at the age of thirty became a member of the senate of Savoy. While member and later president of the senate he was employed upon numerous state missions in which he acquitted himself honorably. Whatever the reason for Favre's fame during his lifetime, he is at the present recognized as the first scientific student of interpolation in the Roman law. Employing the criteria of linguistic impossibility and historical anachronism he discovered hundreds of passages in the Corpus juris of Justinian in which the compilers had altered or omitted portions of the texts of the jurists of classical times (for an enumeration of these passages see Medio, A. de, in Istituto di Diritto Romano, Bullettino, vol. xiii, 1901, p. 208-42, and vol. xiv, 1902, p. 276-84; Baviera, G., in Archivio giuridico, vol. lxix, 1902, p. 398-404). Favre began his study of interpolations with his Coniecturae, written at the age of twenty-two, and even noted some by way of analogy in his Codex, a work on Savoyard law. A few jurists early noted Favre's interpolations, for example, Kaspari Schieferdecker (Ad Antonium Fabrum, 3 pts., Oppenheim and Frankfort 1610-13) and Girolamo Borgia (Investigationum iuris civilis, 2 vols., Naples 1678), in the main unfavorably; but it is significant that the first interpolations discovered by Eisele and Gradenwitz, the earliest of the modern students in this field, were those

that Favre had noted three centuries earlier.

A. ARTHUR SCHILLER

Important works: Coniecturae iuris civilis (first 3 bks., Lyons 1581; 20 bks., 1605; new ed. 1661); De erroribus pragmaticorum et interpretum iuris (Lyons 1598, new ed. 1658); Rationalia in pandectas (Geneva 1604; new ed., 5 vols., Lyons 1659-63); Iurisprudentiae papinianeae scientia (Lyons 1607, new ed. 1658); Codex fabrianus definitionum forensium et rerum in sacro Sabaudiae senatu tractatarum (Lyons 1606, ed. by G. F. Avet and G. Latty, Turin 1829).

Consult: Taisand, P., Les vies des plus célébres jurisconsultes de tout nations (Paris 1721) p. 187-246; Nicéron, J. P., Mémoires pour servir à l'histoire des hommes illustres, vol. xix (Paris 1732) p. 286-93; Mugnier, François, in Société Savoisienne d'Histoire et d'Archéologique, Mémoires et documents, vol. xlii (1901-02) 3-539, vol. xlii (1902-03) 3-545, vol. xliii (1904-05) 3-230, and vol. xliv, pt. 3 (1905-06) 1-173; for an early appreciation see also Jennaro, G. A. de, Respublica jurisconsultorum (Naples 1731) p. 83-87.

FAWCETT, HENRY (1833-84), English economist and statesman. Accidentally blinded by his father shortly after leaving Cambridge, Fawcett nevertheless maintained his academic and political interests. He became the first paid professor of political economy at Cambridge in 1863 and remained in that position until his death. He sat as an advanced Liberal member of Parliament from 1865 to 1884, with a brief interlude in 1874 when his radical opinions shocked his original constituency. From 1880 to 1884 Fawcett was postmaster general in Gladstone's ministry.

As an economist Fawcett was not an original thinker. His Free Trade and Protection (London 1878, 6th ed. 1885), perhaps his most important intellectual work, was an admirably complete statement of the orthodox arguments in favor of free trade. His Manual of Political Economy (London 1863, 8th ed. 1907) was, except for some sections on cooperation, little more than an accurate but dull restatement of the Principles of Political Economy (1848) of J. S. Mill, by whom Fawcett was greatly influenced. As a teacher he failed to stimulate the study of economics at Cambridge, partly because of his imperviousness to the newer influences in economics, especially those emanating from the German historical school. Although deeply concerned with the problem of poverty, as is evident from his The Economic Position of the British Labourer (Cambridge, Eng. 1865) and his Pauperism: Its Causes and Remedies (London 1871), he feared the harmful effects of state intervention on initiative and enterprise and strenuously adhered to

the wage fund doctrine even after Mill's recantation.

As a politician Fawcett was courageous, unhesitatingly opposing his own party when its action fell short of his own liberal principles. His criticism of the Indian policy of the British government, which caused him to be known as "The Member for India," led to the appointment of commissions of investigation and to important financial reforms. His articles on Indian affairs were published under the title Indian Finance (London 1880). Fawcett's efforts to check the indiscriminate enclosure movement were both notable and successful. His generous impulses were also evident in his fight for the abolition of religious tests in universities, the universal extension of compulsory education and, as might be expected from the husband of Millicent Garrett Fawcett, the enlargement of the political and economic opportunities of women.

Fawcett's practical mind found considerable scope as postmaster general, and he not only improved the working conditions of his staff but also initiated administrative changes which rendered the services of the post office more readily available to the poorer classes. In particular he introduced, in the face of opposition from strong private interests, the parcel post, the cheapened telegraph and the postal money order and modified the savings bank, insurance and annuity requirements in favor of the smaller income groups.

E. M. Burns

Consult: Stephen, Leslie, Life of Henry Fawcett (5th ed. London 1886).

FAWCETT, DAME MILLICENT GARRETT (1847–1929), English feminist. Dame Millicent, whose sister, Elizabeth Garrett, became the first woman doctor in England, was from childhood interested in political problems and the emancipation of women. She was influenced at an early age by J. F. D. Maurice, J. S. Mill and other philosophic radicals. In 1867 she joined one of the first women's suffrage committees and thereafter was one of the leaders of the movement. She and her husband, Henry Fawcett, a professor and member of Parliament, also supported higher education for women and were instrumental in the founding of Newnham College, Cambridge.

Dame Millicent spoke all over the country for women's suffrage and wrote many articles and books, among them *Political Economy for Beginners* (London 1870, 9th ed. 1904). In 1897

she became president of the National Union of Women's Suffrage Societies, an organization uniting the various groups hitherto functioning separately. Militant tactics appeared in 1906 but Dame Millicent remained leader of the non-militant constitutional forces. Under her leadership their ranks expanded rapidly and by August, 1914, the agitation had reached phenomenal proportions. During the war suffrage activities were suspended but the National Union used its strong organization to facilitate women's participation in war work. Dame Millicent wrote, "Let us prove ourselves worthy of citizenship whether our claim is recognized or not," and her advice showed not only sincerity but also the utmost political wisdom, for when the urgent question of wartime franchise came before Parliament the women once more pressed their claims and the first women's suffrage bill was passed in 1918. The following year Dame Millicent resigned from active participation in the movement. Throughout her long life she was one of the most respected figures in English public life.

RAY STRACHEY

Consult: Fawcett, Millicent Garrett, What I Remember (London 1924); Strachcy, Ray, Millicent Garrett Fawcett (London 1931), and "The Cause" (London 1928).

FEBRONIUS, JUSTINUS. See HONTHEIM, JOHANN NIKOLAUS VON.

FECHNER, GUSTAV THEODOR (1801-87), German physicist and founder of psychophysics. Although he made significant original contributions to physical science he is chiefly famous for his struggle to reconcile his belief in exact science with his equally earnest conviction that exact methods were failing to grasp the nature of life and mind. He undertook to solve the great dilemma by devising methods of studying the relations between the magnitudes of physical stimuli and the intensities of psychic responses. The decade 1850-60 was spent in elaborate research with many experimental and mathematical devices culminating in the publication of Elemente der Psychophysik (2 vols., Leipsic 1860). His conviction that he had succeeded in stating the quantitative relation between the objective and subjective worlds ($S = c \log R$, or "intensity of sensation equals a constant times the logarithm of the stimulus") has universally failed to win assent; but his careful experimental methods were taken over by G. E. Müller and Wundt as a part of the new experimental psychology which sought to study the variation of mental responses in relation to objectively controlled and measured stimuli. Fechner's genius also profoundly influenced Ebbinghaus, the founder of quantitative method in the study of memory. In fact, no single individual did more to show the possibilities of experimental and quantitative method in psychology. In his old age Fechner published an important introduction to experimental aesthetics, Vorschule der Ästhetik (2 vols., Leipsic 1876; 2nd ed. 1897–98).

GARDNER MURPHY

Consult: For a bibliography of Fechner's writings, Hall, G. S., Founders of Modern Psychology (New York 1912) p. 174-77. For his life and philosophy, Lasswitz, Kurd, Gustav Theodor Fechner (3rd ed. Stuttgart 1910); James, William, A Pluralistic Universe (New York 1909) ch. iv; Merz, J. T., A History of European Thought in the Nineteenth Century, 4 vols. (Edinburgh 1896-1914) vol. ii, ch. xi. For his work in psychophysics, Titchener, E. B., Experimental Psychology, 2 vols. (New York 1901-05) vol. ii, pt. ii, p. xx-cxvi.

FEDERAL RESERVE SYSTEM is the customary designation of the present system of central cooperative banking in the United States. It includes the Federal Reserve Board at Washington, a central body of supervision and control, twelve Federal Reserve Banks, which at the end of 1930 had twenty-five domestic branches, one domestic agency and one foreign agency (in Havana), and a large number of member banks; at the end of 1930 the membership of the system comprised 7033 national banks and 1019 state chartered banks and trust companies.

The national banking system which preceded the Federal Reserve had never since its inception in 1863 furnished altogether satisfactory service; and as it grew older it proved less and less efficient, particularly in times of special strain. During the late eightics "inelasticity of the currency" became a standard criticism of the system of national banks and national banknotes. Since inelasticity was usually traced to the high price of government bonds which the banks were required by law to buy before receiving their supplies of note currency, the restoration of an "asset currency" was increasingly urged as a remedy. During the panic of 1893 the inadequacy of the national banknotes became more obvious than ever. Clearing house currency certificates were used temporarily to relieve conditions, and after the panic was over various projects of reform based on asset currency principles came prominently to the front. In order to overcome objections to a pure asset

plan the demand for asset currency was converted by some propagandists into a call for "emergency currency."

Among the projects of reform the best known was probably the Baltimore Plan, strongly urged at the Baltimore meeting of the American Bankers' Association in the autumn of 1893 and founded upon a modification of the Canadian system of guaranteed note issues. Several variants of the Baltimore Plan shortly appeared. but the movement for a better paper currency was obscured by the growing agitation for the unlimited coinage of silver which constituted the staple of controversy in the presidential campaign of 1896. During the years 1897 and 1898 the monetary commission, appointed by the Indianapolis Currency Convention, which represented business interests (particularly banking) from various sections of the country, revived the project for an asset currency. But the bill drafted by it was thrown into the background by the outbreak of the Spanish American War, which deferred remedial action until 1900. In that year a small group of Republican leaders, anticipating a renewed contest for the presidency, drafted and pushed through Congress the Gold Standard Act. This statute was largely devoted to monetary problems, but it also provided the beginning of a treatment of the banking issue by lowering the minimum capitalization of national banks, refunding the outstanding bonds into 2 percent consols, thereby rendering national banknotes cheaper in issue, and making a few other changes designed to render bank credit easier and more abundant.

Conditions in trade and industry improved after 1900, but the banking situation was hardly better during the next five years. Bond retirements soon caused a renewed scarcity of currency, and when the panic of 1907 broke out the closing of various financial institutions, which might have been saved had there been a suitable provision for credit currency, emphasized the banking and credit breakdown as an important factor in the crisis.

The experience of 1907 made obvious the necessity of some thoroughgoing treatment of the banking problem and broadened the popular issue from currency reform to banking reform. There was a recognition wider than ever before of the necessity of welding the banking system into a unit and of finding some acceptable way of protecting the gold reserves of the country through money market safeguards. It was becoming obvious that these objects could

be attained only through the mechanism of central banking, which had been so long desired and so unpopular politically in the United States. The younger school of economists had been urging a return to central banking for some years; the practical applications of this general principle had been developed in academic discussion as well as in proposed bills, some of which were later introduced in Congress. Among these should be mentioned the Mühleman bill of 1909 and the various proposals of Charles N. Fowler, chairman of the Banking and Currency Committee of the House, which culminated in the very elaborate bill of 1910. None of these bills, however, received serious consideration or was regarded as more than tentative.

The panic of 1907 also forced upon Congress the necessity of immediate action, the result of which was the Aldrich-Vreeland Act of 1908. It was a composite measure which combined the House of Representatives, or Vreeland, proposal of an emergency clearing house currency and the Senate, or Aldrich, proposal of emergency notes based on state and municipal bonds. This law soon came to be recognized as merely an experimental step in banking reform; it was loosely drawn and had to be amended before currency could be issued in accordance with its provisions under the stress of war conditions in 1914. Perhaps its most important feature was the creation of a National Monetary Commission consisting of senators and representatives. Except for the work on the history and current organization of banking with special reference to the activities of European central banks, which was done for the commission by a staff of experts among whom were some of the best authorities of the academic world, the commission was relatively inactive. In January, 1911, Senator Aldrich, the chairman of the commission, submitted to it a bill which with comparatively unimportant modifications was incorporated in the report of the commission of January, 1912, and later introduced in the Senate. The Aldrich bill called for the establishment of a central banking organization with fifteen branches equipped to receive deposits from the government and member banks, to rediscount for banks and bankers and to issue notes which would form a lawful part of bank reserves. The bill never reached a committee consideration, for, the political composition of Congress having changed from Republican to Democratic, the ruling party in the House began preparation of a new and different banking measure.

The new bill, afterward known as the Federal Reserve Act, was begun in March, 1912, reached its first draft in November of the same year and was accepted at Christmas subject to a few changes by the then president elect, Woodrow Wilson. During the winter of 1912-13 it went through a series of hearings before the legislative subcommittee of the House Banking and Currency Committee, was taken up in the special session of Congress called by President Wilson after his accession to office, officially presented to the newly appointed Banking and Currency Committee of the House in May, passed by the House on September 18 and in a considerably modified form by the Senate on December 19, put through a conference committee which virtually restored the bill to the form in which it left the House, and finally put on the statute book on December 23, 1913. In drafting the new law the Mühleman bill, the Fowler bill of 1910 and the Aldrich bill as well as many others were given careful consideration. Its legislative history was marked by the rejection of the plans evolved by McAdoo, then secretary of the Treasury, and Senator Owen, chairman of the new Banking and Currency Committee, and by concessions made to the Bryan wing of the Democratic party in the matter of note issue and governmental control of the Federal Reserve Board.

The Federal Reserve Act sought to reconstruct the entire banking system of the United States by superimposing upon existing banks a new system of organization. This was furnished by the twelve Federal Reserve Banks headed and controlled by the Federal Reserve Board at Washington. The Board was to consist of seven members (after 1922 the number became eight), including the comptroller of the currency and secretary of the Treasury ex officio, the membership to be appointed by the president and confirmed by the Senate; not less than two of the members were to have practical knowledge of banking and no two members were to represent the same Federal Reserve district; the term of membership eventually contemplated was ten years. To the Board, which in some circles was regarded as "the supreme court of finance," was committed the large power of making inclusive rules and regulations for the conduct of the system. Each reserve bank was to have a capital subscribed for by member banks in the proportion of 6 percent of their capital and surplus; of the subscribed amount only one half was to be paid in full, the remainder constituting a

liability of the member banks subject to call in case of need. The board of directors of each reserve bank was to consist of nine members: three appointed by the Federal Reserve Board, one of them being designated as the Federal Reserve agent and acting as a liaison officer between the Board and the bank; and six, including three business men and three bankers, elected by the member banks. For the purpose of electing directors the member banks were to be divided into three groups according to size, each group electing one banker and one business man. Despite differences in capital contribution, each member bank was entitled to only one vote within its group. Member banks included all national banks-membership was made a condition for the retention of the federal charterand those state chartered institutions which satisfied the definite requirements of eligibility and proved acceptable to the Board.

The new reserve banks were to receive within a period of three years the reserves of the national banks. Central reserve city banks, formerly required to hold 25 percent of deposits in vault cash, were now to maintain a reserve of only 18 percent, of which 6 percent was to be cash in vault, 7 percent was to be represented by a balance on the books of the reserve bank of the district and 5 percent might be in either form. Banks outside central reserve cities were to hold smaller reserves divided in the same general proportions. This plan, at first denounced by the large banks in reserve and central reserve cities, whose managers believed it would reduce the volume of deposits of other banks which they could obtain, and by country banks, which would lose interest on their deposited reserves, resulted eventually in a complete shift of the reserves called for without friction or financial stringency. In 1917 Congress reduced the required reserve of central reserve city banks to 13 percent, of banks in reserve cities to 10 percent and of country banks to 7 percent, the entire reserve to consist of a balance on the books of the reserve bank of the corresponding district.

Each reserve bank was authorized to rediscount eligible commercial paper for the member banks. The rules of eligibility were laid down in the act in general terms: the paper was to bear evidence of growing out of bona fide commercial transactions; its maturity was not to exceed ninety days for commercial paper and six months for agricultural and livestock paper. Eligible paper was to have two signatures; but one-name

paper was not thus excluded, for endorsement by the member bank furnished the necessary second signature. In order to prevent the use of reserve system funds for stock market speculation, paper with a security collateral other than government security was made ineligible, but security collateral was not forbidden if the paper was otherwise eligible. The more detailed regulation of eligibility in accordance with these principles was left to the Board at Washington. Rediscount rates were to be established from time to time by each reserve bank subject to approval by the Board. The balances established by member banks with the reserve bank through rediscounting were to be treated in the same way as balances established by the deposit of gold, i.e. as lawful reserves. This rule did not apply in the transition period from 1914 to 1917, when no more than a half of the balance with reserve banks could be established through rediscounting. The reserve banks were required to maintain a gold reserve of not less than 35 percent of their liabilities on deposit balances. Each reserve bank was also authorized to buy and sell paper and securities in the open market subject to considerably less control from the Board than in the case of rediscounting; the open market powers of the reserve banks made the funds of the reserve system available to some extent also to non-member banks.

The note issue problem, which at the beginning of the movement had been primarily responsible for the attempt to correct existing conditions, aroused much less controversy than did the reserve provisions, largely because it was possible to deal with it in such a way as to avoid much trespassing upon vested interests. The Federal Reserve Act retained the national banknote, merely authorizing the Board to make gradual provision for its retirement; but it furnished the necessary element of elasticity by authorizing reserve banks to issue Federal Reserve notes, based to the extent of their full value on liquid commercial paper rediscounted with the reserve banks and placed in the hands of the Federal Reserve agent; these notes are protected in addition by a 40 percent gold reserve maintained by the reserve bank itself. When commercial paper held behind notes expired it was to be replaced with similar paper or gold or its equivalent. The notes were to be retired by depositing with the Federal Reserve agent the notes themselves or gold or its equivalent. The notes are redeemable in gold either by the reserve bank issuing them or by the Treasury; they also constitute obligations of the United States and have full legal tender powers.

Among the many new provisions of the Federal Reserve Act there were two which deserve special attention because of their later importance. One was the grant of authority to national banks to engage in fiduciary business on a limited scale. After being called in question on constitutional grounds and sustained by the Supreme Court of the United States, these powers of the national banks were enlarged to the full limit. The second provision was the grant of authority to national banks to accept time deposits, usually referred to as savings deposits. For these the reserve requirement was to be only 5 percent; after 1917 it was reduced to only 3 percent. Both provisions were intended to conciliate banking support in order to render the adoption of the measure easier; and both were to furnish occasion for later difficulties and problems.

The new system was by far the most significant and important change in American banking since the adoption of the national banking system during the Civil War. Yet all its provisions grew out of experience in American banking history, and precedent was found for each in past legislation. It differed from European central banks in method and technique, but not in fundamental principle. Unlike all other central banks it adopted the regional system, with one independent bank to a given area instead of a single main bank with branches. Unlike the Bank of England it adopted the system of commercial asset protected notes instead of the secured currency of the Pitt Act of 1844, and it prohibited dealings with the public except through open market operations. It differed from the Reichsbank in that it refused the issue of notes which could be counted in member bank reserves and required the building up of deposit balances by the member banks which were to trade with it. It declined to support the extension of collateral loans by its members, and it refused all direct relations with the securities market or those operating in it. In contrast with the Bank of France it rejected the principle of widespread direct contact with the public through branches, and it evidently intended to extend the bulk of its accommodation by means of deposit credits rather than notes.

The introduction of the new system obviously demanded the establishment of extensive financial machinery. The act almost unavoidably left a good many matters to be subsequently determined, merely laying down general rules or broad principles for the guidance of those who were to put the details of the system into operation. In order to furnish the means of making a definite start the act provided for the creation of an Organization Committee. This committee held hearings in various cities and after ascertaining popular opinion determined upon the location of the reserve banks and laid out the districts of which they were to be the respective centers. A committee of technical experts appointed by the Organization Committee prepared plans for the internal organization of the system, which were largely incorporated in the first set of regulations and operating instructions issued by the Federal Reserve Board organized on August 10, 1914. Upon the basis of the plans and rules so furnished, the new system went into operation on November 14, 1914.

The reserve banks came into existence under exceedingly unfavorable auspices. Not only were the larger commercial banks unfriendly to the system, as the result of the friction developed in passing the new act, but the advent of the World War thrust upon the Federal Reserve Board all sorts of unexpected and more or less irrelevant problems with which it had to deal. Prior to the opening of the reserve banks the outbreak of the war had compelled the revision of the Aldrich-Vreeland Act of 1908 and the issue under its provisions of some \$375,000,000 of emergency currency. The duty of retiring these emergency notes and the necessity of providing an emergency currency of the reserve note type prevented the new banks for some time from getting actively into the exercise of their non-currency powers. During the first period of the system's history, from the date of its organization to the entry of the United States into the war in April, 1917, the early difficulties were slowly overcome, reserves were gradually transferred and a limited control over the money and credit situation was established. Such control did not attain recognized proportions until near the end of 1916, but it was sufficient to enable the system to do real work during the first four months of 1917 in preparing for the war, which was now recognized as inevitable. The discount rate question was under discussion but was largely academic. The system, moreover, was beginning to make a strong appeal to the state institutions which at the beginning had abstained from giving it their support. Foresighted trust company executives and state bankers were beginning to file membership

applications in order to be ready to obtain aid and protection in case of urgent need.

With the declaration of war by the United States the system felt the first severe test. The Treasury Department was largely unprepared; neither through issue of loans in the usual fashion nor through the imposition of taxes, whose yield would necessarily be considerably deferred, could it expect to get within a short time the resources it needed. The government fell back at once upon the Federal Reserve system, practically instructing the twelve banks to purchase pro rata a \$50,000,000 issue of 2.5 percent certificates of indebtedness with a six-month maturity. This way of collecting money frightened the banking community and led to the working out of other methods of financing. The Treasury officials devised a general plan of borrowing which called for the issue at brief intervals of short term certificates with recurring Liberty bond placements, the funds obtained through the latter means being used to take up and "refund" the outstanding short term evidences of debt. As the new taxes began to yield revenue the proceeds were to be used in paying war expense, but the immense and unprecedented cost of the war was such that the proceeds of taxation never amounted to more than a fraction of the requirements and the government found itself obliged to rely upon borrowing as a regular resource. This policy was strongly enforced by the generally accepted necessity of making large advances to the Allied governments, which were very short of money. With these added burdens the Treasury gradually found its periodic bond loans, placed presumably in large part with the public, increasingly inadequate, and it tended more and more to rely upon biweekly issues of certificates of three to six months' maturity, which were given a special position as collateral security at reserve banks with a discount rate equal to the coupon rate. Thus by the middle of 1918 the government had fairly definitely accepted the creation of bank credit as the basis of war finance.

Reserve banks had little choice but to adapt themselves as well as they could to the requirements of the time. They did their best to effect a wide distribution of certificates and bonds, but their efforts were necessarily limited by the willingness of the public to buy. The system found itself increasingly forced into the position of a mere adjunct of the Treasury. The Board lost power and finally ceased largely to exert authority except in serving to carry out Treasury

instructions. Commercial paper became scarce because of the general extension of production for or by the government. About the close of the war on October 25, 1918, the twelve banks had combined assets of \$5,270,785,000, of which \$350,311,000 were bonds and other government obligations directly owned, while \$1,092,417,ooo were bills secured by government war obligations. On the same date the member banks reporting to the Board owned \$1,967,860,000 government war obligations and granted \$1,-165,738,000 in loans on government security collateral. For many months it proved impossible to cease either the advances to Allied governments or the heavy borrowing from the public, so that inflation and heavy lending continued. The fifth Liberty or the Victory loan of \$4,500,000,000 was sold in the spring of 1919; the average daily holdings of war obligations of the government by the reserve banks were at a maximum in September, 1919, while discounted bills secured by government war obligations reached a peak on May 16, 1919, with \$1,863,-476,000. At the opening of 1920 two thirds of all bills in the hands of the reserve banks were based on war paper.

The reserve system was now obliged in the interest of safety to retrace its steps and to turn from the inflationary policy which had been forced upon it to a plan of conservation of reserves and moderation in lending. The Board recognized the necessity of eliminating as much as possible of the government obligations from the portfolios of the banks; it likewise felt the urgency of restricting the advances freely made by member banks to borrowers who had no really liquid assets. Many such borrowers had purchased land at very high prices in order to increase their holdings; business men had borrowed in order to carry commodities bought at high prices in the belief that prices would go still higher; it was known, moreover, that a part of the funds advanced by the reserve banks to their members for the purpose of carrying government securities found its way eventually into speculative channels. The inflation of credit was clearly reflected in the rise of prices. The wholesale price level, as measured by the Bureau of Labor Statistics index with 1913 as a base, was 197 in February, 1919; it now proceeded to rise with a steady and apparently uncontrollable movement to 272 in May, 1920.

The war period of reserve banking came to a close in December, 1919, when the Board notified the reserve banks that it was ready to consider their suggestions for an advance in rates. During the war the system had had perforce to maintain a discount rate equal to the interest on Liberty bonds, and after the war a quarter point differential had been added to the bond rate of the Victory loan in order to induce overburdened banks to go still further. Yet the banking conditions were such and the political opposition to a conservative policy was so strong that it was not possible to advance discount rates on commercial paper as distinct from bills with a government security collateral until January, 1920. After January discount rates were steadily raised, reaching 7 percent in June, 1920. The wholesale price level reached a peak in May, 1920, from which it slowly receded thereafter. The recession was sharpened by the dumping of great quantities of hoarded commodities, while continued overproduction of grain sharply reduced prices of farm produce. The price of land fell in line with the price of its produce; security quotations likewise suffered considerable shrinkage. By autumn the existence of a crisis was universally recognized, and general business conditions did not make any real recovery until late in 1921. The expansion of the loans of the reserve banks continued until early in November, 1920, and in Federal Reserve note issues until December 23, but during 1921 the reserve banks strengthened their condition considerably. By the close of 1921 government security holdings of the reserve banks had been reduced to \$241,444,000, while loans on government securities had fallen to \$487,193,000. Farm credit, so excessive in amount, had been somewhat curtailed. The ratio of reserves of the twelve banks to their deposit and note liabilities, which had fallen to 42.4 in April, 1920, had been restored to 72.7 percent in November, 1921. and the gold holdings of the reserve banks replenished by importation had risen to \$2,869,-600,000 by the end of the year. The close of 1921 thus marks the restoration of the Federal Reserve system to a position in which it was able to begin the work for which it was originally planned—the strengthening of American banking for peaceful pursuits.

In the first seven years of its existence the system had undergone important alterations of structure introduced by amendments to the act as well as by Board rulings. These modifications were the result of strong pressure for change which has been felt almost from the date of the passing of the act; some of them were also caused by exigencies of war financing. The effect of

these changes was accepted during the war as part and parcel of the financial mobilization of the country; after the war, however, it was recognized that they had permanently altered the character of the system in important particulars.

An amendment adopted in 1916 provided for the direct discounting at reserve banks of the notes of member banks collateraled by any paper eligible for rediscount, the maturity of such notes not to exceed fifteen days. The provision was highly important when it began to be used as a means of obtaining reserve bank funds through the discounting and renewal of paper backed by government obligations. After the war this provision was to furnish the material basis for the financing of speculation. Members' access to the funds of the reserve banks was similarly facilitated by the amendment which reduced the required reserves of member banks. When the United States entered the war, inflation interests again sought authorization to have reserve banknotes counted as an element in the vault cash of members. The plan was only partly successful; discussion resulted in a compromise which cut the required percentage of reserve from 18, 15 and 12, according to the class of the bank, to 13, 10 and 7 without any local vault cash requirement. Since vault cash must, as has been shown by experience, constitute approximately 5 percent of demand deposits, this change in the law implied that Federal Reserve notes might be used as a part of the actual reserves, a privilege which was not enjoyed theretofore by reserve notes or national banknotes. When in the period of expansion following the war reserve banks encountered difficulties in maintaining a strong control over credit extension, a solution was thought to have been found in the Phelan Act passed in 1920 providing for the graduation of discount rates by the reserve banks in proportion to the volume of accommodation secured from them. This device, however, proved unsuccessful and the act was repealed in 1923.

Even before the organization of the Federal Reserve system certain sections of the country were continually pressing for a better adaptation of commercial banking to the satisfaction of agricultural credit requirements. The Federal Reserve Act permitted national banks to extend credit secured by mortgages on farm land with a maturity not to exceed five years and made eligible for discount with reserve banks agricultural paper with a maturity up to six months. After the war the charges that the reserve system

was disregarding the interests of the farmer led to a number of developments in the legislative situation. A congressional inquiry into agricultural credit conditions, prosecuted in 1921 and 1922, revealed errors of judgment and inadequacies of performance but on the whole gave the reserve banks and the Board a tolerably clean bill of health. In 1922 by an amendment to the Federal Reserve Act the membership of the Board was increased by one to make room for a "dirt farmer." Finally, the Agricultural Credits Act passed in 1923, which created intermediate credit banks in order to furnish working capital to cooperatives and other associations serving the farmers' intermediate credit needs, contained also amendments to the Federal Reserve Act. The general tenor of these amendments was to make the funds of the reserve system available to intermediate credit banks and agricultural credit corporations: reserve banks were permitted to buy acceptances and debentures of these institutions as well as to discount paper intended to finance the carrying of agricultural staples; the maturity of agricultural paper eligible for rediscount was also raised to nine months. This easy access to the reserve system funds involves considerable danger, which, however, has never yet been fully felt.

More significant because more immediately successful was the very great development of the bankers' acceptance system. The Federal Reserve Act had for the first time permitted national banks to accept drafts drawn on them, but it attached to this power certain qualifications: the acceptances were to be foreign trade documentary acceptances limited in amount to 100 percent of the capital and surplus of the accepting banks. In 1916 this provision was amended to add the making of acceptances in domestic trade and to permit the making up to an additional 50 percent of a bank's capital and surplus of non-documentary acceptances in order to furnish "dollar exchange" in trade with designated countries. At first the growth of acceptances of all kinds was slow; then serious abuses crept in and had to be eliminated. A new era opened after the crisis of 1920, and when the Board on March 29, 1922, practically surrendered its control over the making of the paper to the reserve banks the paper began to be drawn with much greater freedom. The low buying rates for acceptances, which were steadily maintained, served to act as a temptation to convert into acceptance form many transactions hardly suitable for such treatment, and

with the growth of the volume of acceptances much of the paper tended to become illiquid. Recently it has become clear that after 1927, when European countries resorted to short term borrowing as long term accommodation grew harder to obtain, many of the European finance bills assumed the form of bankers' acceptances. Thus the German collapse in the summer of 1931 made hundreds of millions of dollars noncollectible. Moreover, one of the major purposes for which bankers' acceptances were introduced, the decentralization of the short time money market, has largely failed of accomplishment. Nevertheless, they remain important as the device through which reserve credit becomes accessible to non-member banks, particularly private banking institutions.

In this connection should be mentioned the open market powers of the reserve banks. They had not been much used during the war, but soon after its close they assumed a more important place and after 1923 were exercised through an open market committee, which included several reserve bank governors and enjoyed a considerable degree of autonomy although technically under the general oversight of the Federal Reserve Board. During 1930, the first year of depression after the crisis of 1929, there developed a strong feeling that the open market powers had been used without much regard to the ultimate purposes of the system, particularly in 1927 and 1929, and that open market operations had on occasion offset or neutralized the discount policies, over which the Board exercises a much greater degree of control. As a result a new administrative mechanism was devised in 1930, and the open market organization now includes all twelve of the governors of the reserve banks. Its duty is to determine the total of open market purchases and to apportion them among the reserve banks in consultation with the Board.

Another important achievement of the system was the establishment of par clearance upon a definite basis. For many years before the adoption of the Federal Reserve Act there had been dissatisfaction throughout the country because of the indirect routing of checks with corresponding postponement in collection. This was due in part to the inadequacy of the correspondent system, which linked country banks with institutions in reserve and central reserve cities, and in part to the practise of charging and granting exchange. The act provided that each reserve bank should serve as a clearing house for its

members and that the Board or a designated reserve bank should act as a clearing house for the reserve banks themselves. The Board carried out this latter provision by creating soon after its establishment a "gold settlement fund" planned in accordance with the recommendations of the technical experts of the Organization Committee. The organization for national clearing was on the whole successful; it resulted in eliminating the shipment of gold to and from different parts of the country and in thus concentrating gold resources in what was for all practical purposes a single available fund. The clearance functions of the several banks proved harder to develop; after various experiments, however, there was definitely adopted a plan according to which reserve banks received checks and drafts from members upon deposit and credited them to reserve account after the lapse of a brief period of collection. The length of this period was carefully graduated to correspond with the time required in each district to obtain returns by mail from each of the several banks. But country banks resented the loss of their exchange charges, and while member banks could not help themselves, non-members declined to join the par collection system. The controversy between the reserve banks and the state institutions eventually led to protracted litigation; moreover, several states, chiefly in the south, had adopted antipar collection legislation. Although the Supreme Court upheld the par collection system in its main outlines, its growth outside the Federal Reserve membership has of late years been retarded. Yet the Federal Reserve system has accomplished a very great reform in collection, the elimination of the dangerous "float," or uncollected items, and the lifting of a serious expense from the shoulders of the community. The future prospects of par collection are promising: experience has shown that the convenience of par collection is so great as practically to insure the gradual extension of the system.

The year 1922 marked the opening of a new period in reserve banking. The powers of the Board were in large measure distributed among the reserve banks, and the administration of the latter was gradually altered by custom and practise so as to vest the chief authority in the governor of each bank. The period from 1922 to 1927 was one of great industrial and financial growth as well as of rapid recapitalization and "rationalization" of industry. During these years there developed a new instalment credit system

of domestic marketing and the practise of corporate financing through security flotation rather than borrowing from banks on commercial paper. Particularly after 1925 did the system of floating new issues of capital obligations, using the proceeds to take up outstanding debts at the banks and employing a large part of the balance in call or time loans on the stock exchange become generally accepted among the larger institutions of the country in nearly every branch of industry. The result was a constant increase in the number of bonds and shares listed on the stock exchanges and a decline in commercial paper and direct borrowings at the banks. A parallel development characteristic of this period was the steady acquisition of gold by the country and the reserve system; the monetary gold stock of the United States was thus increased from less than \$3,000,000,000 at the beginning of 1921 to over \$4,600,000,000 in May, 1927. The reserve banks placed few or no obstacles in the way of the financial community, which used the inflowing tide of gold for commercial and industrial expansion. Nor did the reserve banks attempt constructive action in controlling the expansion of foreign investments of the United States, which proceeded at a rapid pace. The aid of the system, which usually acted through the administrative machinery of the Federal Reserve Bank of New York, was, however, essential and effective in supporting and financing the operations of European central banks by which the principal European countries found their way back to a gold or a gold-exchange monetary standard. Unfortunately serious mistakes were made in supporting hasty or too ambitious schemes of monetary reform.

The period beginning with 1927 presents the latest phase of Federal Reserve policy. At the beginning of this period the behavior of the business community at large displayed evidence of unrestrained optimism, a state of mind which seemed justified by the constant advance of stock market prices and the apparent certainty that almost every kind of security, if provided with what was called satisfactory sponsorship, would move to higher levels of value. It was a situation in which the reserve banks had a great opportunity to apply corrective measures. Sharp differences of opinion, however, had broken out among the managers of the system. Between the Board and several of the reserve banks, among the banks themselves and within the Board's own membership these differences had become pronounced. During the early part of 1927 the

policy of discount rate reduction was on the whole in the ascendant in the system. Discount rates were kept down to low levels and credit was rapidly inflated. An enormous volume of bankers' acceptances came into existence; these were largely purchased and held by the reserve banks, partly for their own account and risk and partly for those of foreign banks. Stock quotations were pushed to fabulous heights by the free use of brokers' loan funds in advances to speculative customers. After the 1928 presidential election a further general inflation of credit took place. It was not until the following spring, with the steady advance of prices and the growing recklessness of the market, that the higher rate party in the reserve system achieved an incomplete victory. In the course of 1928 discount rates were raised three times from 3.5 to 5 percent at the Federal Reserve Bank of New York; in August, 1929, they were advanced to 6 percent.

As these figures were far below the current charges for call money at the time and as the speculative public paid little heed to these changes, the rate advance did no good. The rise of prices, particularly in a limited list of shares, continued still further, and brokers' loans maintained their steady growth. The culmination came on October 24, 1929, when a severe crisis occurred in the stock market. This was followed by successive periods of liquidation alternating with temporary and partial recoveries extending throughout the year 1930 and the first half of 1931 (the last period for which information is available at the time of writing). The credit position of the member banks of the system was radically changed, with correspondingly decisive effects on the reserve banks. Brokers' loans to customers, as measured by borrowings on collateral by members of the New York Stock Exchange, had been steadily increasing until the fall of 1929, when they totaled about \$8,500,000,000. The outbreak of the panic led to the active calling of these loans and within six months they had been reduced by more than a half. This decline in brokers' loans, the result of a withdrawal from the market of non-banking lenders and of banks outside New York City, was offset to some extent by an increase in loans on securities by New York City banks. By the spring of 1931 borrowings by brokers and dealers in securities were again at their pre-war level, while loans on securities by member banks had reached their peak in the middle of 1930. Reserve banks cut their rates as soon as the existence of the crisis was

definitely recognized; the last series of reductions declared in May, 1931, brought the rates down to 1.5 percent for New York and from 2 to 3.5 percent for the other banks. Meantime suspension of foreign financing had induced a further inward movement of gold and had again given a fresh impetus to "easy money." The reserve banks, however, had not been able to prevent the steady increase in bank failures, which reached a maximum of 1345 in 1930; the resources of the banks suspended in that year were probably in excess of \$1,000,000,000.

Experience during the last period of the history of the system renders possible its evaluation in the light of the expectations of its advocates and founders. In both of the major depressions during its existence the system has proved fully adequate as a preventive of currency "panics," which before 1913 were so familiar as to appear inevitable. Few banks which could present satisfactory paper have been refused accommodation or have been unable to obtain notes in amounts sufficient to satisfy depositors desirous of drawing their "money." Far less success has been enjoyed in connection with the control and direction of credit. But perhaps the least satisfactory phase of reserve banking is its ineffectiveness in relation to bank failures; there is no conclusive evidence that member institutions have been less liable to failure than have others. Opinion is divided as to the reasons for this lack of success. Some observers emphasize the inability or indisposition of reserve institutions to use their power of examining or inspecting members, others the indiscriminate methods of rediscounting and still others the lack of credit control methods applied at a date sufficiently early to prove effective. To some extent the inability of reserve banks to aid large member banks which have found themselves in a critical position is to be ascribed to fundamental changes in the prevailing methods of financing business, which have basically altered the character of the paper held by member banks, thus preventing them from holding as large a quantity of eligible commercial paper as they should.

It is this change in the nature of the member portfolios that has perhaps more than anything else led to departures in practise from the original intent of the act and has furnished a plausible reason for discount policies often charged with an undue friendliness for "speculation." The amendments to the act, as they have worked out under conditions of war and post-war public finance, have put in the hands of the banks an

immense volume of short term treasury certificates available at all times as a basis for unlimited extension of credit. Thus a mechanism has been set up for increasing credit without regard to the total of commercial paper outstanding. It has been the contention not only of many reserve bank officers but of capable commercial bankers as well that the decline of the old fashioned type of bank loan growing out of business transactions had largely driven the reserve banks to a policy in which advances were made indiscriminately against the treasury certificates as collateral; since such loans afforded on their face no evidence as to the necessities that gave rise to them or the uses to which their proceeds were to be put, this system of granting credit almost unavoidably enabled borrowers to draw what they needed from the reserve banks for speculative operations. However it may be explained, there is no reason to believe that since the creation of the reserve system the proportion of banking funds devoted by the nation at large to speculative operations has been at all lessened. On the contrary, it has been considerably increased, although it would be difficult to venture even an approximate estimate as to whether such increase has been out of proportion to the general expansion of industry and trade and the growth in the number of listed issues.

Much greater success has clearly been attained in regulating the geographical distribution of funds among different parts of the country; this may doubtless be regarded as one of the principal achievements of the reform. The manner in which the clearing and gold settlement provisions of the act have been carried out, the exercise of open market powers and the use from time to time of rediscounting between reserve banks have tended to diminish the hitherto pronounced regional differences in rates of interest and discount for short term paper. Whatever differences remain are explicable chiefly in terms of variations in risk and in character of security offered. Moreover, in insuring a decidedly better and easier movement of loan funds to regions where they are needed the system has eliminated what might otherwise be wide seasonal fluctuations in rates and in the current supply of "money." The crop moving season, formerly so difficult and disturbing each year, has ceased to be regarded as an important factor of financial friction between communities and regions.

It is more difficult to evaluate the effect of the reserve system upon the credit technique of

commercial banking. During the first years of their operation the reserve banks succeeded in raising somewhat the standards of banking practise, as was intended at the time the act was passed, but the effort was interrupted by the entry of the United States into the war. Attempts to reintroduce two-name commercial paper, the trade acceptance, were not resumed after the close of the war. With the growth of a practise of lending against Treasury certificates there was less interest in the building up of elaborate credit files; and in lieu of the latter the custom of demanding collateral to protect eligible paper offered to reserve banks has gained ground. In the course of time the reserve banks have been increasingly inclined to follow existing practise in most directions and to abstain from efforts at leadership. The expectation that the creation of the reserve system would improve and strengthen credit technique has thus been largely disappointed. Much the same is true of bank examination, although some results have been accomplished in various districts through collaboration with state and national examining authorities.

It was anticipated that reserve banks, whose management was elected by the members on a democratic basis ("one bank, one vote"), would arouse the interest of the local banker and develop a strong corps of observers and critics who would keep the system under constant supervision and eventually modify it to accord with local interests and the best local practise. But later experience showed that these hopes were not justified; the small banks in particular generally make little use of their voting rights. With this feeling inside of the system it has been difficult to build up a clientele of support from the outside. At first state banks were slow to join because of the loss of interest on their reserve balances. They came in much more freely later, when the United States entered the war, because they feared a severe credit stringency and thought that the help of the system would materially strengthen them. After the panic and depression of 1920 and 1921, during which the performance of the system fell short of their expectations, their membership fell off. The membership of state institutions reached a high point in 1922, when it numbered 1639; it has declined fairly steadily since then, but an important factor in this connection is a reduction in their number owing to mergers and sus-

A factor which has doubtless retarded the

natural expansion of the system has been the failure to develop a genuine local discount market about each reserve bank. The regional system of organization had been criticized from the outset by bankers who desired a single central institution and was defended on the ground that only by regional organization would local markets be likely to be brought into existence. Experience has shown that such markets can be successfully evolved. In at least two or three districts outside New York considerable progress has been made in that direction; but elsewhere the correspondent bank system, strongest in New York and Chicago, has tended to inhibit such development so that the reserve banks of some districts still buy in the New York market the acceptances made by their own members and sent to New York for disposal. The failure to develop local markets is cited by critics as evidence that they are not wanted or not needed and that one central bank with branches would have been preferable to the regional organization. It is to be observed, however, that the regional plan is approved at present by many of those within the system who opposed it in the beginning and that some of the factors which prevented a more rapid development of local markets will prove less important in the future.

The reserve banks have had far greater success in the integration of the entire banking system of the United States than appears on the surface. Although disappointment at the failure of state institutions to become members in larger numbers is justified, it is not to be overlooked that non-member state banks have indirectly received nearly as much benefit from the system as have those which accepted membership. The creation of an incipient discount market, the free purchase of acceptances whether originated by state or national institutions and in some cases the purchase of state bank paper with member endorsement have all been factors of support and sometimes of emergency relief. Agricultural credit organizations, which were permitted by the act of 1923 to deal in specified circumstances with reserve banks, have from time to time received much needed help and have been able to accomplish many results that would otherwise have been impossible. For the first time in American history there has been a substantially uniform foreign banking policy which, whether sound or not, has been representative of the entire nation.

A general evaluation of the Federal Reserve system and its work is thus composite in nature.

Few of the dangers and probably none of the injustices foreseen by its opponents at the outset have been incurred. Without it the war could not have been financed with anything like the success actually attained. General suspensions of payment like those of the national banking era have been dispensed with, and a serviceable, even if not very flexible, banknote currency has been furnished in adequate amount. Some control over foreign financial relations has been provided, and the ability to exert a genuine influence upon the volume of domestic credit and its distribution has been exhibited, however fitfully and hesitantly. Business has at times been materially aided and cost of credit standardized and reasonably lowered. Checks are more nearly at parity throughout the country than ever before and a severe burden of exchange charges has been lifted from the shoulders of the business public. Gold has been economized and its constant shipment back and forth across the country ended. But the termination of the subtreasury system is still to be given its full effect by a skilled and non-political use of public funds and public borrowing powers. And most of the greater objects of the system--such as the fairer division of banking facilities, the real control of credit and the sound limitation of speculation-remain to be more fully accomplished in the future.

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Sec: Banking, Commercial; National Banks, United States; State Banks, United States; Central Banking; Credit Control; Banknotes; Bank Reserves; Clearing Houses; Brokles' Loans; Farm Loan System, Federal; Financial Administration; War Finance; Financial Organization.

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FEDERAL TRADE COMMISSION. This independent commission, created by Congress in 1914, is part of the federal structure designed to safeguard the competitive scheme of economic organization in the United States. Its particular role is to make various economic investigations and reports, to prevent certain abuses of the competitive system by legal processes of its own initiation and to act in an advisory capacity in the administration of the federal antitrust laws. The Commission also supervises export associations under the terms of the Export Trade Act of 1918.

The Commission's powers of investigation, apart from those incidental to its work of law enforcement, were intended to make possible a continuing public check by an expert governmental body upon the operation of the competitive system and to protect that system from abuses by inviting the "curative power of public opinion," antitrust law enforcement or added legislation. By the act creating it the Commission was empowered to "investigate . . . any corporation engaged in commerce" except banks and common carriers whose regulation is entrusted to other governmental agencies, and to "require . . . annual and special, reports . . . or answers in writing to specific questions, furnishing to the commission such information as it may require as to the organization, business, conduct, practices, management, and relation to other corporations, partnerships, and individuals." It was also authorized to investigate "trade conditions in and with foreign countries" which "may affect the foreign trade of the United States," and upon direction of the president or either branch of Congress to "investigate and

report the facts relating to any alleged violations of the antitrust Acts by any corporation."

With the exception of trade secrets and names of customers the Commission was authorized to make public such portions of the information obtained through its investigations as it should "deem expedient in the public interest" and to make annual and special reports to Congress, including recommendations for legislation. To reenforce the Commission's powers of investigation, in the exercise of which it was designed to continue and expand the work of the Bureau of Corporations created in 1903, provision was made for the recourse to the courts for mandamus proceedings; and the imposition of fines on corporations and of both fines and imprisonment on persons was authorized in case of refusal to comply with its requests for information.

The powers of the Commission to prevent abuses of the competitive system by legal processes instituted by it were embodied in section 5 of the act creating it and in sections 2, 3, 7 and 8 of the Clayton Act passed in the same year and as part of the same legislative endeavor. By the sections of the Clayton Act, in the enforcement of which the Commission was given a supplementary jurisdiction, price discrimination, "tying agreements," intercorporate stock acquisitions and interlocking directorates were prohibited under certain conditions believed by Congress to obstruct materially or to destroy competition. By section 5 of the Commission act "unfair methods of competition" were declared unlawful, and the Commission was "empowered and directed" to prevent them when such a course "would be to the interest of the public." Banks and common carriers were excepted from the Commission's field of law enforcement, as meat packing establishments and stockyards have been since 1921, when special federal legislation was enacted to deal with them.

The administration of these provisions was reenforced by no criminal penalties. After establishing an offense the Commission was empowered to issue its order to "cease and desist." Should the order be ignored, the Commission was authorized to appeal to the appropriate United States Circuit Court of Appeals, as could those seeking to have the order set aside. Ultimate appeal to the United States Supreme Court on writ of certiorari was authorized with provision that in all court proceedings "the findings of the commission as to the facts, if supported by testimony, shall be conclusive."

In the administration of the federal antitrust

laws, apart from those in the enforcement of which it was given jurisdiction, the Commission was given various advisory powers, the legislative design being to temper the enforcement of these laws with expert economic counsel. Upon the application of the attorney general, who heads the other major part of the federal establishment designed to protect the competitive system, the Commission was empowered "to investigate and make recommendations for the readjustment of the business of any corporation alleged to be violating the antitrust Acts" to bring it in accord with law. Upon similar application or its own motion the Commission was empowered to investigate and report on the manner of compliance with any final antitrust law decree. And at the request of a federal court it was authorized to serve as a master of chancery in the framing of suitable decrees in equity suits brought under the antitrust laws.

The organization of the Commission, whose authority is vested in five commissioners appointed for seven-year terms by the president and confirmed by the Senate, reflects its dual nature as an investigating and law enforcing body. Its principal divisions, in addition to an administrative division, are economic and legal, the former being concerned primarily with general economic investigation and the latter with the enforcement of statutory provisions relating to competition. While the Economic Division has remained a single unit under the immediate direction of a chief economist, the Legal Division has become progressively more complex in organization and at present consists of six separate and independent units, also designated as divisions, each responsible only to the Commission.

The relationships of these legal divisions may be suggested by a rough review of the Commission's procedure in handling its work of law enforcement. When the Commission receives an application to eliminate an offense against the statutes entrusted to its enforcement, the application is referred to the Chief Examiner's Division unless it involves a charge of false and misleading advertising, in which event it goes to a Special Board of Investigation set up in 1929 to deal exclusively with such offenses. The Chief Examiner's Division, which also handles inquiries directed by the president, Congress or the Commission when they are primarily concerned with a legal question, then determines the substance of the application and, unless it is patently unsuited to Commission action and

capable of informal disposition, makes a report and recommendation. This is then referred to the Board of Review, or directly to the Commission, if dismissal of the application is recommended. The Board of Review then recommends to the Commission outright dismissal of the application, dismissal after the entering of a "stipulation" or the issuance of a complaint on behalf of the Commission. In the latter event the complaint is prepared by the chief counsel, who represents the Commission in subsequent legal proceedings, acts as its general legal adviser and supervises the work of an Export Trade Division engaged primarily in administering the Export Trade Act of 1918. If the complaint is contested it is referred to the Trial Examiner's Division, a representative of which takes the evidence and prepares a report of the facts for the Commission. After the conventional legal formalities the case is then brought before the Commission for final argument, and its order of dismissal or to "cease and desist" is entered.

To deal with unfair methods of competition en masse as opposed to individual cases the Commission has since 1926 maintained a Trade Practice Conference Division. Here the procedure, first adopted in 1919, is to have representatives of an industry assemble voluntarily under the Commission's auspices and at its discretion with a view to devising rules to eliminate unfair competition in the entire industry. Those rules which are jointly approved by the Commission and a satisfactory representation of the industry are officially designated as the "final rules of the trade practice conference." They fall into two groups: (1) those covering practises which in the judgment of the Commission are illegal and subject to elimination by its formal complaint, and (2) those which are expressions of opinion as to desirable practises for the industry to follow. After the final rules are promulgated, the Trade Practice Conference Division endeavors to secure compliance with them by establishments not represented at the conference at which they were formulated and reports directly to the Commission all violations of the rules. Such reports on group 1 rules may be the basis for the Commission's formal complaint.

In the field of economic investigation the Commission has carried out only a part of the program contemplated by Congress in creating it. The Commission still awaits a decisive ruling by the courts on its power to command information for purposes of general enlightenment as opposed to the much more restricted pur-

poses of law enforcement. Both by voluntary contributions of information and contributions secured in response to resolutions directing investigations of alleged violations of the antitrust laws the Commission has compiled a substantial library of economic reports. During recent years most of the additions have been made in response to Senate resolutions. Some of the Commission's investigations and recommendations, notably those on *Cooperation in American Export Trade* and the *Meat Packing Industry*, have resulted in legislation.

In the field of law enforcement most of the Commission's work has been predicated upon the mandate to prevent "unfair methods of competition." In construing this phrase the Commission has held it to cover not only violations of the Sherman Act of 1890, the basic federal antitrust law, but also practises of an immoral and fraudulent nature which are related only remotely if at all to monopoly and restraint of trade. While it has thus addressed itself to certain practises and arrangements of an essentially monopolistic nature, the general drift of its decisions has been toward emphasis upon certain standards of commercial conduct without immediate reference to monopoly and restraint of trade. In recent years misbranding, false and misleading advertising, misrepresentations of various sorts, "passing off" and commercial bribery have constituted the basis for the bulk of its decisions.

In defining "unfair methods of competition" the Commission has been largely controlled by the federal judiciary. The United States Supreme Court has held that "it is for the courts, not the commission ultimately to determine as a matter of law what they include." This court has also undertaken to determine the "interest of the public" which the Commission is directed to protect (as has the Commission by formal statement of policy) but in terms so general that the only abiding proposition established is that the judgment of the courts is controlling.

The Commission's policies of law enforcement have recently tended strongly toward emphasis upon what has been termed prophylaxis as opposed to prosecution. Since 1925 it has extensively followed a policy of settling cases by "stipulation" and on generous terms with reference to publicity. In its discretion but in pursuance of a policy that "all cases shall be settled by stipulation except where the public interest demands otherwise," a party liable to format complaint is allowed to sign a stipulation of the

facts about the practise and an agreement to "cease and desist forever," with the understanding that "should he ever resume it the facts, as stipulated, may be used in evidence against him in the trial of a complaint which the commission may issue." The proceeding is then dropped without making public the name of the offending party but with an anonymous statement of the practise condemned. This publicity arrangement has been bitterly attacked by a minority of the Commission as placing that body in the position of protecting lawbreakers, but it has been retained. And the general "stipulation" procedure, which was employed for the first two years of the Commission's existence and then dropped until 1925, has been extensively used, 672 "stipulations" having been entered in the five-year period prior to June 30, 1930, in comparison with 431 formal complaints.

In keeping with the prophylactic motif the Commission has also greatly extended the scope of its trade practise conferences. During the year ending June 30, 1930, fifty-seven such conferences were held, almost half the total number held since the proceeding was originated in 1919. In pressing this procedure, which the Commission asserts "performs the same function as a formal complaint without bringing charges, prosecuting trials, or employing a compulsory process, but multiplies results by as many times as there are members of the industry who formerly practiced the methods condemned and voluntarily abandoned," the Commission may have paved the way for some violations of the antitrust laws. The officer of the Department of Justice in immediate charge of antitrust law enforcement stated in 1930 that "there have been recent instances where . . . price fixing has been attempted by the misuse of so-called Codes of Ethics or Trade Rules." Since then the Commission has revised the rules adopted by most of the trade practise conferences held under its auspices.

The role which Congress contemplated for the Commission as an expert economic adviser on the enforcement of the antitrust laws by the Department of Justice and the federal courts has been very little developed. The attorney general has rarely called upon it for advice, and the Commission has proffered little except indirectly, as in response to congressional resolutions. The Commission has never been called upon to act as a master of chancery in framing an antitrust decree. At times, as in the case of resale price maintenance, the Department of Justice and the Commission have worked quite independently on the same question but recently efforts to develop a greater degree of cooperation have been reported.

Viewed in relation to congressional design in creating it the accomplishment of the Commission has been meager. As an instrumentality for information and publicity about the performance of the competitive system it has done much valuable work but only a small fraction of the work of this type requisite to an enlightened public control of competition; nor has this work been done by other governmental agencies. As an adviser on antitrust law enforcement the powers of the Commission have been barely touched. In law enforcement its most extensive accomplishment has been in the field of commercial ethics rather than of monopoly and restraint of trade, to which the legislation creating it was primarily directed.

For the fact that the Commission has had relatively little success a great variety of causes might be assigned. Among these a lack of sympathy with certain of the main objectives of the 1914 legislation on the part of some of the members, the great technical difficulty of the program involved and adverse court decisions would probably bulk large. The principal cause, however, has probably been the change in public attitude toward the question of antitrust law enforcement since 1914. More recently there have been some slight evidences of a renewed interest in the general objectives sought by the 1914 legislation. Should these materialize in any substantial degree, the Federal Trade Commission would probably reflect the change as it has reflected general changes in economic ideology since its organization.

DEXTER MERRIAM KEEZER

See: GOVERNMENT REGULATION OF INDUSTRY; COMMIS-SIONS; EXPERT; TRUSTS; COMPETITION; CUT-THROAT COMPETITION; UNFAIR COMPETITION; PRICE DISCRIM-INATION; BUSINESS ETHICS; TRADE ASSOCIATIONS; Ex-PORT ASSOCIATIONS; INVESTIGATIONS, GOVERNMENTAL. Consult: Henderson, Gerard C., The Federal Trade Commission (New Haven 1924); Rublee, George, "The Original Plan and Early History of the Federal Trade Commission" in Academy of Political Science, Proceedings, vol. xi (1924-26) 666-72; Stevens, W. H. S., "What Has the Federal Trade Commission Accomplished?" in American Economic Review, vol. xv (1925) 625-51; Seager, Henry R., and Gulick, Charles A., Trust and Corporation Problems (New York 1929) chs. xx-xxiii, xxvii; Keezer, Dexter M., and May, Stacy, The Public Control of Business (New York 1930) chs. ii-iv; United States, Federal Trade Commission. Statutes and Decisions Pertaining to the Fedoral Trade Commission, 1914-1929 (1930), and Annual Report, published since 1915, the first volume of which, including decisions beginning with 1915, appeared in 1920.

FEDERALISM in its broadest and most general sense is a principle which conceives of the federation as the ideal form of social and political life. It is characterized by a tendency to substitute coordinating for subordinating relationships or at least to restrict the latter as much as possible; to replace compulsion from above with reciprocity, understanding and adjustment, command with persuasion and force with law. The basic aspect of federalism is pluralistic, its fundamental tendency is harmonization and its regulative principle is solidarity. Carried to an extreme, federalism becomes pacifistic and approaches syndicalism and anarchism. Proudhon, the French socialist, wrote in 1863: "Only federation can solve, in theory and practise, the problem of an adjustment between the principles of liberty and authority by leaving to everyone his proper sphere, his true competence, and his full initiative. Therefore federalism alone warrants on one hand the ineffaceable respect for the citizen as well as for the government, and on the other, order, justice, stability and peace." In 1862 Constantin Frantz, the German journalist, had employed the modes of thought of the speculative-romantic philosophy to express similar ideas: "What must federalism do in order to found such a union? Nothing more than draw particularism, i.e. individuality, out of its retirement and introduce it into the community, at the same time that it complements centralization by means of individuality and renders the union more real through the liberation of individuality." Unconsciously the Frenchman had in mind the memory of the bloody conflicts at the height of the French Revolution between the federalism of the Girondists and the centralism of the Jacobins. 'The German thinker was guided by the organismic conceptions of a philosophy conceived against the background of the complicated constitutional relations which had developed in the old German Empire. He was also influenced by his antagonism to the first steps of the centralizing Prussian policy by which Bismarck intended to establish the empire. In modern sociology federalism was revived by the neoromantic school of Othmar Spann under the term "universalism."

Federalism postulates that the state likewise should join a more comprehensive federal system (Concert of Nations, pan-Europe, League of Nations) and, similarly, that the parts of the state (the member of confederate states) also be constituted on a federal plan. In this sense federalism aims at a universal social organization which attempts to realize liberty by establishing fraternity without being equally concerned about equality. Accordingly, the theory of federalism frequently acquires a utopian character.

In its application to concrete political problems federalism becomes a relative and dynamic principle. One may distinguish a centrifugal and a centripetal federalism. The federalist tendencies of continental Europe during the nineteenth and twentieth centuries were mainly centrifugal -a reaction against the unitarism which was prepared in France during the monarchy and put into practise in an exemplary fashion during the French Revolution by the Jacobins and by Napoleon. Under French influence unitarism progressed in Russia, especially under Peter the Great; in Prussia under Frederick William I; and in Austria under Joseph II. Similarly, the unification of Italy took place in conformity with the principles of unitarism, because there federalism was considered a doctrine of disintegration and foreign domination. Besides, the existence of the Papal States impeded a solution along federalist lines. Although the unitarian tendencies in Germany foundered in 1848 and the Reich which Bismarck created in 1871 was organized according to federal principles, the reform of the Swiss constitution of 1848 tended toward unitarism. At the same time Austria experimented with a greater centralization, which was also the aim of the German constitution of 1919.

In the face of a tendency to establish complete unitarism federalism becomes a principle of opposition. It unites itself with forces which are unpolitical, hostile to the state and, if carried to an extreme, anarchical; and through this alliance or psychological coloring it becomes discredited as a constructive political principle. The government and such groups as maintain a positive attitude toward the state fear that federalism may bring about a weakening of the state and lead to disintegration in the form of irredentism or separatism. If federalist tendencies conquer a state constituted mainly on the principles of unitarism, the result is more likely to be decentralization than federalism proper. For all practical purposes, however, the transition from federalism to decentralization remains one of degree.

Wherever federalism consciously and system-

atically and by the use of proper measures and institutions emphasizes and guarantees union and solidarity in the federal state it becomes a patently centripetal and conservative principle. In such a case the antithesis of federalism is not unitarism, but particularism and separatism. In the Anglo-Saxon countries and especially during the last decades in the British Empire federalism has possessed such a positive meaning. There federalism, by professing the principle of the equal rights of all members, acts as a counterweight to the desire of the component parts for independence and hegemony. It is noteworthy that the same symbol or institution, the crown, which stood for centralization in France now stands for federalism in the British Empire. While federalism as an element of opposition easily becomes doctrinaire and degenerates into anarchism, in connection with certain forms of imperialism it has definitely proved itself an aid to the highest kind of statesmanship and has furthered the preservation of the state. Even in the former Austrian Empire, in spite of strongly centrifugal tendencies, a peculiar combination of monarchism and federalism postponed for a long time the threatening disruption, until finally defeat in the World War brought the collapse of the empire. Thereupon its peculiar problems were transferred to the countries which succeeded it.

Federalism in its practical application manifests itself differently according to the sociological factors which it attempts to regulate and which form its basis. The purest and most consistent form of federalism appears where it follows traditional political lines. The old states of Europe are almost entirely of dynastic origin. In many instances territories were added by conquest, by bequest or at times by purchase. While mediaeval feudalism facilitated the disintegration of ethnically homogeneous regions, the absolutism of the early modern period, which even in France began its centralizing work very circumspectly, generally developed from a personal union into a real union and only gradually prepared the way for unitarism. Territories which received a new suzerain retained their self-administration under native leadership and their traditional rights, customs and regional peculiarities. It was possible to spare local tradition as long as the principle of absolutism remained unshaken and the tasks of the central state were limited in scope as compared with the autonomous territorial and local jurisdictions. Swiss federalism did not rest upon eth-

nical but upon local and traditional factors, determined by the particularistic and conservative mentality of the Alemannic race as well as by the geographic conditions of a mountainous country and peculiar sociological conditions. Consequently, Switzerland achieved the earliest and most enduring form of a purely republican and democratic federalism. Similarly, the federalism of the Anglo-Saxon and the Iberian nations is based primarily upon geo-political and historical circumstances and not upon race or nationality, the differentiating effects of which were of only secondary importance. The thirteen British colonies in North America gained their independence in a manner reminiscent of the original cantons of Switzerland and formed themselves into a democratic and republican confederation which, like the Swiss, later augmented its territory. About the middle of the last century England seemed threatened with a progressive decomposition of the empire, until about 1860 British imperialism entered into its peculiar synthesis with federalism. The creation of colonial and imperial conferences, a gradual raising of the status of the dominions and reduction in the hegemonial demands of the mother country and the assistance of federalism have enabled the empire so far to adapt itself successfully to a changed world. Bismarck mastered an especially difficult task in federal organization by opposing the revolutionary tendencies of 1848 with a carefully tempered legitimistic federalism and by creating the new German Empire as a polydynastic federation with the office of the emperor as its presidial head. The articles of the German constitution of 1871 were wisely formulated so as to spare the particularistic sentiments of the German sovereigns and states and yet prepare the way for an organic coalescence into a more unified empire. The development after 1918 proved that this consolidation had advanced sufficiently to keep the Reich from disintegrating even after the disappearance of its dynasties. Yet in spite of the strongly unifying tendencies of the Weimar constitution the traditional federalist forces within the states have proved so strong that only a few consolidations (mainly in Thuringia) of the overdivided German territories had taken place. The Republic of Austria in 1919 also constituted itself on a federal plan in spite of its ethnic homogeneity and opposed quite strongly the centralizing tendencies of the Austrian Social Democrats.

With the spread of nationalist ideas in the

nineteenth and twentieth centuries the principle of federalism acquired a peculiar significance and at the same time became more complicated. In former centuries differences in religion and customs demanded different treatment of subjects. Now differences in nationality represented chiefly by different languages and, in countries which possessed colonies, racial differences have made themselves felt as factors endangering the principle of civic equality. Federalism could be applied within a state to the organization of national groups wherever these inhabited distinctly separate territories and especially where in the course of history they had been subject to a uniform administration. Yet even where this was the case the obvious trend was not toward federalism, but toward autonomy or decentralization. Federalism presupposes a certain equality in size and cultural level and a common allegiance among the nationalities joined under the same state; actually they were often numerically weak minorities, possessed a low cultural level or as the inhabitants of conquered territories were suspected, rightly or wrongly, of irredentism and separatism. Besides, a politically conservative federalism frequently clashes with a demand of long standing for a redistribution of territory on an ethnical basis. This is true to a certain extent even of Switzerland, which is wrongly considered a model for the solution of national problems. The federal organization of the cantons is in no way based upon ethnic or linguistic principles; there are several polyglot cantons, and neither German, French nor Italian Switzerland is a constitutionally recognized individuality within the confederation as a whole. The same statement can be applied to former Austrian territory, where the historical provinces (crownlands) lacked ethnographical unity, as did the largely autonomous administrative districts of Hungary (the Comitats). Accordingly, all projects of a federal organization discussed in Austria-Hungary after 1848 by Palacky and Löhner met the violent opposition of conservative-federalist circles and frequently even that of the national groups themselves, who wished to assimilate their own ethnic minorities and therefore did not favor a clean cut reorganization along ethnographic-territorial lines. They considered as revolutionary the proposals, arising primarily from within the ranks of the Austrian Social Democratic party and advocated by Bauer and Renner, for a regulation of the legal status of the nationalities according to "personal" instead of "territorial" principles. Since a satisfactory demarcation of the national districts proved partly impossible, partly inexpedient, it was proposed to register the ethnical groups and to organize them for national and cultural purposes as cooperative unions. In this case federalism was replaced by the principle of a territorial autonomy, or "group federalism."

While in central Europe ideas of autonomy became, theoretically at least, increasingly prevalent as a solution of the problem of nationalism, the national aspirations of the rest of the world continued largely to move within federalist ideology; for example, certain national aspirations within the British Empire and in the Near East. Yet even the radical federalism put into practise by the Soviet Union offers merely a sham solution of national and especially cultural problems. The formation of Soviet republics and autonomous territories with national nomenclatures seems to follow the principle of separating the domain of cultural activities from that of government proper. While politics as such is strictly centralized in Russia, culture as determined by social and religious factors is to a certain extent decentralized. The Communist zeal for revolutionary reorganization goes so far that the central organization artificially revives the national life of even the smallest nations and tribes. This very procedure of the Communists demonstrates that they are not seriously considering a real recognition of national individualities. Their efforts serve mainly the ideas of the social revolution, the mobilization of the illiterates and of the conquered and uncivilized tribes against their own upper classes. This policy is furthermore used in propaganda abroad to revolutionize the neighboring countries in the west (especially Poland and Rumania) and to excite the natives of the British colonies. Its final aim is solely the winning of allies in the revolutionary class struggle and world revolution. Accordingly, Russian methods cannot be applied to countries which adhere to a Christian culture and to stable social traditions without endangering the foundations of their very existence.

Yet the propaganda of Soviet federalism gains strength from the social and constitutional crisis which the British Empire and the continental European countries are undergoing, and in which the ideology of federalism plays an important part. This applies especially to those polyglot countries of Europe which have modeled their centralism on the pattern of France and which are therefore now finding themselves in serious difficulties. In France itself a move-

ment opposing the centralization of culture on the basis of a so-called regionalism had already sprung up about the middle of the nineteenth century and manifested itself chiefly in southern France, in the Provençal, Basque and Catalan regions but also in Brittany and among the Flemings of northern France. The very strong autonomous tendencies within Alsace-Lorraine have considerably increased the political strength of French regionalism, which is tending in its program partly toward economic, partly toward political, federalism. The attempt to unite Serbs, Croats and Slovenes in a Jugoslav nation, in spite of their considerable difference in language, culture and especially religion, met strong opposition, mainly because of the desire of the Serbs to exercise hegemony. This opposition has caused revolutionary disturbances in Macedonia and recently also in Croatia. To a lesser extent the same statement could be applied to the attempt to weld Czechs and Slovaks into a unified Czechoslovakian nation. The added factor of a large and compact German speaking territory in Czechoslovakia might suggest to that country a reform along federal lines; this, however, the Czechs oppose. Even a single people, the Poles, after the restoration of their state showed themselves so differentiated through the Russian, Austrian and German domination that centralization was not possible without friction (for example, the promise to give autonomy to Upper Silesia). Furthermore, in both Spain and Belgium the demand for federalism has increased since the war. In Belgium the nationally conscious Flemings and some of the Walloons demand separate administrations for their respective regions. The overthrow of the Spanish monarchy in 1931 was caused largely by the attempt of the dictatorship to suppress by force the federalist aspirations of the Catalans and Basques. Finally, even in Germany tendencies toward a new territorial demarcation have sprung up since the war, tendencies that are not founded upon linguistic and ethnical principles but rather on cultural traditions; it is not likely, however, that revolutionary upheavals will result. Another victory was gained for the principle of federalism when Ireland received the status of a dominion, although the question of Ulster continues unsettled.

Federalist theories are also frequently employed by movements advocating a confederation of existing governments without the impairment of their sovereignty, in contrast to the customary leagues ultimately determined by the

requirements of war. The characteristics of federalism in a broader sense may be found in regional economic agreements, such as customs unions, and also in such movements as Pan-Americanism, Mitteleuropa, the pan-European movement and pan-Slavism. With some reservations even the League of Nations may be so classified. Such programs and institutions are frequently abused as a shield for a particular brand of hegemony, as in the pan-Slavic movement. When international federalism is sincerely conceived it frequently does not progress beyond the stage of impractical idealism. Yet it cannot be denied that pacifism, growing everywhere as a result of the enervating effects of the World War and the fear of new wars, has created a readiness to solve international problems with the aid of federalism. As yet the forms of these solutions are perceptible only in vague outline upon the horizon of practical politics.

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S2e: Federation; Autonomy; Regionalism; Localism; Decentralization; Self-Determination, National; Home Rule; Dominion Status; Nationalism; Minorities, National; International Organization; State; Government; Anarchism; Syndicalism.

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FEDERALIS'I' PARTY, UNITED STATES. See Parties, Political.

FEDERATION. The term federation is variously employed to indicate a relationship, the process of its establishment or the entirety of a

complex organization that embodies it. The etymological kinship of the word (from Latin foedus) with ideas of treaty and of contract illuminates but no longer fixes the meaning of a protean and widely applicable principle. The essential relationship involves a division of activities between the autonomous parts and the common or central organs of a composite whole. Arrangements inherently so conditional do not foster an absolute nomenclature. Usage must look in two directions. As a deliberate phase of the structure of certain modern states federation has acquired legal attributes which should be insisted upon, if only to retain the perspective necessary to an appreciation of the significance of institutional variations and inventions. But in another direction conscious looseness is advisabie. The federal principle cannot be constrained by the analogies appropriate to territorial governments operating in an inchoate international society. The principle is manifested in innumerable types of association. The basis of groupage need not be spatial. The element of federation may even be unintentional and implicit, resulting, on the one hand, from the inevitable interdependence of supposedly separate things or, on the other hand, from the nature of man's mind, which by dividing his attention and qualifying his ioyalties imparts a vaguely federal character to all authority.

Traces of federalism are ubiquitous, but federation when deliberate implies relative sophistication. The exact limits of the history of federal government are a matter of definition, depending upon the differences which are conceived to exist between federations proper and confederations and between the latter and the leagues and alliances into which their looser forms almost imperceptibly merge. When the proponents of the Constitution of the United States sought historical support for what their sense of need prompted, they necessarily dealt in terms of still unfixed meaning with institutions which were imperfectly understood and in part legendary. They could point surely to no true analogy in past experience, but only to unions which were confederations in the sense that they emanated from and acted upon constituent governments and not with direct reference to individuals. This conception of the difference between confederations and federations has been generallyaccepted, although realistic analysis has increasingly recognized the fact that the distinction rests upon results rather than forms and can be read in the extent to which, whether by direct

or indirect methods, the decisions of the central authorities of a composite state within the field of their competence can secure certain and orderly compliance. The logical difficulty of divided sovereignty can be avoided (if, indeed, such escape seems profitable) by regarding a confederation as merely a comprehensive and cohesive form of international administrative union, whereas a federal system is regarded as a multiple government in a single state.

The Hellenic unions—the Boeotian, Actolian, Achaean and in Asia Minor the Lycian leagues, not to consider early, slighter instances of something akin to federalism in Phocis, in Acarnania and in Epirus—cannot unqualifiedly be called mere confederations. They were sufficiently developed to warrant the application of the term federal to the period in the history of ancient Greece after the passing of both strict town autonomy and Macedonian empire and before complete subordination to Rome. E. A. Freeman remarks that the Achaean League in the years from 281 to 146 B.C. was "the first attempt on a large scale to reconcile local independence with national strength" and had given "to a larger portion of Greece than any previous age had seen, a measure of freedom, unity, and general good government, which may well atone for the lack of the dazzling glory of the old Athenian Democracy" (p. 553-54).

No other unions so definitely federal in texture seem to have existed until modern times. On the Italian peninsula the early urban leagues of Etruria and Latium were imperfect and impermanent. Later, Rome's sprawling empire involved quasi-federal elements, but they were negated by a theory which despite the flexibility of its conception of Roman citizenship had no room for the idea of a voluntary union of equals. Feudalism was vaguely federal, although the pattern of confederate government was largely concealed in personal relationships. The Holy Roman Empire, while fiefs were evolving into principalities and kingdoms, was a kind of confederation that lapsed into an even more ambiguous union. The defensive alliances of certain Italian cities approached but did not achieve thorough and lasting federation. The Lombard League, consummated in 1167, fell to pieces in 1183; at the end of the twelfth century a concert of Tuscan communities was arranged; but the passing of the Hohenstaufens withdrew the chief motive for such combinations. Economic purposes stimulated organizations among northerly cities like the Rhenish League in the thirteenth century, the Swabian League in the fourteenth and the even more essentially economic union which, having developed from an association of merchants into a loose combination of corporate communities, long survived as the Hanseatic League. More important were the two loosely composite states which in the mountains and by the sea successfully threw off the grasp of a dynasty. The Seven United Provinces of the Netherlands doubtless lacked the cohesion entailed in the modern conception of federation, but in the first half of the seventeenth century the union could be counted the strongest Protestant force in Europe, and it endured until the wars consequent to the French Revolution. The system of perpetual treaties of alliance which grew into the Swiss Confederation, spreading by degrees from the agreement of three forest cantons in 1200, remained hardly more than a permanent league until it yielded to unitary government under French auspices. The interruption was temporary; the confederation was restored in 1815 and in 1848 was transformed into a federal government.

The emergence of national states was accompanied by political ideas more compatible with the logic of unitary than of federal constitutions. In Germany, however, the course of unification led through a series of unions which generated a stream of analytical writing, dating at least from Ludolph Hugo in 1661, which in its source was independent of the turgid controversies set in motion by the Constitution of the United States. The vestiges of the aged empire disappeared when the semi-independent Confederation of the Rhine was imposed by Napoleon in 1806. This yielded in 1815 to a confederation under the presidency of Austria, which lasted until the North German Confederation was engineered by Prussia in 1866. Meanwhile within the shell of the old the Zollverein illustrated how shadowy in practise may be the line between international administrative unions for particular purposes (in this case customs, currency and weights and measures) and comprehensive federations. The German constitution of 1871 did not quite end the debate as to whether a Staatenbund had not at last evolved into a Bundesstaat, while in another direction the disproportionate weight of Prussia sharpened the problem of the degree of inequality which is consistent with the genius of federation. The new plan of government in 1919, still ostensibly federal, gave a fresh turn to the discussion. So broadly did it empower the central authorities of the union to establish principles and standards that, like Austria's contemporary constitution and the scheme of multiple organization consummated in the Union of Socialist Soviet Republics in 1923 (not to consider the abortive Chinese constitution of 1923), it raised the question of the point at which normative federalism ceases to be federalism at all. De Tocqueville truly said, speaking of federal government, that "the human understanding more easily invents new things than new words" (Democracy in the United States, 7th ed. Boston 1882, vol. i, p. 200).

A number of federations established in the nineteenth century drew inspiration from the United States, although the lesson learned was sometimes a lesson of avoidance. Those of Latin America—Mexico, Argentina, Colombia, Venezuela and Brazil-were most simulative. There were indigenous roots of decentralization contending with the heritage of the old colonial administration; but the introduction of federal government in these countries demonstrated that, in form at least, the latter is not always the result of a movement toward closer union. Federation in Canada in 1867 departed from the type set by the United States in numerous crucial respects, notably in reversing the arrangement of delegated and residual powers. Australia's union of 1901 was nearer to the pattern, and the problems of adaptation to changing conditions which it has faced have been most closely analogous to those of the United States.

The historical pattern of federation has entailed a formalized distribution of powers among central and local governments. As a natural consequence of the fact that most federal systems have evolved from looser unions or conditions of complete independence, it has been customary to partition the sum of possible powers by assigning certain of them to the common organs, limiting those of the constituent governments by exclusion only. The theory of federation can no longer insist that this mode of allotment is essential; the example of Canada and the instances of federalism implicit in the constitutional provisions by which certain states in the United States have sought to establish municipal home rule have sufficed to show that the arrangement can be reversed. This indeed is an outcome pointed to by the tendencies that are embodied in the federations established on the continent since the World War. In distinguishing true federalism from the deconcentration which, supported by the tradition of the local

Federation

choice of local authorities, exists in varying degrees in most unitary states, it is as proper as it is easy to say that in a federation the powers of the constituent governments, whether residual or enumerated, must be substantial. What this means, however, is not likely to be fixed. When defense was the paramount purpose of union, the spirit of federation seemed to require that the central government should be confined to the care of external relations. This rudimentary stage characterizes countless voluntary associations which are approximately federal in structure; government was soon carried beyond it. It is increasingly unrealistic to conceive of a federal division of functions in terms of the assignment of subjects as wholes. Each has phases appropriate to central and to local attention. Federal constitutions which disregard this fact are brought into conformance with it in the end, although tardily and imperfectly, by subterfuge, indirection and fertile adaptation.

The legal distinction between federations and decentralized unitary governments rests upon more mechanical considerations than the scope of the powers of the constituent members of federal systems. The method whereby such powers are allotted is crucial. A federal organization can hardly be said to exist if the allotment can be altered by ordinary legislation. On this ground the Union of South Africa (not to mention countries like Cuba, which are still further removed from the type) is commonly excluded from the list of federations. A written constitution seems to be a prerequisite of federalism, although it can be argued that a virtually federal structure is being created without one in the British Commonwealth of Nations. The relative difficulty of the amending process is a decisive factor in all conceptions of federation, but like the other criteria it cannot be standardized. The widely variant provisions for the amendment of federal constitutions indicate that a lenient view must be taken or the list of true federations would be a short one. It is not indispensable to the principle of federal equilibrium that amendments be submitted to the authorities of the member states or to their electorates or to the electorate of the union or to a constituent assembly. The amending power may be vested in the central legislative body, provided some unusual procedure (such as an extraordinary majority or repassage in successive sessions or both) is required. The constitution of Brazil can be changed by a two-thirds majority in the national legislature, as can the recent constitutions

of Austria (save in the case of a general revision) and of Germany, although the referendum can be invoked under certain conditions in the latter countries. In the Union of Socialist Soviet Republics unrestricted power to amend is given to the Union Congress of Soviets, which, however, may be regarded as a periodical constituent assembly. A considerable degree of fixity in the division of jurisdictions is undoubtedly an essential ingredient of federal government, but, on the other hand, adjustments are constantly necessary and undue inflexibility (such as has resulted in Australia from the combination of an unpliant court and a costive amending process) may weaken and even discredit the federal idea.

Judicial control like a written fundamental law has become an accepted corollary of the theory of federal equipoise. A court of last resort although it is almost inevitably an emanation of the central government has seemed the most practicable method of providing relatively impartial arbitrament. This plan has been developed in the United States and followed in Australia and in the federalized states of Latin America; it has appeared in Germany and Austria; it is being agitated in Switzerland, where judicial review (partly perhaps because frowned on by ideas that were a contagion from unitary states) has not been extended unequivocally to acts of the federal assembly. Canadian federalism has been exceptional in vesting the right of review in the judicial committee of the Privy Council, while Parliament holds the technical power of amendment; but whatever success has attended these expedients, which may be reassuring to Quebec, they are not examples for other federations to follow. Strictly speaking, it is equally improper to allow the policy shaping organs of the central and of the local governments to determine finally the scope of their competence. Actually in a day of great nations and pervasive commerce the assumptions in favor of strength and convenience have been so compelling that only the check on the action of constituent governments has seemed indispensable. The practise of judicial review in most places although ostensibly even handed has reflected this attitude.

The conception of federation which has been colored by the early example of the United States has tended to disapprove all non-judicial forms of control over the actions of member states as incompatible with the autonomy which should characterize the federal type of decen-

tralization. There were exceptions in the United States from the outset, of course, but they chiefly involved Congress, as in the consent required for the levying of tonnage duties by the states, and were relatively unimportant. The constitution of Canada mildly challenged the theory by providing for the central appointment of the titular heads of the provinces accompanied by a real although seldom used power of disallowance. The form of executive control known in Argentina and Brazil as federal intervention may be dismissed, at least when chronic, as belonging to the pathology of federalism. It would be empty pedantry, however, to rule out as inconsistent with federal ideals the numerous forms of direct legislative and administrative control over the actions of member states which have been provided in the federal constitutions of the continent. Such forms of control have been engendered partly by reliance upon indirect federal administration, which can no longer be regarded as a sign of imperfect federalism. Beyond that, however, they reflect the seemingly inevitable tendency to bring about union, if not unity, within every broad field of governmental concern. This tendency is more than nation wide; it has already given rise to a congeries of international administrative unions. In weaving relationships across geographical divisions the tendency in question is distantly related to socalled economic federalism; but, regardless of the use that various forms of the latter may presently serve in facilitating the devolution of vexing problems of control and the interest that it holds as part of a scheme of social reconstruction, it does not appear now as a substitute for territorial federation. In systems like that of the United States arrangements akin to indirect federal administration are being realized in numerous ways. It would miss the essence of the new relationships to say that they are an attempt to enlist the state governments as agents of Congress, for national administration will be found as frequently to serve as agent of the states. By such means, federal systems-compelled (as are all forms of government) to reconcile the claims of localism and functionalismare contending practically with the difficulties which constitute, more than does embarrassment in external relations, the weakness of this type of organization: lack of uniformity, duplication, imperfect stimulation and grave impediments in equalizing the services of government in the face of an uneven distribution of taxable wealth.

The allocation of representation in federal legislatures has been the subject of much controversy and varying practise. The necessity of bicameralism has been urged on the ground that for self-defensive purposes the member states should be allowed to participate on an equal footing in the law making process and that to constitute a single chambered legislature on this basis might result in dissolving the union into something like a confederation. This theory was exemplified in the United States, in the federalized countries of Latin America, in Australia and in Switzerland. It is more applicable to the formation of the federal states, however, than to their operation. Bicameralism by opening the way for equal representation undoubtedly facilitates compromises which may be indispensable in allaying opposition to union. Subsequently in the face of a party system and especially where members of the upper house are directly elected the constituent states are not represented as such. The interests of the states as governmental entities are more likely to be efficiently reflected in a body to which representatives are sent by the state administrations. Such was the former German Bundesrat; such, on a vastly reduced scale, is the present Reichsrat, although confined to recommendations and the carefully guarded exercise of a suspensory veto. There is probably growing need in all federal systems for consultation with state authorities, but the mechanisms of association and conference are not dependent on bicameralism. To say this is not to belittle the political utility of a device like the Council of Nationalities in the binary structure of the Central Executive Committee and the presidium of the Union of Socialist Soviet Republics. It is a conclusion, furthermore, which leaves unsolved the underlying problem that inheres in any gross disparity in the strength of the component parts of a federal union, such as in the relation of Prussia to the other states of Germany or the city of Buenos Aires to the rest of Argentina. Little is gained by protesting that the spirit of federalism is violated where federal organization at least tempers a natural hegemony; and much may be lost by pushing too far an unreal principle of mathematical equality.

When applied internationally the verbiage of federation although instinct with noble promises is still used with little reference to the meanings it has acquired in the experience of modern states. The proposal for which such organizations as the *Union paneuropéenne* have

variously agitated, which Briand brought into official view in an address on September 5, 1929, and which was tentatively sketched in a series of questions sent in the following May to the European members of the League of Nations, mentioned a lien fédéral, urged that the political aspects of the European complex should be emphasized as a prerequisite to economic adjustments and indicated the need of a central committee and other machinery. Begging the question of the bearing on French policy of this particular embodiment of a prevalent idea (such as its possible use as a foil to the scheme of a German-Austrian customs union), it suggested that fuller federation may be approached by treaty woven tissues of confederation, integrating regionally the pronounced economic pluralism of the contemporary world.

In the almost limitless, incoherent and fluent fields of voluntary association the term federation has been used with excusable looseness. It is often merely a catchword, but its prevalence is significant, for it suggests how universal is the human need of solving the riddle of many in one and one in many. The federal form (which in such instances is usually better described as a confederation) lends itself admirably to the purposes of offense and defense, such as carrying on advertising, promoting legislation or conducting litigation-purposes which bear a distant analogy to the cooperative diplomacy and war or the propitiatory religious rites conducted jointly by early unions of tribes or communities. The objectives of composite organization, however, are frequently more complex administratively, more difficult or more vexing from the standpoint of balancing the competing claims of the parts. Federated charities, for example, experienced little difficulty in maintaining clearing house relations which facilitated specialization in case work; but the recent development of the method of financing semipublic undertakings through so-called community chests has increased the dependence of the member organizations upon the energy of central committees and has raised difficult problems in the allotment of funds.

Federation has been an obvious instrument of craft unionism and where labor organization has followed more industrial lines autonomous tendencies have usually been strengthened by philosophies impregnated with economic federalism. The effective conduct of collective bargaining has required regional federation on both sides, although (with some exceptions like the "system

federations" of the railroad shop crafts) this sense of the term federation is less familiar in the United States than in Great Britain. It is perhaps significant of tendencies inherent in federal organization that the American Federation of Labor, which at the outset was little more than the legislative agent of a group of unions retaining complete freedom of economic action, has assumed an increasingly active role in defining the jurisdiction of its members. Federations, once begun, must struggle endlessly for the order entailed by balance.

ARTHUR W. MACMAHON

See: Federalism; Autonomy; Regionalism; Localism; Dlcenfralization; Centralization; Administrative Areas; Home Rule; Government; Constitutions; Amendments, Constitutional; Sovereignty; Concurrent Powers; Judicial Review; States' Rights; Bicameral System; Uniform Legislation; Full Faith and Credit Clause; Compacts, Interstate; Grants in Aid; Articles of Confederation; Central American Federation; American Federation of Labor; Labor Movement.

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FEE SPLITTING, or the sharing of fees for professional services, is a widely prevalent practise. Its essence is the payment of a commission for the reference of work. The practice has been most common among lawyers and medical men, but has also prevailed to some extent in other fields, such as the dental and engineering professions. Fee splitting is to be found even among clergymen in the form of the "marrying parson" who pays a commission to marriage license officials or taxicab drivers who send or bring to him couples desiring to be married.

Fee splitting within the professions is of relatively recent origin. In the main the practise has followed the development of professional specialization. The fact, for instance, that dentists do not split fees as frequently as do physicians is not because of their moral superiority but because occasions to refer dental cases are rarer. A great deal of fee splitting also arises from the frequent dependence of professional men upon equipment or supply houses or other agencies of technological assistance. Opticians, druggists, laboratories, sanitaria and appliance manufacturers frequently make it profitable to physicians to send them business. Engineers split with contractors. The growth of fee splitting gives some indication of the extent to which the professions have adopted business methods and become pecuniarily minded, for in business the giving of commissions has been of long standing.

Fee splitting has become very prevalent in the loosely organized and theoretically unspecialized American bar. The division of fees—usually two thirds to the receiver and one third to the forwarder or referrer—is an accepted practise. If one law firm refers a client who wishes counsel relative to income tax matters to another law firm which specializes in this work, the latter usually sends the former one third of the fee. A lawyer in one state often sends a collection case to a lawyer in another state and frequently receives a portion of the fee. The division of the fee in this instance is even more common than in the former.

Fee splitting, except in so far as the division was based upon a sharing of professional responsibility or of legal services, has often been con-

demned by the American bar. The practise has been dubbed unethical because it was thought to savor of champerty (i.e. the purchase of litigation) and because it seemed to be a method whereby less competent lawyers might obtain practise despite their lack of qualifications. Within recent years, however, the bar's condemnation has generally faded into mild disapproval, and the practise does not now present a contentious issue. At the present time it is only the splitting of fees with laymen that is strongly denounced by bar associations. Fee splitting of this type commonly occurs when a collection agency refers a case to a lawyer. Under these conditions the lawyer who splits his fee is not only paying for business but is in effect employing the agency to solicit business for him, when by the canons of legal ethics he is not permitted to do so for himself. The division of fees with laymen has occasionally led to intolerable abuses, as in ambulance chasing. Fee splitting of this type has been held illegal in various states under the general powers of the courts to disbar for professional misconduct. In addition many states have passed penal legislation specifically aimed at the practise.

Fee splitting among physicians is of relatively recent origin; it was infrequent before the twentieth century. The practise is prevalent in France, Germany and some other European countries; in Paris it is said to be almost universal. The exact extent to which it prevails in the United States is not known; very rare in certain sections, it is very common in other sections, as was shown by an extensive investigation made by the Judicial Council of the American Medical Association in 1913. To the question whether fee splitting was justifiable 77.3 percent of those answering the council's questionnaire replied in the negative, 13.4 percent in the affirmative and 9.3 percent were doubtful. It is everywhere conceded that since then the practise has increased.

The most frequent type of fee splitting in medicine is the division of the surgeon's fee for an operation with the practitioner who referred the case. Since this violates the ethical code of the profession and is in some places illegal, it usually takes place underhandedly, and care is exercised to see that no evidence of the transaction exists. Occasionally subterfuges are employed; for example, a surgeon will ask the referring practitioner to act as his assistant during the operation. Important economic factors seem to make fee splitting of this kind almost inevitable under present conditions. The general

practitioner with a patient requiring an appendectomy controls a piece of business worth several hundred dollars. With surgeons competing for work there is every temptation for the one to exact and the other to offer a commission. Another factor is the relative overvaluation of specialists' services; a general practitioner may receive five, ten or twenty dollars for diagnosing a case of appendicitis, while the surgeon will receive a fee ten or twenty times as large for a relatively simple and mechanical operation. Fee splitting undoubtedly tends to encourage the performance of unnecessary operations and increases the number of unnecessary consultations, laboratory tests and other medical services. One of its worst features is the inducement to auction off the patient to the highest bidder, who may be the most poorly qualified, a course of action which violates the trust which a patient puts in his physician. Because of the lack of legal control over the specialties and the absence of satisfactory postgraduate facilities, many incompetent, unqualified specialists are now in practise, and these men gain work through fee splitting which they would not be able to obtain under other conditions. Undoubtedly fee splitting tends to increase the cost of medical service to the public.

The question of fee splitting engenders much emotional heat among physicians. Specialists who refuse to divide fees and see inferior men waxing fat by so doing are not able to view the matter with Olympian detachment. Similarly, the general practitioner who again and again has refused a handsome bonus has definite views about the odiousness of the practise. The present situation makes for hypocrisy and demoralization. Few men will admit publicly that they split fees, yet many of those who in the meetings of their societies rant most furiously against the evil split fees in private. Certainly few men have been expelled from medical associations for fee splitting.

In view of the failure of attempts to stop fee splitting it has been proposed that the best way to resolve present difficulties is to legitimize the practise and to standardize the division of the fees. This would undoubtedly clear the atmosphere and would reduce and perhaps stop the tendency to send work to poorly qualified or incompetent men simply because they offer a split or a higher split, but it would still leave untouched such objections as that the practise increases the cost of medical service and encourages unnecessary surgery. Group medical

practise and the socialization of medicine have also been advanced as solutions of the problem.

Legislation to prohibit fee splitting in medical practise has been passed in twelve states: Iowa, Kansas, Kentucky, Michigan, Minnesota, South Dakota, Tennessee, Virginia, West Virginia, Wisconsin and Washington. The statutes of Virginia and Wisconsin prohibit fee splitting "between physicians and surgeons," so that presumably they would not apply to splitting with laymen. The South Dakota statute only makes the "giving" of the part of the fee unlawful. Six of the statutes, those of Iowa, Kansas, Kentucky, Nebraska, Tennessee and West Virginia, make the fee splitting unlawful only when done without either the knowledge or consent of the patient. Revocation of license is provided in all states but in some it is compulsory only after the second conviction.

Louis S. Reed

See: Professional Ethics; Professions; Specialization; Legal Profession; Medicine.

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FEIJÓO Y MONTENEGRO, BENITO JE-RÓNIMO (1676 -1764), Spanish scholar. Feijóo became a member of the Benedictine order at an early age and spent most of his life as a teacher at the University of Oviedo. He achieved fame as a prolific writer on the most diverse subjects and in spite of his obvious defects and superficiality possessed an erudition difficult to surpass. A representative figure of his period, Feijóo devoted his critical faculties to fighting vigorously against the prevailing ignorance and superstition and against national and social prejudices. He introduced to his countrymen the rationalist ideas of the eighteenth century and strove to bring Spain into the contemporary cultural movement which had begun in France. He was frequently attacked by the traditionalists, who accused him of being dominated by foreign ideas and reproached him particularly for his Gallicisms. He was supported, however, by King Ferdinand VI.

His series of essays entitled Teatro critico uni versal (9 vols., Madrid 1726-41; new ed. 1781;

selective ed. by A. Millares Carlo, 3 vols., 1923-25) and Cartas eruditas (5 vols., Madrid 1742-60; new ed. 1781; selective ed. by A. Millares Carlo, 1 vol., 1928) deal with mathematics, the various sciences, philosophy, theology, history, literature and aesthetics. Feijóo's rationalism was limited by his religious convictions, which often prevented him from carrying his ideas to their logical conclusion in his critical works. In his philosophy he was greatly influenced by the doctrines of Bacon and Newton and especially by those of Vives, whose educational ideas inspired him to advocate a number of educational reforms. Through his writings he was instrumental in awakening the interest of the Spanish people in scientific study and in the inductive method in teaching.

José Ots y Capdequi

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FELLENBERG, PHILLIP EMANUEL VON (1771-1844), Swiss educator. Fellenberg was the son of a successful jurist of noble family. After a short political career, during which he tried to rally the peasantry against invading French revolutionary forces, he turned to educational work. He planned to create an educational republic, a closely coordinated combination of educational institutions which would be a model for a complete national or even universal educational system. This was to include schools for boys and girls of various ages and all classes, with their focal point in a model farm on his estate, Hofwyl, near Berne. The grouping of institutions was to develop a common national and international consciousness through early interclass contact, and each class was to be trained for useful pursuits by productive labor at school. A charity agricultural school was established in 1804; Pestalozzi was for a short time associated with it, and from 1810 to 1833 it was directed by J. J. Wehrli. Another charity school trained handicraftsmen. There were also a vocational school for the urban bourgeoisie and a literary and scientific school for upper class children, which was for a while combined with a higher agricultural institute. Normal courses to train public school teachers in his methods

were organized but failed because of government opposition to private enterprise of such nature. A follower of physiocratic theories, Fellenberg regarded farming as the center of economy and education; he introduced to English four and eight-field system, organized agricultural exhibitions and improved farm implements.

Fellenberg was not an original thinker. He was the product of such influences as Rousseau's *Emile*, Gregoire's Paris lectures on education, Kantian philosophy, Pestalozzi's educational methods, which he did not quite grasp, Rochow's attempts to link education with agriculture, Thaer's agricultural writings, but above all of his parents' humanitarian cosmopolitanism. He was typical of the Enlightenment with its hope for a rebirth of humanity through the systematic education of a new species of man. Being a forceful personality and a brilliant organizer, he was able to build up his institutions with the aid of skilled teachers, but after his death his work fell to pieces. Nevertheless, he had international influence. Children of wealthy families from all countries came to Hofwyl, and his system of combined farm work and education was copied widely in both Europe and America.

ROBERT REIGBERT

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FELLOW SERVANT DOCTRINE. See Employers' Liability.

FELS, JOSEPH (1853–1914), single taxer. Fels was a successful Philadelphia soap manufacturer who devoted his later years to land reform. Beginning near home with vacant lot gardening he went on in England to costly experiments in farm colonies for unemployed and small holdings for men of small capital. Finding that every improvement in his own men's holdings drove up the price of adjacent land and made further expansion more costly, he concentrated his efforts upon what he had long believed in theoretically, the taxation of unimproved land values.

In 1905 Fels proclaimed himself a follower of

Henry George. "The great God-denying crime of society," he wrote, "is [that] men are permitted to put into their pockets ... the community-made values of land." Increasingly he spoke, wrote, traveled, lobbied and interviewed for the single tax. In 1909 he established a foundation for single tax propaganda in America, the Joseph Fels Fund Commission, and he gave generously to the movement in other countries. Fels' immediate aim, to put the single tax into effect somewhere as an object lesson, failed, but his efforts transformed the movement for a time from a relatively academic to an active one.

Fels was also an active supporter of the Jewish Territorial Organization, hoping to test his economic theories in the Jewish pioneer colony which it planned to establish.

DOROTHY W. DOUGLAS

Consult: Fels, Mary, Joseph Fels: His Life-Work (New York 1916); Zangwill, Israel, "Joseph Fels" in Fortnightly Review, vol. cxiii (1920) 918-29.

FÉNELON, FRANÇOIS DE SALIGNAC DE LA MOTHE (1651-1715), French prelate, author of numerous political, pedagogical and theological works. A member of an old and noble family of Quercy, Fénelon took orders immediately upon leaving Saint-Sulpice in 1675 and in 1689 was appointed tutor to the duke of Burgundy, grandson of Louis xiv. The high position which he thereafter enjoyed at the French court was, however, forfeited as a result of his support of Madame Guyon's mystical religious doctrines, known as quietism, and of his impassioned controversy with Bossuet on the subject. In 1697, two years before the papal court formally condemned his position, he was ordered by Louis XIV to retire to the diocese of Cambrai, of which he had been appointed bishop in 1694. There he remained in virtual exile for the rest of his life. But the ascendant influence which he had exercised over his pupil persisted; and in the hope that Burgundy would some day occupy the throne he continued to work out what he conceived to be the principles of just government. His plans were forestalled by the death of the duke in 1712.

Fénelon's influence upon subsequent French thought was tremendous. The philosophes of the eighteenth century saw in him a precursor of their own political ideas. In taking such a view they credited him with a religious tolerance which he hardly possessed and ignored the reactionary framework upon which his ideas were hung. No less than Bossuet he subscribed to the

divine right of kings. Moreover, being a great admirer of antiquity, particularly of the Greeks, and a man whose political, ethical and aesthetic notions were intimately interwoven, he was haunted by the idea of a return to the simple forms of primitive life, to the world of *Télémaque*. The point at which he coalesced with the philosophes lay in his antipathy to the system of Louis XIV and in the practical policies which he advocated as a reaction from that system. Besides Télémaque, the famous pedagogical novel which he wrote for the purpose of instructing the duke of Burgundy in the ethics of governing, his political ideas are contained principally in Tables de Chaulnes, which represents a summary of his conversations with the duke of Chevreuse in 1711, Dialogues des morts, L'examen de conscience sur les devoirs de royauté and An Essay upon Civil Government, which is a report of his conversations with the Old Pretender committed to writing by the Scot Ramsay (London 1732). In these works he reveals himself to be an aristocrat by tradition and a friend of the humble by sentiment. The government he depicts is a monarchy sharing its powers with the nobility, loving peace no less than Louis XIV loved war, practising economy, solicitous for the public welfare, hostile not only to luxury but (once more in reaction from Louis XIV and Colbert) to industry. (For further elaboration of Fénelon's political views, see volume I, Introduction 1, RISE OF LIBERALISM, p. 117.)

In pedagogy Fénelon's theories represent a foreshadowing of Rousseau. They are most clearly presented in a pioneer treatise on female education, Traité de l'éducation des filles, which Fénelon wrote for the duchess of Beauvillier in 1681, several years before the foundation of Saint-Cyr. In the age of the précieuses ridicules on the one hand and of the utterly uninstructed woman on the other Fénelon presented the idea that women should be educated for the role they are to play in the family and in society. Their education should therefore be pleasurable, concrete and aesthetic; Fénclon assigned an important place to drawing and object lessons. He insisted that education should develop rather than repress nature. No less characteristic than his emphasis upon nature was his conviction that education must be subordinated to a lofty Christian ideal. It was this last principle especially which was his guide throughout his tutorship.

Féncion's religious doctrines, centering about the idea that effusions of pure love for the divinity

rather than solicitude for personal salvation constitute the essence of faith, were submerged in the immediately succeeding generations by an official Catholicism which echoed the voice of Bossuet and by the prevalent antireligious sentiment. Nevertheless, despite a certain lack of clarity in his doctrines the vitality which they have retained has been largely responsible for the persistence of the mystical current in French thought. The religious renaissance under Rousseau and Chateaubriand had indeed been silently prepared by the condemned quietism of Fénelon. In estimating the extent to which Fénelon anticipated later thought or movements his views on history must not be overlooked. The Lettre à l'Académie Française, which he designed chiefly as a vehicle for his aesthetic ideas, develops the theory that the materials of history are to be found in social and political institutions, in customs and in manners. At once positive, philosophic and dramatic, his conception recalls Michelet.

RENÉ HUBERT

Works: Télémaque, first published as Suite du quatrième livre de "l'Odyssée" d'Homèrc, ou les aventures de Télémaque, fils d'Ulysse (Paris 1609, rev. ed. 1911), tr. by John Hawkesworth, 2 vols. (Paris 1836); Tables de Chaulnes, first published as Lettres inédites à la duchesse de Chevreuse et au duc de Chevreuse . . . (Paris 1904?); Dialogues des morts, first published as Dialogues divers entre les cardinaux Richelieu et Mazarin et autres (Cologne 1700, new ed. Paris 1883), English translation, 2 vols. (London 1776); L'examen de conscience . . . , first published as Directions pour la conscience des rois et princes souverains (The Hague 1747, new ed. Paris 1888), tr. as Proper Heads of Self-Examination for a King (London 1747); Education des filles (Paris 1687, 8th ed. 1902), tr. by G. Hickes (3rd ed. London 1713); Lettre à l'Académie, first published as Réflexions sur...les travaux de l'Académie française (Paris 1716, new ed. 1899), tr. by W. Stevenson as Dialogues on Eloquence . . . with His Letter . . . (new ed. London 1808). The most recent edition of Fénelon's complete works is Oeuvres complètes, 10 vols. (Paris 1848-52); a selection of his political writings has been edited by Charles Urbain (Paris 1920).

Consult: Janet, P. A. R., Fénelon (Paris 1892), tr. by V. Leuliette (London 1914); Delplanque, Albert, La pensée de Fénelon (Paris 1930), and Fénelon et ses amis (Paris 1910); Crouslé, Léon, Fénelon et Bossuet, 2 vols. (Paris 1894-95); Chérel, Albert, Fénelon au XVIIIe siècle en France (1715-1820), son prestige, son influence (Paris 1917); Tréca, Les doctrines et les réformes de droit public en réaction contre l'absolutisme de Louis XIV (Paris 1909); Gidel, Gilbert, La politique de Fénelon (Paris 1906); Sée, Henri, "Les idées politiques de Fénelon" in Revue d'histoire moderne et contemporaine, vol. i (1899-1900) 545-65; Lemaître, Jules, Fénelon (Paris 1910); Jones, R. A., in Social and Political Ideas of Some Great French Thinkers of the

Age of Reason, ed. by F. J. C. Hearnshaw (London 1930) p. 70–103; Lote, René, "De Fénelon à Rousseau ou les origines du rêve humanitaire" in Revue hebdomadaire, Année xxvii, vol. vii (1918) 60–97.

FENIANS. See IRISH PROBLEM.

FÉNYES, ELEK (ALEXIS) CSOKAJI (1807-76), Hungarian statistician and geographer. Fényes' work not only served as the foundation for subsequent statistical, economic and geographic studies of Hungary but was a unique contribution to the cause of Hungarian nationalism both prior to and after the struggle of 1848. Because of the fact that Hungary's fiscal, economic, educational and military affairs were directed from Vienna by the imperial Austrian government Hungarian national leaders lacked the information necessary for the achievement of their ideals of independence and for social and economic reform. This Fényes supplied in his many descriptive and statistical works on the economic and social resources of Hungary. Beginning with the only source available, the figures for 1830 for those counties which for centuries had enjoyed local autonomy, Fényes with great resourcefulness turned for valuable supplementary material to the communal registers of the Roman Catholic dioceses. He was able to show how imperfect were any conclusions as to national origins drawn on the basis of religious affiliations and he compiled probably the first occupational and industrial statistics available.

His first work, published in six volumes from 1836 to 1840, received the recognition of the Hungarian Academy of Sciences, and upon the formation of the Hungarian ministry of 1848-40 he was entrusted with the task of organizing a central statistical bureau. The defeat of the revolution forced him to retire from public life, and although barred thereafter from new sources he used his original data for several additional studies, showing among other things the defects of official Austrian statistics. His geographical dictionary, published in four volumes in 1851, remained for decades the most complete of its type.

In both structure and content Fényes' works reflect the influence of the Achenwall school, with its emphasis on all inclusive descriptive material to be used as the basis for the formulation of national policy. Nevertheless, he stressed the development of statistics as a separate science.

ALEXANDER KRISZTICS

Consult: Keleti, Károly, Fényes Elek emlékezete (Budapest 1878), containing complete bibliography of Fén-

yes' works; Kovács, Aloyse, "Activité statistique d'Alexis Fényes, Magyar statisztikai Társaság" in Société Hongroise de Statistique, *Revue*, vol. ii (1924) 57-69.

FERDINAND V and ISABELLA, Spanish rulers. The marriage of Isabella of Castile (1451-1504) and Ferdinand of Aragon (1452-1516) took place in 1469. Five years later Isabella succeeded to the throne of Castile and in 1479 her husband became king of Aragon. The existence of a personal union between the sovereigns, however, did not bring with it the political unification of their states. Castile as well as Aragon maintained its independent organs of government, and the subjects of each kingdom regarded those of the other as foreigners. This attitude persisted even in regard to the newly discovered American territories, which were politically united with the crown of Castile. After Isabella's death in 1504 the separation between the two states became even more patent, although from 1507 until he died Ferdinand was regent of Castile. The dynastic union was accordingly not consolidated until the reign of Charles 1, the grandson and successor of Isabella and Ferdinand; even then the internal political organization as well as the intellectual life of the two states remained distinct.

Despite the lack of union between the two kingdoms, however, the marriage of Ferdinand and Isabella created important political changes. It formed the solid basis for a new type of state which permitted the king to realize his imperialistic ambitions. These found their legal backing in the doctrines derived from the Roman law, which at that time carried great weight throughout civilized Europe. Spain was thus the first country in Europe to evolve into a national state, and it soon developed from a poor and backward mediaeval country into the leading European power.

In Spanish history the rule of Ferdinand and Isabella represents the transition from the Middle Ages to the modern period. The sovereigns found themselves with a powerful instrument of government and they employed it to its full advantage. The keynote of their rule was the establishment of royal authority. This they effected by pacifying the country, by subduing the nobility and reducing their power and by various administrative reforms. Absolutism became firmly entrenched. Municipal autonomy, already on the decline in the late Middle Ages, was virtually destroyed. The Cortes was rarely convened and when it sat was definitely under

royal domination. A thoroughly centralized government was organized, resulting in an excessively bureaucratic system at the head of which were the supreme councils and the secretaries; the latter and the councilors were generally educated men of the middle class. The economic policy which was introduced was strongly protective and favored commerce, industry and cattle raising rather than agriculture.

The initiation of a policy of religious intolerance brought about the expulsion of the Jews in 1492 and of the Moors in 1502, while the converts suspected of heresy were persecuted by the Inquisition. The international authority of the pope was respected in the matter of the line of demarcation separating the Spanish and Portuguese possessions. Within Spain, however, the prerogatives of the crown were strictly upheld against the claims of the church.

Royal policy was favorable to the contemporary intellectual renaissance, which was distinguished particularly by the cultivation of humanism. During Ferdinand's reign Jiménez de Cisneros founded the University of Alcalá de Henares.

In their foreign policy Ferdinand and Isabella successfully followed the traditional anti-French policy of Castile and Aragon. Aragon strengthened her hegemony over the Mediterranean by defeating the French in Italy. Granada was taken by Castile in 1491. The plan of the sovereigns to unite the Spanish peninsula through the marriages of their children failed, however. Portugal maintained its independence, and Ferdinand did not succeed in conquering Navarre until the end of his reign. During the reign new enterprises were undertaken of a scope hitherto undreamed of; such was the discovery and colonization of America. The sovereignty of Castile was firmly established in the Canary Islands and the north African cities were forced to accept Spanish dominion.

All the virtues as well as the defects of modern Spain existed in embryonic form in the reign of the two monarchs.

José Ots y Capdequi

Consult: Prescott, W. H., History of the Reign of Ferdinand and Isabella, 3 vols. (rev. ed. Philadelphia 1873); Mariéjol, J. H., L'Espagne sous Ferdinand et Isabelle (Paris 1892); Ballesteros y Beretta, A., Historia de España y su influencia, vols. i-vi (Barcelona 1918-29) vol. iii, ch. v; Altamira y Crevea, R., Historia de España y de la civilización española, 5 vols. (Barcelona 1900-30), abridged translation by P. Volkov, 1 vol. (London 1930) ch. vii; Desdevises du Dezart, G., "La politique de Ferdinand-le-catholique" in Revue

hispanique, vol. lvi (1922) 285-344; Plunket, I. L., Isabel of Castil and the Making of the Spanish Nation (New York 1914); Hume, M. A. S., Queens of Old Spain (London 1906) bk. i. A full bibliography may be found in Sánchez Alonso, B., Fuentes de la historia española e hispano-americana (2nd ed. Madrid 1927) vol. i, p. 179-90.

FERGUSON, ADAM (1723-1816), Scottish social philosopher. At the University of Edinburgh Ferguson occupied the chair of natural philosophy from 1759 to 1764 and that of pneumatics and moral philosophy from 1764 to 1785. His ability as a lecturer and his forceful and well organized restatement of certain recently formulated points of view gave him an outstanding position among the distinguished Edinburgh group, which included Hume, Smith, Robertson and Stewart. His writings although falling far short of an original, fully rounded system led Gumplowicz to regard him as the first sociologist, the author of "the first natural history of human society." Ferguson's chief significance perhaps is due to the prominent part which he played in divorcing philosophy from the prevailing rationalistic a priori approach and in substituting the inductive, historical method. Recognizing subrational drives as the mainsprings of human action he portrayed societal evolution as the aggregate of countless unpredictable forces which could not be reduced to a philosophical system. His realistic mind, colored by Hume's skepticism and Montesquieu's sense of relativity, was impelled by an intensive if limited study of history and anthropology to repudiate the orthodox contract theory as well as the quietistic implications of the state of nature postulate. Passive enjoyment of individual rights promotes dissension, active achievement union. "Man is by nature a member of society"; his emotions are conditioned by the social environment in which his habits are formed. Self-realization in social activity; restless striving after perfection, which "consists . . . in being an excellent part of the system to which he belongs"; division of labor not only in industry but throughout the entire structure of society and the state; conflict in commerce and war—these are the forces, the active principles, which make of society an integrated organism and which help to relate the individual and the species in an intimate functional unity. This interrelation and unity Ferguson finds not only in a cross section of a given static society but also-with a sense of historical continuity akin to Burke's-between succeeding

generations and periods of history. To an examination of the evolutionary factors of continuity and of change he devotes his most penetrating analysis, careful always to avoid any suggestion of abstract progress as it had come to be apotheosized by so many of his contemporaries.

W. C. LEHMANN

Important works: An Essay on the History of Civil Society (Edinburgh 1767, 8th ed. Philadelphia 1819); Principles of Moral and Political Science, 2 vols. (Edinbugh 1792); The History of the Progress and Termination of the Roman Republic, 3 vols. (London 1783; new ed., 5 vols., Edinburgh 1813).

Consult: Lehmann, W. C., Adam Ferguson and the Beginnings of Modern Sociology, Columbia University, Studies in History, Economics and Public Law, no. 328 (New York 1930), bibliography p. 259-62; Huth, Hermann, "Soziale und individualistische Auffassung ... bei Adam Smith und Adam Ferguson" in Staatsund sozialwissenschaftliche Forschungen (Leipsic 1907) vol. cxxv.

FERNALD, WALTER ELMORE (1859-1924), American psychiatrist and educator. Fernald was for thirty-seven years superintendent of the Massachusetts State School for the Feebleminded. When he began his study of mental deficiency in 1887 little interest was shown in the subject by social workers and educators. Largely because of the influence of his statistical and interpretive studies legislation was enacted in Massachusetts and in other states establishing additional schools for the feebleminded and special provisions for the defective delinquent, making mandatory the establishment of special classes for the mentally defective in the public schools, requiring a census and registration of the feebleminded, establishing clinics for the examination of retarded school children, permitting parole of the feebleminded and initiating inquiries on the mental status of prisoners. Through his educational work Fernald showed that the feebleminded child may be educated to the point of social usefulness when the tasks given him are graded in accordance with his capacity. Fernald's efforts to develop a suitable curriculum led him to prepare the first program for the standardization of the teaching of manual labor according to the intellectual levels. Although he used the Goddard and Terman revisions of the Binet-Simon tests he was not convinced that psychological tests gave an accurate picture of the entire personality of the child. He maintained that for a satisfactory rating knowledge is required of the child's family history, personal and developmental history, psychological rating, school progress, his response to the school test, his practical knowledge, economic efficiency, social history and traits, moral reactions and general physical condition. His program for state control of mental deficiency comprised the identification, registration, education, supervision and segregation of mental defectives.

Frankwood E. Williams

Important works: Waverly Researches in the Pathology of the Feebleminded, ed. in collaboration with E. E. Southard and Annie E. Taft; "Thirty Years' Progress in the Care of the Feeble-Minded" in Journal of Psycho-Asthenics, vol. xxix (1923-24) 206-19; "The Feeble-Minded in the Community" in Social Aspects of Mental Hygiene (New Haven 1925) p. 109-24.

Consult: Massachusetts, Department of Mental Diseases, "Fernald Memorial Number," Bulletin, vol. xiv (1930) nos. i-ii; Wallace, George L., in Journal of Psycho-Asthenics, vol. xxx (1924-25) 16-23. See also articles in Mental Hygiene, vol. ix (1925) 157-61, and in Journal of Nervous and Mental Diseases, vol. lxi (1925) 219-22.

FERNÁNDEZ NAVARRETE, PEDRO, Spanish economist of the late sixteenth and the early seventeenth century. Fernández Navarrete was chaplain of the court of Philip III and an officer of the Inquisition. In Conservación de monarquias (Madrid 1626, 5th ed. 1805), his chief work, he amplified the remedies for economic decadence which Diego Corral y Arellano had formulated in 1618 at the request of the Council of Castile. To replenish the population, depleted by colonial emigration and the expulsion of religious dissenters, and to revive decadent agriculture and languishing industry he advocated internal freedom of the grain trade, the exemption of peasants' sales from legal maximum prices, rewards for marriage, the immigration of foreign Catholic artisans and technical schools for the instruction of orphans in navigation and mechanical trades. He opposed liberal education in rural districts, the extension of mortmain, the importation of foreign manufactures and the further expansion of the Spanish Empire. He also disapproved of high taxes, extravagance in government, luxury in the royal household, the congregation of courtiers in Madrid and the indiscriminate giving of alms.

As an economic theorist Fernández Navarrete has little claim to distinction beyond his anticipation of the later mercantilist differentiation between natural and artificial wealth. Although he recognized that the effect of specie imports upon prices obstructed the indefinite accumulation of treasure and specifically stated that national prosperity depended upon an abundance

of commodities, particularly agricultural, Fernández Navarrete shared the prevailing mercantilist prepossession in favor of gold and silver.

EARL J. HAMILTON

Consult: Colmeiro, Manuel, Biblioteca de economistar españoles de los siglos XVI, XVII y XVIII (new ed. Madrid 1880) p. 85; Rahola, F., Economistas españoles de los siglos XVI y XVII (Barcelona 1887) p. 48-50 "Advertencia sobre las obras del licenciado Pedro Fernández Navarrete" in Biblioteca de autores españoles, vol. xxv (Madrid 1866) p. xix-xxi.

FERNOW, BERNHARD EDUARD (1851-1923), American conservationist. Fernow was born and educated in Germany and served in the Prussian forest service. In 1876 he came to the United States, where about 1882 he assumed the leadership of the incipient forestry movement. From 1886 to 1898 he was chief of the Division of Forestry in the United States Department of Agriculture. Subsequently he was occupied with the introduction of technical forestry education into the United States and Canada and with its administration. His educational and propagandistic activities and especially his direction of the scientific work of the United States forest service in the interests of timber users won the support for conservation which permitted its elaboration into a political movement by Pinchot and Roosevelt. Fernow led the forestry movement away from the sentimentalism which failed to understand the historical and utilitarian factors leading to the destructive work of the pioneer and which advocated the legal prohibition of the cutting of timber; he urged that concrete measures be undertaken to guarantee a sustained supply of specifically useful woods to meet the increasing demand which he anticipated. Restriction of the private operator he held to be impractical because of unrestrained competition, inadequate fire protection, ignorance of technical matters and American tradition, and he regarded the subsidizing of private enterprise as a demonstrated failure. He believed that the large amount of capital required and the necessarily long delay in return made the practise of forestry suitable only to large corporations and to governments and that government activity should be largely fire protection, education and exemplary administration of its own timberlands. He is chiefly responsible for the basic forestry legislation of the United States, enacted in 1891 and 1897, which provided for the creation of forest reservations out of lands in the public domain, for their protection and administration and for the regulated

sale of timber. Directly or indirectly he influenced much forestry legislation of the American states and of the Canadian dominion and provinces.

Max Levin

Important works: Economics of Forestry (New York 1902); A Brief History of Forestry (New Haven 1907, 3rd ed. Toronto 1913).

Consult: Roth, Filibert, "Great Teacher of Forestry Retires" in American Forestry, vol. xxvi (1920) 209–12, and articles on Fernow by F. Roth and others in Journal of Forestry, vol. xxi (1923) 305–48, with bibliography; Cameron, Jenks, The Development of Governmental Forest Control in the United States (Baltimore 1928) p. 196–214.

FERRARA, FRANCESCO (1810–1900), Italian economist. Ferrara was director of the Direzione Centrale della Statistica de Sicilia and founder of Giornale di statistica. He was a political prisoner in 1848 and later collaborated in Cavour's Risorgimento. He was also chief editor of the Biblioteca dell'economista (ser. i-ii, 1850-68) and professor of economics at the University of Turin, member of Parliament, minister of finance and senator in the United Kingdom of Italy and director of the Scuola Superiore di Commercio in Venice. His theories are closely related to those of his contemporaries Carey and Bastiat. Like Jevons later on Ferrara stressed the anti-Ricardian note, but his theory while more abstract than that of the English classical school is not inconsistent with it. He recognized utility along with reproduction cost as a determinant of value, reduced all concrete economic phenomena to value problems and emphasized the unity of the economic system. Pareto said of him: "Had he but given a mathematical form to his reasonings, he would have achieved the exactness of the theories that have as their basis the consideration of ophelimity" (Cours d'économie politique, 2 vols., Lausanne 1806-07, vol. ii, p. 101). Ferrara's views had a wide vogue in Italy and have recently begun to exert an international influence through the writings of Pantalconi, Pareto and their followers. Ferrara's prefaces to the issues of the Biblioteca dell'economista have been incompletely collected as Esame storico-critico di economisti e dottrine economiche del secolo XVIII e prima metà del x1x (4 vols., Rome 1889-90).

GUSTAVO DEL VECCHIO

Consult: Bertolini, Angelo, "La vita e il pensiero di Francesco Ferrara" in Giornale degli economisti, 2nd ser., vol. x (1895) 1-58, with bibliography; Martello, Tullio, "Commemorazione di Francesco Ferrara" in

Giornale degli economisti, 2nd ser., vol. xxii (1901) 323-54; Battistella, Carlo, Francesco Ferrara nella scienza e nella politica economica (Rome 1924); Bousquet, G. H., "Un grand économiste italien, Francesco Ferrara" in Revue d'histoire économique et sociale, vol. xiv (1926) 344-77; Stefani, Alberto de, Gli scritti monetari di Francesco Ferrara e di Ang. Messedaglia (Verona 1908); Vecchio, Gustavo del, "Ritorni alla teoria ferrariana del credito" in Economia politica contemporanea, vol. i (Padua 1930) p. 239-50; Prato, Giuseppe, "Francesco Ferrara a Torino" in Reale Accademia delle Scienze di Torino, Memorie, 2nd ser., vol. lxvi (1926) pt. ii, no. 2.

FERRARI, GIUSEPPE (1812-76), Italian social philosopher. Ferrari's doctrines evolved under the influence of Romagnosi's teaching, of the study of Vico and of the friendship which he formed with Proudhon during his voluntary exile in France from 1837 to 1859. An uncompromising skeptic in metaphysics, Ferrari followed Romagnosi in developing phenomenalism. For him as for Romagnosi the intellect could serve effectively only sociological and historical problems; that is, the problems of man in action. All of Ferrari's works were at once doctrinal and controversial from his early studies on Romagnosi (1835) and on Vico (1837) through the minor writings on revolutions and reforms to the more important volumes beginning with Filosofia della rivoluzione (2 vols., London 1851; 2nd ed. Milan 1873). In the Filosofia, which contains the most complete exposition of his philosophical system, he showed that while metaphysics is no more than a succession of antinomies, the life which dominates these contradictions and the necessity of liberty and equality are affirmed independently of logic as natural revelations. But it is only by struggle that these can be carried over into law. Struggle will resolve the conflict between liberty, which begets property, and equality, which presupposes communism, by giving birth to the agrarian law. Struggle will free Italy from the power of the Catholic church; it will realize the acme of attainable political liberty by uniting the Italian people into a republican federation. Ferrari's federalistic ideal of unification was set forth at length in La federazione repubblicana (London 1851). In part a reflection of Proudhonism and in part the result of his admiration for the constitution and religious freedom of the United States, it was also, as he thought, a deduction from the teaching of all history, both Italian and foreign. On the eve of the uprising of 1859 Ferrari reiterated in his Histoire des révolutions d'Italie (4 vols., Paris 1858; tr. into Italian, 3 vols., Milan 1870-73) the idea that revolution is rinascita and not distruzione. After returning to Italy in 1859 for the immediate purpose of combating Cavour's conception of unification Ferrari became increasingly absorbed in the philosophy of history. The deterministic view expressed in Histoire de la raison de l'état (Paris 1860) was systematically expounded in Teoria dei periodi politici (Milan 1874). Here he sought to demonstrate that successive principles have been at work in history, each surviving for a "century" of one hundred twenty-five years and passing through four phases: preparation, efflorescence, reaction and dissolution. In a series of lectures delivered at the R. Istituto Lombardo di Scienza e Lettere in 1874-75 (published in the Rendiconti of the Istituto, 2nd ser., vol. viii, 1875, and vol. ix, 1876) he stated the principles of an "arithmetic of history." This mechanization of history was the weakest part of his work, as his theory of revolution when considered in its bearing upon the Risorgimento was the most significant.

Rodolfo Mondolfo

Other works: Corso sugli scrittori politici italiani (Milan 1862); L'Italia dopo il colpo di stato del 2 dicembre 1851 (Capolago 1852); La Chine et l'Europe (Paris 1867, 2nd ed. 1868).

Consult: Mazzoleni, A., Giuseppe Ferrari (Milan 1877); Nicoli, P. F. G., La mente di Giuseppe Ferrari (Pavia 1902); Gentile, G., Le origini della filosofia contemporanea in Italia, vols. ii-iii² (Messina 1917-23) vol. i, p. 11-43; Ferri, L., Essai sur l'Instorte de la philosophie en Italie au dix-neuvième siècle, 2 vols. (Paris 1869) vol. ii, p. 229 49; Croce, B., Storia della storiografia italiana nel secolo decimonono, 2 vols. (Bari 1921) vol. ii, p. 115-20.

FERRARIS, CARLO FRANCESCO (1850-1924), Italian statistician, economist and jurist. He was graduated from the University of Turin and completed his studies in economics in Germany and England. From Germany he introduced into Italy the science of social administration and in 1878 he occupied the first chair of this discipline in Italy at the University of Pavia. In 1885 he went to the University of Padua, where he first taught statistics and later until his death administrative law. He was a member of the Chamber of Deputies and in 1905 became minister, in which capacity he made preparations for the transfer of Italian railways from private to state operation. Later Ferraris became a member of the Senate, where he was highly regarded for his competence in financial matters.

His scientific works are in statistics, econom-

ics and law. He was the first to apply the statistical method to economic problems in Italy. His economic works combine deductive and statistical methods and deal principally with monetary problems. His works on bimetallism, the Latin Union, the production of precious metals and the premium on gold are of great value. His work on the war indemnity levied upon France by Germany in 1871 exhibits an excellent use of the inductive method as applied to the study of the effects of international transfer of capital on the balance of payments and the rate of exchange of the countries concerned. In a controversy with Professor Loria he wrote a scholarly volume on historical materialism, in which with the aid of numerous historical facts he attacked the materialistic interpretation of history. Jurists appreciate the value of his studies on administrative law, principal among which are L'amministrazione locale in Italia (2 vols., Padua 1920) and the Diritto amministrativo (Padua 1922-23). Although his doctrines may have been somewhat superseded, his works are still of importance because they furnish a complete picture of the Italian administrative organization immediately preceding the Fascist revolution.

MARCO FANNO

Chief works: La rappresentanza delle minoranze nel parlamento (Turin 1870); Moneta e corso forzoso (Milan 1870); Saggi di economia, statistica e scienza dell'amministrazione (Turin 1880); Principii di scienza bancaria (Milan 1892); Il materialismo storico e lo stato (Palermo 1897, 2nd ed. 1897).

Consult: Gini, Corrado, "Commemorazione del Prof. Ferraris" in R. Istituto Veneto di Scienze, Lettere ed Arti, Atti, vol. lxxxiv, pt. i (1924-25) 41-61.

FERREIRA, SILVESTRE PINHEIRO. See Pinheiro Ferreira, Silvestre.

FERREIRA BORGES, JOSÉ (1786-1838), Portuguese economist and jurist. Ferreira Borges studied law at the University of Coimbra and was a practising attorney at Oporto from 1808 until 1820. Subsequently he held several state offices, but in 1823 he was forced to emigrate because of his activities in the constitutionalist movement. He lived in London until 1827 and again from 1828 to 1833. Upon his return to Portugal in 1833 he was appointed chief judge of the Court of Commerce. He was the author of the Codigo commercial portugues of 1833, known as the Commercial Code of Ferreira Borges and which served as the commercial law of the country for almost fifty-six years.

Ferreira Borges was also a very learned and influential economist. His study of finance, entitled Principios de syntelologia (London 1831), was inspired by Parnell's writings and was the first systematic study of finance in Portugal. It was divided into two parts, of which the first dealt with the theory of taxation, direct and indirect taxes and other public revenues, public credit, public loans and the national budget; the second part discussed public expenditure. His Instituições de economia politica (Lisbon 1834), although not the first Portuguese compendium on the subject, was the best systematic work on economics published in Portugal at that time. The various sections dealt with the foundations and the utility of economics, the production, accumulation and distribution of wealth, and money, credit and consumption. The book reflected the ideas of Storch particularly, but also of Lauderdale, Malthus, Ricardo, John Stuart Mill, Bentham, Hennet, Say, Tracy and others. The Instituições gave a strong impetus to the study of economics in Portugal; two years after its publication a chair of economics was created at the University of Coimbra.

Moses Bensabat Amzalak

Chief works: Diccionario juridico commercial (Lisbon 1835, 2nd ed. Porto 1856); Instituições de direito cambial (London 1825, 2nd ed. 1844); Jurisprudencia do contracto-mercantil (London 1830); Synopsis juridica do contracto de cambio maritimo (London 1830); Das fontes especialidade e excellencia da administração commercial (Oporto 1835); Do banco de Lisboa (Lisbon 1827).

Consult: Laranjo, Frederico, in Instituto, vol. xxxii (1884) nos. v-vi; Francisco da Silva, Inocencio, in Archivo pittoresco, vol. ii (1859); Rebello da Silva, L. A., Varões ilustres das tres epocas constitucionaes (Lisbon 1870).

FERRI, ENRICO (1856-1929), Italian criminologist. Ferri was, with Cesare Lombroso and Rafael Garofalo, the originator of the positive school of criminology, which has caused penal law to take cognizance of the results of the biological and social sciences and has affirmed the necessity of first studying the person who commits crime and the medium in which he commits it and only afterwards studying juridically the crime committed. After his conversion to socialism he ascribed to economic factors directly, or indirectly through heredity, a decisive role in the genesis of the crime. He also called attention to the necessity of supplementing the Darwinian point of view, by which Lombroso and Garofalo justified the death penalty, by the Lamarckian, which emphasized

the possibility of readaptation to the environment and favored the application of correctives to the delinquent. He propounded the doctrine of penal substitutes, according to which the legislator should supplement the repression of crimes with attempts at their prevention. As professor of penal law in Rome and visiting professor in various European and South American universities, as author of La sociologia criminale and as editor of the review Scuola positiva Ferri exercised a commanding influence upon the criminology and legislation of Latin Europe and South America, in the latter continent particularly after his visit to Argentina, whose penal code compiled in 1921 attests his influence. He presided over the labors of a commission which drew up a plan for an Italian penal code in 1921 in which the positivist theories triumphed. Its most outstanding innovation was the rejection in principle of the definition and penalty relative to each of the judicial forms of crime (e.g. theft, homicide, rape), subordinating repression of crime to the determination of the categories of delinquents (instinctive, insane, emotional, occasional and habitual). The plan was abandoned when the Fascist reaction occurred.

In the field of general sociology Ferri associated Spencer's views with the historical materialism of Marx. In his book Socialismo e scienza positiva he endeavored to demonstrate the thesis that Marx complemented Darwin and Spencer and that the three men constituted the great scientific trinity of the nineteenth century.

In his political activity he worked with the Socialist party and was for a long time editor of the socialist daily *Avanti*. At the end of his life, old and infirm, he assented to Fascism.

C. Bernaldo de Quirós

Works: Ferri's principal works on criminology include: I nuovi orizzonti del diritto e della procedura penale (Turin 1881, 2nd ed. Bologna 1884), superseded by La sociologia criminale (Turin 1884; 5th ed. by A. Santoro, 2 vols., 1930), tr. from 2nd French ed. by J. I. Kelly and John Lisle (Boston 1917); L'omicidio, 2 vols. (Turin 1895, 2nd ed. 1925); L'omicidio-suicidio (Rome 1884, 5th ed. Turin 1925); I delinquenti nell' arte (Genoa 1896, 2nd ed. Turin 1926); Studi sulla criminalità (Turin 1901, 2nd ed. 1926); Difese penali studi di giurisprudenza penale (Turin 1899; 3rd ed., 3 vols., 1925); Principii di diritto criminale . . . in ordine al codice penale vigente, progetto 1921, progetto 1927 (Turin 1928), incorporating the Italian text of Progetto preliminare di codice penale italiano (official publication by Commissione Reale per la Reforma delle Leggi Penale with English, French and German versions, Milan 1921); Conferenze di Enrico Ferri nella repubblica Argentina, compiled by Folco Testena (Buenos Aires

Ferreira Borges — Ferry

1911). The last editions of works, with the exception of the *Conferenze*, represent a final revision prepared by the author.

Ferri's writings on socialism and politics include: Socialismo e scienza positiva (Rome 1894), tr. by R. R. La Monte (New York 1900); Mussolini, uomo di stato (Mantua 1927), tr. by A. Caporale (Philadelphia 1927); Il fascismo in Italia e l'opera di Benito Mussolim (Mantua 1927, 2nd ed. 1928).

Consult: Franchi, Bruno, Enrico Ferri (Turin 1908); Scritti in onore di Enrico Ferri (Turin 1929), articles in Scuola positiva, n.s., vol. ix (1929) pt. i; Bonger, W. A., Criminalité et conditions économiques (Amsterdam 1905), tr. by II. P. Horton (Boston 1916) p. 99-136; Collin, Fernand, Enrico Ferri et l'avant-projet de code pénal italien de 1921 (Brussels 1925); Colajanni, Napoleone, I partiti politici in Italia (Rome 1912).

FERRINI, CONTARDO (1859-1902), Italian jurist. Ferrini began his legal studies at Pavia and Snished them in Germany. He was the favorite pupil of Zachariae von Lingenthal, whose work he continued. Ferrini taught Roman law at Pavia, Messina and Modena, exemplifying always the historical method. The many briefer studies in various languages which Ferrini wrote during his short life have been collected by V. Arangio-Ruiz and E. Albertario (Opere, 5 vols., Milan 1929-30). These and his many longer works show Ferrini to be the least specialized of masters; he paid considerable attention even to modern law. In Roman law he was at times a dogmatic jurist, as in Diritto romano (Milan 1885, 2nd ed. 1898), Teoria generale dei legati e dei fedecommessi (Milan 1889) and Manuale di pandette (Milan 1900, 3rd ed. 1908), and at times a historian, as in Storia delle fonti del diritto romano e della giurisprudenza romana (Milan 1885). He also left a work on the Roman criminal law, Diretto penale romano (Milan 1809). Ferrini particularly distinguished himself in his original work on the law of the Byzantine period. He published *Il digesto* (Milan 1893), several articles on the sources of the Institutes of Justinian and some pre-Justinian Greek texts. Among his editions of texts are a new edition of the Paraphrase of the Institutes of Justinian, Institutionum graeca Paraphrasis Theophilo antecessori vulgo tributa (2 vols., Berlin 1884-97), published under the direction of Lingenthal; an edition of the Nomos georgikos (in Opere, vol. i, p. 375-95); a supplement to Heimbach's edition of the Basilica (Leipsic 1897); and the Tipucitus (bks. i-xii, Rome 1914); the last two were in collaboration with Mercati. Ferrini also translated Aristotle's celebrated work, La costituzione degli Ateniesi de Aristotele (Milan 1891, republished in Opere, vol. v, p.

253-394), and two Syriac manuscripts—he had learned Syriac expressly for this purpose—on the Leges saeculares (the MS. of Paris, in Opere, vol. i, p. 397-441; the MS. of London in Fontes iuris romani anteiustiniani, Florence 1909, pars altera, p. 637-75). Not satisfied with his eminence as a scholar, Ferrini was also an apostle of Christian charity, the "Ozanam of Italy," as he was called; and he has had the unique distinction among his peers of having his virtues proclaimed "heroic" by the Vatican on February 8, 1931, a preliminary honor to sainthood.

A bibliography of Ferrini's works is to be found in the *Opere* (vol. i, p. xi-xii).

PAUL COLLINET

Consult: Pellegrini, Carlo, La vita di Contardo Ferrini (Turin 1920); Vaussard, M., L'intelligence catholique dans l'Italie du xxe siècle (Paris 1921) ch. vii; Ryan, Mary, "Contatdo Ferrini, Scholar and Saint' in Studies, vol. xvii (1928) 369-83; Scialoja, Vittorio, Istituto di Diritto Romano, Bullettino, vol. xiv (1901) 294-319.

FERRY, JULES FRANÇOIS CAMILLE (1832-93), French statesman. Ferry was perhaps the most hated statesman of the Third Republic, but in recent years he has received increasing recognition as the founder of the French school system and the builder of the modern French empire. As minister of public instruction from 1870 to 1882 Ferry was able to carry through the great educational reforms which are still the basis of the French school system. Building upon the ideas of Condorcet and the experiments of the French Revolution and guided by positivist principles he aimed to establish the "moral unity" of France and to strengthen the foundation of the Republic by the introduction of free, compulsory, lay instruction in the primary grades. At the same time Ferry reorganized the Conseil Supérieur de l'Instruction Publique by eliminating the clerical element. The monopoly of granting university degrees and teachers' certificates was reserved to the state. Members of unauthorized religious orders were forbidden to teach and all such orders were dissolved. Provision was made for state secondary education for girls and for the establishment of normal schools. The primary school curriculum was broadened by the introduction of new subjects like civics, natural history, singing, drawing and manual training. Large appropriations made possible the rebuilding of the Sorbonne and provincial universities and the establishment of laboratories, libraries and research facilities. This anticlerical legislation was bitterly opposed by

the conservative parties and brought upon Ferry their lasting hostility. During his second ministry, from February, 1883, to March, 1885, Ferry took over the portfolio of foreign affairs and continued the work of colonial expansion which he had initiated with the occupation of Tunis in May, 1881. He was convinced that sources of raw materials and markets would become increasingly necessary because of the economic transformation of the world and went so far as to cooperate with Bismarck to circumvent the opposition of the English. It was due largely to his efforts that the French position was established in the Congo and on the Niger, in Madagascar and in Indo-China. But his policy was attacked with great bitterness by both the radicals and the conservatives. In March, 1885, on receipt of exaggerated news of French reverses in China he was overthrown by Clemenceau and his followers.

WILLIAM L. LANGER

Consult: Rambaud, A. N., Jules Ferry (Paris 1903); Billot, Albert, Jules Ferry (Paris 1904); Liard, Louis, and Fallières, C. A., "L'oeuvre de Jules Ferry dans l'enseignement supérieur et dans l'enseignement secondaire" in Revue internationale de l'enseignement, vol. liii (1907) 5-15; Lapie, R., "Jules Ferry as Educator" in Educational Administration and Supervision, vol. xi (1925) 125-33; Israel, Alexandre, L'école de la république; la grande oeuvre de Jules Ferry (Paris 1931); Roberts, S. H., History of French Colonial Policy (1870-1925), 2 vols. (London 1929) vol. i, p. 9-33, 260-66, and vol. ii, p. 426-29, 437-39; Wienefeld, R. H., Franco-German Relations, 1878-1885, Johns Hopkins University, Studies in Historical and Political Science, ser. xlvii, no. iv (Baltimore 1929) p. 73-78, 125-35, 143-53, 156-70.

FERTILITY RITES. Concern for the fertility of the human race and for the fruitfulness of the sources of food has supplied the motives for many traditional rituals and has given rise to ideas which have become embodied in religious systems. No sphere of human interest is less amenable to rational apprehension and control than generation, and accordingly the desire to control it tends in a larger measure than in other activities to rely on magico-religious means.

The economic interests of primitive humanity center round the multiplication of its food supply. The desire for progeny is beyond doubt largely influenced by cultural factors but is nevertheless prominent, more especially in the lower cultures. Upon the increase of the tribe depends its strength as a social unit, its power to compete against other groups. Numerical increase is therefore accounted equivalent to pros-

perity, diminution to decay. The stress laid by nationalistic and religious authorities upon increase and multiplication rests primarily upon the competitive advantage resulting from numerical strength. Social sentiment renders it therefore incumbent upon every member of the group to contribute toward its increase: fertility is a merit, sterility one of the deepest of reproaches. The latter is generally a ground of divorce and in lower cultures a motive of suicide. Where patriarchal individualism prevails, the transmission of frequent property and of social status to an heir is all important, and the desire to perpetuate the family is added to that of perpetuating the tribe. Magico-religious ideas confirm these social motives and values.

The food of hunting tribes is thought to be magically multiplied by ritual procedures, such as the *intichiuma* of the Australian aborigines and the buffalo dances of the Sioux. The assimilation of the participants in such rites to the animals over which they desire to exercise control suggests a connection with the conceptions of totemism. The procedures of sympathetic magic by which the multiplication of food animals is thought to be promoted commonly include the imitation of the sexual act and sometimes the practise of ritual promiscuity.

The fertility of the soil is likewise thought to call for the employment of magical means no less than for labor and skill to promote it. Thus, for instance, specimen seeds may be intensively cultivated in baskets or pots (Siouan basket gardens, "gardens of Adonis," "gardens of Osiris," Greek $\kappa \in \rho \gamma \alpha$). The lighting and tending of magical fires and the waving of torches over the fields are widespread features of agricultural magic. Magical herbs or the remains of animals -pigs, dogs, goats, serpents-are scattered or buried about the fields. Not infrequently human sacrifice was resorted to for this purpose, as in ancient Mexico, among the Pawnees, throughout west Africa, among the Bechuana and the Khonds of Bengal. In New Caledonia a young girl was buried up to the neck in the ground to promote the growth of sweet potatoes. Processions in which the images of the gods are carried form part of the rites of agrarian fertility in most advanced cultures. The various rites intended to produce rain constitute an essential part of agricultural magic.

Primitive cultivation, which is in the hands of the women, is held to be dependent for its success upon their magical skill and more particularly upon their fecundity. A prolific woman or

one who is actually pregnant is thought to be particularly suitable as a cultivator. Barrenness constitutes a disqualification. The fruitfulness of the earth is everywhere assimilated in the closest manner to human fertility. The fruit bearing soil is assimilated to the womb, the fecundating rain to seminal fluid, and the conjunction upon which fertility depends is represented by the sacred marriage of the supernatural powers, often enacted ritually by priest and priestess, in hierodulic prostitution or general promiscuity. The act of sexual intercourse is regarded as imparting fruitfulness to the soil and is sometimes indulged in for that purpose in the fields at the time of sowing, a custom illustrated in Greek myth and still observed by the peasantry in some districts of central Europe.

Sexual license is a prominent feature of the agricultural festivals of seed and harvest times. Thus among the Pipeles and the Musquaki Indians ritual coitus was timed so as to coincide with the planting of the seed. Among the Bantu, men and women who in ordinary circumstances are modest in behavior and speech are said to abandon themselves to licentiousness during these festivals. In India the harvest festival is the signal for general license, and such license is looked upon as a matter of necessity. The agrarian populations of southern Algeria resent any interference with the licentiousness of their women on the ground that such restrictions would be prejudicial to the success of their agricultural operations. The ritual promiscuity of primitive agrarian festivals is represented in more advanced cultures by the license of the festivals of Bubastis in Egypt and the ritual obscenity of the Greek Thesmophoria, the Roman Saturnalia, the Dionysian festivals, which have passed into the usages of southern and western Europe as the carnival festivities, May Day and midsummer feasts.

Human fecundity is in primitive and archaic thought also held to derive from the powers which govern the fertility of the sources of food. Apart from the possible ignorance of some of the most primitive peoples in regard to physiological processes, reproduction is commonly regarded as the effect of supernatural agencies. As the Christian avowedly believes that children are sent by God, so in lower cultures the part of the male in the reproductive process is held to be at most that of a vehicle of supernatural powers and fecundation is commonly believed to be possible by the direct action of those powers or through the medium of vehicles other than

the male. The same rituals which are employed to secure abundant harvests are accounted efficient in procuring offspring, and agricultural rites and festivals are regarded as equally effective in fulfilling both functions. Rain showers (as among Australian aborigines and the Hottentots), springs, rivers and holy wells are thought to promote or to be indispensable to the fertility of women. Conception is thought to be brought about or favored by the partaking of food, especially cereal and seed bearing fruit, whether especially consecrated or not, or the flesh of animals. Sacred spots where the spirits of the unborn are thought to dwell are believed in central Australia and among the Alfurs to cause the women who visit them to conceive, and crossroads where children are buried were among the Iroquois thought to have the same effect. Graves and shrines of saints exercise a similar influence. Girdles, leaves, especially those of the fig tree, amulets worn in the neighborhood of the genitals, serve originally the purpose of fertility charms, both positively by imparting fertility and protectively by warding off injurious in-

A large proportion of the rites commonly described as marriage ceremonies have reference to securing the fertility of the union rather than to its solemnization and consecration. Such are the rites in which food or drink is ceremoniously partaken of. The food may consist of game or fish procured by the bridegroom and presented to the bride, as among aboriginal Australians and the Eskimos. Coconuts, apples or eggs are sometimes employed with the same object. The bride is commonly pelted with flowers, cereals, dates, nuts, figs, sweetmeats. The newly married pair may stand on the hide of a bull or a ram or sit on mounds of earth, which sometimes are specially brought for the purpose from sacred spots, as in India. The invocations to the gods to bless the union frequently have reference to the promotion of its fertility as well as to making it binding.

Marriage is often preceded in the usages of primitive and ancient cultures by observances intended to bring about the union of the woman with the powers which are held to be the sources of fertility. This is sometimes effected directly by copulation with the image of the god. Thus in India girls were deflowered before marriage by means of the lingam, or phallus of stone, metal or ivory, representing the god Shiva. Roman brides had similarly to seat themselves on the lap of the phallic statue of the god Mutunus Tutunus. In China copper images of the gods

were rubbed against the abdomen of women as a cure for sterility. Survivals of the same practises were not uncommon in Europe during the Middle Ages with reference to statues of ithyphallic saints.

The so-called phallic character of many archaic deities and religious symbols follows from the function of divine powers as sources of generation, a function which corresponds in many respects to the more advanced theological conception of them as creators. Although magicoreligious obscenity is prevalent in lower cultures, phallic symbolism is a characteristic of rather more advanced cultural phases, such as those of India and Japan and the more developed African cultures. The indiscriminate interpretation of religious symbolism as phallic has often been applied uncritically.

The god is sometimes represented by a priest or other sacred personage who has intercourse with the bride before she passes to her husband, a custom which is very widespread and constitutes the so-called jus primae noctis. Medicine men and persons with a reputation for sanctity are eagerly sought out by women in the hope of offspring. The means of divine union may also be sought in prenuptial promiscuity, for it is considered that in such general freedom the gods are afforded the same opportunity as other males. Such prenuptial license may be limited to strangers, as in Tibet and some parts of southern India, Burma and the Philippines or, as in the Babylonian observance of the temple of Mylitta, to a single stranger to whom it is obligatory for every woman to yield herself once in her life. The unknown stranger is in popular tradition a common disguise of the god. The prenuptial prostitution of the bride is, in the usage known as the Nasamonian rite from the description by Herodotus of the custom among the Nasamonians of Lybia, confined to the male guests attending the wedding, who each possess her in turn before the bridegroom is allowed access to her. Vestiges of those usages appear to survive in the rights of the wedding guests to kiss the bride, to dance with her and sometimes to undress her. Such rites are sometimes represented by the custom of postponing the consummation of the marriage for three or more nights, during which the bride is supposed to be dedicated to the god, who is sometimes, as in India and ancient Mexico, represented by sacred emblems placed on the bridal couch by the priest. The usage was adopted by the Catholic church under the name of Tobias nights.

The sacred and solemn character which marriage has acquired as a sacrament appears to derive in a considerable measure from the fiction that it is incumbent upon the woman before being joined to her earthly husband to enter into a holy union with the divine powers which are the true source of fertility. The human husband is thus held to act as the representative of the god, and it is enjoined in the code of Manu and in the Pauline doctrine that he should be regarded by the woman in that light.

The primitive rites of fertility magic have usually, as in the last mentioned instance, become adapted by cultural transformation to the social and moral demands of advanced culture. Thus, obligatory prenuptial prostitution was commuted in the rites of Adonis at Byblos to the symbolic shearing off of the woman's hair, a common marriage rite which is still observed by Catholic nuns on their dedication to the Divine Bridegroom. Ritual obscenity, which, like actual sexual intercourse, is held to exercise a stimulating influence upon the powers of fertility, has commonly been attenuated, as in the Fescennine jests of Roman harvest festivals, in the similar ritual ribaldry of Hindu marriage ceremonies and in the rites of Bona Dea, in which the matrons whispered the ritual ribaldry in each other's ears, a custom which survives today among the peasantry of the Rhino district on the occasion of the feast of the Three Maries. The supernatural means employed to promote fertility have commonly become subject to new interpretations which have veiled their original intention.

ROBERT BRIFFAULT

See: Religion; Magic; Ritual; Sacrifice; Mysteries; Festivals; Social Organization; Marriage; Sex Ethics.

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FERTILIZER INDUSTRY. Although the fertilizer industry, involving the manufacture and sale of the so-called artificial fertilizers, is a product of modern chemistry, the application of animal manures to cultivated soils is as old as knowledge of systematic agriculture. Chinese agriculture is still based on an extensive use of such fertilizers. References in Greek mythology indicate the existence of similar practises in pre-Homeric times. In Rome the use of animal manures, ashes, clays and lime was common, particularly in the cultivation of vineyards and olive groves. A somewhat similar but less extensive knowledge and practise of fertilizing existed among the more civilized of the Britons and the German tribes at the opening of the Christian era—a knowledge and practise which seem to have been extended greatly as a result of Roman influence. Although throughout the Middle Ages the use of marls, lime, stable manures and wood ashes as a means of renewing soil fertility formed a part of the empirical knowledge of agriculture, manuring was not extensively practised. It is probable that the decay of English agriculture in the fifteenth century resulted in part from inadequate fertilizing.

Soil fertility and plant growth assumed a new importance with the agricultural revolution of the eighteenth century, the introduction of large scale farming and the utilization of relatively large amounts of capital. Scientific fertilizing, however, awaited the development of chemical knowledge. Its basis was laid primarily by the chemical research of Justus Liebig and the research and agricultural field experiments of Sir John Lawes and Sir Henry Gilbert.

In 1840 Liebig made his famous report to the British Association for the Advancement of Science upon the state of organic chemistry (subsequently published as Organic Chemistry in Its Applications to Agriculture and Physiology, London 1840, 4th ed. 1847). Therein he developed and gave quantitative expression to the theory that the maintenance of soil fertility depended upon the return in the form of manure of the mineral constituents and the nitrogen which had been taken away. He recognized as the basic plant foods nitrogen, potassium and phosphorus. He further developed the principle, later formulated as the Law of the Minimum, that 'by the deficiency or absence of one necessary constituent, all the others being present, the soil is rendered barren for all those crops to the life of which that one constituent is indispensable." Before he had finished his experiments the fundamental facts of plant nutrition had been established.

Some years before Liebig's report John Bennet Lawes had begun research and experimentation on soil conditions at his farm at Rothamsted, England. He found that apatite and other mineral phosphates when treated with sulphuric acid formed a superphosphate of lime which proved to be a very effective manure. In 1843 he established the first factory for the manufacture of superphosphates. In the same year he was joined by Joseph Henry Gilbert in his experimental work at Rothamsted. This fruitful association continued without interruption until the death of Lawes in 1900. More recent contributions to the knowledge of plant nutrition and growth have been made for the most part in the study of soil bacteriology and soil physiology.

The researches of Liebig, Lawes and Gilbert and those who have followed in their footsteps have helped to revolutionize agriculture, particularly in regions where long exploitation had exhausted the soils of their plant foods. They have necessitated modifications in the implications of the Malthusian principle of population and the Ricardian doctrine of rent. The importance of the work of these scientists is indicated roughly by the fact that the estimated world's consumption of commercial fertilizer in 1928 measured in net tons of plant food—nitrogen, phosphoric acid and potash—approximated 7,700,000 tons.

Around these three plant foods the modern fertilizer industry has developed. In the location of the basic industries for supplying the raw materials for the fertilizer industry, geologic and geographic circumstances played the major role at the outset. For many years the Peruvian and Chilean coasts of South America supplied large quantities of guano, derived from the excrement of sea birds, rich in nitrogen and phosphorus and containing small amounts of potassium. Before the end of the nineteenth century guano as a source of commercial fertilizer had been largely replaced by the Chilean deposits of sodium nitrate, the American and French deposits of mineral phosphates and the German deposits of potash salts.

Shipments of nitrates from Chile had begun as early as 1830, although they remained small until the middle of the nineteenth century. By 1875 Chile had become the world's most important source of inorganic nitrates through exploitation of her unique deposits of caliche—

a mixture primarily of sodium nitrate and sodium chloride—which extend irregularly just below the surface of a strip five hundred miles long and from five to forty miles wide. The industry consists of the mining and refining of the crude salts and the sale of the refined product, sodium nitrate, to distributors in the major fertilizer consuming and industrial areas of the world. In 1913 the Chilean output represented approximately 55 percent of the world's nitrogen consumption. Germany was the leading consumer of the Chilean product, taking more than 32 percent of the total, while the United States consumed about 23 percent.

The World War by demonstrating the danger of dependence upon the Chilean source of supply of nitrates for fertilizer and explosives hastened the development and expansion of the by-product and synthetic nitrogen industry. Completely cut off from the Chilean industry during hostilities, Germany took the lead in this development. The German industry assisted by the government advanced with such rapidity that it not only attained the goal of economic self-sufficiency but became an important exporter of nitrogen products. France, England and Italy, although not so hard pressed as Germany, also took steps during the war to fill their nitrogen needs independently of Chilean supply. In the United States the government constructed a cyanamide plant at Muscle Shoals, Alabama, which was intended to furnish nitrates but was not completed until 1919 nor operated save for a trial run in that year. As a result of the war's influence in bringing new capacity into existence and the subsequent development by private enterprise of the by-product and synthetic nitrogen industry Chile in 1929 was supplying less than one fourth of the world's consumption of nitrogen. The restrictive taxation policy pursued by the Chilean government and the quasimonopoly conditions under which the product has been marketed have contributed to this development.

As a pre-war source of nitrogen, ammonium sulphate, a by-product of the distillation of coal, ranked next in importance to the Chilean deposits of sodium nitrate; but in 1929 only one fifth of the world's nitrogen supply came from this source. In the production of by-product nitrogen the United States has held first place for some years; in 1929 American output represented approximately 40 percent of the world total. Far more important today, however, than by-product and Chilean nitrogen is atmospheric

nitrogen secured by fixation from the atmosphere either by the Haber synthetic ammonia process developed by the Germans during the war, by the cyanamide or by the arc process. German industry has taken the lead in this whole field. Of a total world capacity for fixation of atmospheric nitrogen amounting to 2,203,900 net tons in 1929 Germany ranked first with 938,500 tons and the United States was second with a tonnage of 195,600.

TABLE I
WORLD PRODUCTION OF INORGANIC NITROGEN,
1913 AND 1928-29.
(Net Tons)

Source or Production Process	1913	YEAR ENDING MAY 31, 1929
Chilean nitrate	429,000	530,000
By-product ammonia	377,300	469,700
Air fixation:		
Arc process	19,800	33,000
Cyanamide process	66,000	264,000
Synthetic process	7,700	1,018,600
Total	899,800	2,324,300

Source: United States, Department of Agriculture, "Survey of the Fertilizer Industry" by P. E. Howard, Circular, no. 129 (1931).

Of the total world production of fixed nitrogen in 1929 about 87 percent was used in agriculture. The bulk of the Chilean natural nitrate output is similarly consumed; before the war it was estimated that three fourths of the output was used in fertilizers.

Just as Chile prior to the development of a by-product and synthetic nitrogen industry enjoyed virtually a world monopoly in the production of nitrates for the fertilizer industry, so Germany at the outbreak of the World War enjoyed a world monopoly in the production of potassium fertilizer salts. The German deposits of potassium salts were discovered accidentally in 1859 in a mine sunk by the Prussian fisc in the neighborhood of Stassfurt in a search for additional supplies of rock salt. From the five major producing areas subsequently delimited in pre-war German territory came virtually the entire world output of potash for fertilizers. The industry involved the mining, refining and marketing of potash salts from these sources. The mining process is similar in its fundamentals to that of coal. To eliminate unnecessary freight charges most of the crude salts are put through a refining process at plants located near the mines. The crude salts consist for the most part of carnallite, hartsalz and sylvite. The task of refining is to separate the potash salts from the other ingredients by precipitation. The potash

sals are then dried and stored in bulk or sacked for shipment. The process is highly mechanical and is conducted on a large scale basis.

In 1913 approximately 90 percent of the German potash production was utilized as fertilizer. About 46 percent was exported. The World War was accompanied by an almost complete cessation of German exports and the customary foreign users of potash were hard pressed to find substitute sources of potash not only for fertilizer but for explosives, in the manufacture of which it is an essential ingredient. A variety of American sources were tapped. Giant scawced on the Pacific coast, lake brines in California and Nebraska, and cement and blast furnace dust were made to yield potash in commercial quantities. These sources were adequate to meet essential war needs but insufficient for customary agricultural consumption.

Since the war the German world monopoly has been broken by the cession to France of Alsace, which has abundant deposits of sylvite. Of the American war born industries most have succumbed to the vigorous post-war onslaught of the more mature foreign industry. An exception is the Searles Lake plant in California, which supplied approximately 15 percent of the entire American consumption of potash in 1928. Salts from the promising deposits in southeastern New Mexico were first placed on the market in 1931. Although in the Atlantic coast and southern states, where most of the potash is now consumed, the foreign product would seem to have an advantage in freight rates, the American product is likely to supply an increasingly large percentage of the domestic demand. Since the war, deposits of water soluble potash salts have been mined and refined on a small scale in Poland and Spain. Output from these areas has shown a continuous increase, and it is not unlikely that these two countries may assume a more important place in future production. Among other countries Soviet Russia has announced the discovery of potash deposits, but it is now using sunflower plants to produce fertilizer rich in potash. World production of potash, exclusive of Spanish output, for which specific figures are not available, increased 67 percent from 1913 to 1928 as indicated in Table 11.

The major commercial source of the third essential plant food, phosphorus, is phosphate rock. Phosphate rock, containing high percentages of tribasic phosphate of lime, is available in practically unlimited quantities and deposits

TABLE II

WORLD PRODUCTION OF POTASH BY COUNTRIES, 1913 AND 1928 (Metric Tons)

	1913	1928
Germany	1,328,000	1,691,000
France		447,000
United States		54,000
Poland		53,000
Others	20,000	10,000
Total	1,348,000	2,255,000

Source: International Institute of Agriculture, International Vearbook of Agricultural Statistics (Rome 1930).

are widely distributed throughout the world. American production of phosphate rock dates from 1868. The output of the mines of Florida and Tennessee has made the United States the largest single producing country, but since the World Warthe combined output of France and of mines in Tunis and Algeria has come to exceed that of the United States. French and American production in 1928 amounted to about 85 percent of the world total. Most of the remainder came from the island of Nauru ceded by Germany to England under the Treaty of Versailles. Deposits of phosphate rock occur for the most part near the surface and are mined by the open pit method. Small amounts of phosphate rock are used directly in agriculture after fine grinding; but because of its slight solubility in raw form the bulk of the output is subjected to treatment with sulphuric acid to form the so-called superphosphates, or acid phosphates. These are prepared for the most part in the consuming countries. In 1928 the United States, France, Italy, Japan and Germany were the leading producers. The United States' output represented 29 percent of the total.

Secondary to phosphate rock as a source of phosphorus for fertilizing purposes is basic slag, a by-product in the manufacture of steel from ores containing phosphorus. This source furnished more than one fourth of the world's fertilizer phosphates in 1928, the leading producing countries being France, Germany, Belgium and Luxemburg.

It is estimated that in 1928 a total of 43,000,000 tons of fertilizer salts containing approximately 7,700,000 tons of the three essential plant foods was consumed throughout the entire world. Germany, the United States and France were the largest consumers, using more than one half the world total. On a per acreage basis the Netherlands and Germany were the largest consumers. The lead taken by these two countries is in part a reflection of the natural deficiency of

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TABLE III

WORLD PRODUCTION OF SUPERPHOSPHATES OF LIME AND BASIC SLAG, 1913 AND 1928
(Metric Tons)

Country	Superphosph	SUPERPHOSPHATES OF LIME		BASIC SLAG	
	1013	1028	1913	1928	
United States	3,248,000	4,057,241		18,144	
France	1,920,000	2,265,000	730,000	1,475,000	
Italy	972,317	1,151,100		_	
Japan	548,625	926,175		_	
Germany	1,863,000	792,000	2,280,000	1,639,000	
Belgium	450,000	400,287	655,000	955,625	
Luxemburg			250,000	632,775	
All others	2,747,271	4,561,197	587,000	719,221	
Fotal	11,749,213	14,153,000	4,502,000	5,439,765	

Source: International Institute of Agriculture, International Yearbook of Agricultural Statistics (Rome 1930).

the central European soils in plant food, particularly potash; in part a reflection of the intensive character of the farming which has developed with population increase; and in part a reflection of the intensive propaganda carried on by the German potash syndicate in these areas. American consumption is confined largely to the Atlantic coast and southern states in the production of truck crops, tobacco and cotton.

For the most part the European consumer uses the major commercial fertilizers in an unmixed form, applying each separately to the soil in such quantities as his judgment or knowledge dictates. The American consumer, on the other hand, generally applies his plant foods to the soil in the form of a mixed fertilizer. The organization of the fertilizer industry has conformed in a rough way to these contrasting practises. In the United States it has been organized primarily around the manufacture of superphosphates by companies who own and operate plants for the production of mixed fertilizers, located for the most part in the major fertilizer consuming areas. The manufacturers have been the purchasers of nitrates and potash and the distributors of the finished mixed fertilizer. In numerous instances they are also producers of the raw phosphate. The bulk of the American fertilizer output is in the hands of a few large companies, such as the Virginia Carolina Chemical Corporation, the American Agricultural Chemical Company, the International Agricultural Corporation and the Davison Chemical Company, engaged in these several integrated processes. In addition there are several hundred manufacturers of mixed fertilizers, who purchase finished fertilizer salts and mix them for

sale under trade names. Some of the post-war manufacturers of nitrogen, particularly the Allied Chemical and Dye Company, the American Cyanamid Company and Du Pont de Nemours Company, likewise produce mixed fertilizers. These mixed fertilizer manufacturers purchase most of their potash through the exclusive selling agency of the German and French potash syndicates. In the past they have secured their nitrogen salts primarily through an exclusive selling agency serving the by-product nitrogen industry or direct from importers. The marketing of mixed fertilizers is a highly competitive business, one of the chief characteristics of which has been the confusing multiplicity of brands and trade names. Sales are made direct to the farmers, to agricultural associations and to local retailers, who are frequently seed or implement dealers. The manufacture of branded mixed fertilizers has made the American consumer, uninformed and ignorant as he frequently is, peculiarly subject to deception and abuse. For his protection by March 1, 1930, all but seven states had enacted laws regulating the manufacture and sale of fertilizers. In general these laws have provided for the periodic registration of brands, accurate and not misleading labeling, minimum plant food contents and inspection and analysis of fertilizers by state officials. American manufactured mixed fertilizers have been customarily of low plant food content, containing until recently as little as 160 pounds of plant food to a ton of fertilizer, the remainder consisting of the associated salts of the original raw materials, chlorine, sodium, calcium and the like, and inert material such as sand added by the manufacturer to bring the product to the

desired consistency. As a result of education and legislation the plant food content has been raised until at the present time it approximates 16 percent of the total. With the manufacture of more concentrated constituent salts and an increase in the knowledge of their proper use the trend toward a more concentrated mixed product is likely to persist for some time.

In addition to the inorganic salts utilized by the American fertilizer industry a considerable volume of organic nitrates is furnished by the packing industry from tankage, dried blood and fish scrap and of phosphates from bones. These are marketed under a variety of trade names by organizations which are affiliated with the large packers.

The American fertilizer industry is closely associated with the chemical industry. It is the largest consumer of sulphuric acid, accounting for approximately one third the total consumption; it furnishes an outlet for sulphate of ammonia secured in the distillation of coal and petroleum; it is dependent upon the cement industry, the copper industry and other chemical industries for raw materials and finished products.

In contrast to the American industry, shaped around the manufacture of mixed fertilizers, the European industry until very recently has consisted of three separate branches specializing respectively in the manufacture of potash, nitrogen and phosphate fertilizer salts. The latter two are subdivisions of the chemical industry, with which the manufacture of potash is also closely associated. In Germany the potash industry is under the control of the Deutsches Kali-Syndikat. Before the World War the actual production, mining and refining, of potash salts was distributed among a large number of producers who were members of the syndicate. Since the war production has been much more concentrated, approximately 80 percent of the total being produced by three large companies. Of some half dozen additional producers the Prussian fisc is the most important. The salts are placed on the market as muriate of potash, sulphate of potash and the so-called manure salts and sold by K2O content. They are sold exclusively through the syndicate direct to agricultural associations, fertilizer dealers or fertilizer manufacturers.

In 1925 the German potash syndicate and the French syndicate organized after the war entered into an agreement for the division of the world's markets, for the conduct of a joint propaganda program and a common price policy, under the terms of which competition in the sale of their products is effectively eliminated. The agreements as extended and modified have resulted in the stabilization of prices both in the foreign and domestic markets at levels somewhat higher than are likely to have prevailed in the absence of such agreements.

The German manufacture of synthetic nitrogen is concentrated in the hands of a few large companies, the most important of which is the I. G. Farbenindustrie, the German dye trust. These several companies are associated for the sale of their products into the Stickstoff-Syndikat. In 1929 an agreement was entered into by the German nitrogen syndicate, Imperial Chemical Industries, Ltd. (controlling the bulk of the English output of synthetic nitrogen) and Chilean nitrate producers for the purpose of joint propaganda and uniformity of price policy in the sale of nitrogen salts in the world's major markets.

In recent years the I. G. Farbenindustrie in addition to its manufacture of nitrates has engaged in the production of a mixed fertilizer, a precedent that has been followed by several producers of potash. Inasmuch as savings in freight are effected through the production of a more concentrated product, it is possible that this practise may undergo considerable expansion in the future.

Thus far the manufacture and sale of superphosphates have experienced no such concentration of control as that to which the nitrogen and potash industries have been subjected. Nevertheless, a tendency in this direction has been manifest. In the United States a few companies control the bulk of the output. In France from 60 to 70 percent of the output is in the hands of two large companies. In Germany, although the manufacture has been relatively decentralized, producers have united for marketing purposes in a sales cartel. Moreover, the leading producers of the world are associated for purposes of mutual benefit in the International Superphosphate Manufacturers' Association with headquarters in London. Twenty-four countries with about 70 percent of the total world output are said to be represented in this organization, one of the primary functions of which seems to be joint activity in scientific agricultural research and joint propaganda in the sale of phosphate fertilizers.

It is a long step from the early activities of Liebig and Lawes in the small scale manufacture of artificial fertilizers to the modern fertilizer industry, world wide in its character and of fundamental importance to permanent agriculture. Despite the increased dependence of agriculture upon this basic industry, however, the earlier fears regarding an inadequacy of fertilizer materials have given way to a realization that a surplus of producing capacity and an excess of output of its basic materials are apt to become the major problem confronting the fertilizer industry. Developments in the field of synthetic nitrogen manufacture during the war and in the decade following have resulted in a plant capacity far in excess of current demands. Meanwhile it has become evident that the Chilean natural nitrate deposits have as yet been scarcely touched. Phosphate deposits richer in content and larger in volume than were presumed to have existed have been discovered, and new potash deposits threaten to break the post-war Franco-German potash monopoly. The most pressing future needs of the industry may prove to be a mechanism for control of capacity and an appropriate distribution of world markets.

GEORGE WARD STOCKING

See: AGRICULTURE; AGRICULTURAL EXPERIMENT STATIONS; SOILS; NITRATES; POTASH.

Consult: Hall, A. D., Fertilizers and Manures (3rd ed. London 1929); Nostitz, A. von, and Weigert, J., Die künstlichen Düngemittel (Stuttgart 1928); Parrish, P., and Ogilvie, A., Artificial Fertilisers, Their Chemistry, Manufacture and Application, vol. i- (London 1927-); Waggaman, William II., and Easterwood, H. W., Phosphoric Acid, Phosphates and Phosphatic Fertilizers (New York 1927); Finot, M., Le marché des phosphates (Paris 1929); United States, Federal Trade Commission, Report on the Fertilizer Industry, 2 vols. (1916-23); United States, Bureau of Foreign and Domestic Commerce, "Fertilizers, Some New Factors in Domestic Fertilizer Production and Trade" by H. A. Curtis, Trade Information Bulletin, no. 372 (1925); United States, Department of Agriculture, "Survey of the Fertilizer Industry" by P. E. Howard, Circular, no. 129 (1931); New York State, Cornell Agricultural Experiment Station, "Prices of Fertilizer Materials. and Factors Affecting the Fertilizer Tonnage" by E. E. Vial, Memoir, no. 119 (Ithaca 1928); United States, Bureau of Foreign and Domestic Commerce, Trade Information Bulletins as follows-"Fertilizers, Production, Consumption, and Trade in Various Foreign Countries" by H. A. Curtis, no. 305 (1925), "Chemical Industry and Trade of Switzerland" by A. H. Swift, no. 664 (1929), "German Chemical Developments in 1929" by W. T. Daugherty, no. 690 (1930), "French Chemical Industry and Trade in 1929" by D. J. Reagan and E. C. Taylor, no. 726 (1930), "British Chemical Developments in 1930" by R. R. Townsend, no. 750 (1931), "Italian Chemical Developments in 1928 and 1929" by E. Humes, no. 705 (1930); Waller, Peter, Probleme der deutschen

chemischen Industrie (Halberstadt 1928); Germany, Ausschuss zur Untersuchung der Erzeugungs- und Absatzbedingungen der deutschen Wirtschaft, Unterausschuss für Gewerbe, Die deutsche chemische Industrie (Berlin 1930).

FESTIVALS derive for the most part from collective ritual. The tendency of primitive behavior to rely upon magic involves the participation of the social group—clan, tribe or family in activities which are held to affect the interests of the whole group. Hence the greater proportion of primitive ritual is collective, and most activities involve collective rituals. Meals partaken of in common assume the character of religious ceremonies. The admission of new members to the tribe, the disposal of the dead, ceremonies for the propitiation or placation of supernatural powers, for relief from sickness and epidemics, for the preparation of warriors, hunters and fishermen before an expedition, are occasions for collective rituals, or festivals, in which the entire community joins. Agricultural operations are associated with a series of ritual festivals.

Primitive collective rituals are often governed in their incidence by the phases of the moon. The intichiuma of central Australia and the majority of ritual dances take place at the full moon. The new moon and the interlunary days, on the other hand, usually regarded as unpropitious periods, are the occasion for the observance of rites of mourning and aversion. Agricultural civilizations observe seasonal feasts, the chief of which usually take place at the time of the summer and winter solstices. The dates of the observances are subject to considerable variation. The Celtic festival of Samhain, for instance, which was celebrated in Ireland on the thirtyfirst of October, was observed in Gaul at the beginning of January. In several instances the rites which were originally related to the monthly cycle have become transferred to the yearly cycle, the dates being, however, still determined by the older lunar calendar and not by the later solar reckoning. Sometimes the incidence of periodic festivals is determined by the rotation of crops, necessary in early stages of agriculture, as in the instance of the Greek trieterica, or three-yearly festival.

Primitive collective rituals, primarily designed as magical operations to influence supernatural agencies, have sometimes retained that character in the later phases of cultures, as in the majority of purely religious festivals and in those connected with agriculture. Rites of abstinence,

penance and mourning, such as the celebration of passions, lamentations, agneia, fasts and rogation days, have for obvious reasons tended to / preserve their religious character. Commonly, however, the magical function of collective ritual has undergone decay, and other purposes have come to acquire greater interest and importance. Funeral feasts, primarily characterized by abnegation and mortification, and intended to exercise a placatory action and to avert envy, often assume even in primitive cultures the avowed character of carousals and of occasions for social conviviality and indulgence. The transition from magico-religious functions to simple festivity and revelry is generally favored by the nature of collective rites, which commonly include orgics of eating and drinking and the removal of customary restraints, particularly sexual tabus and class distinctions. The Jews were fond of regarding their religious festivals as manifestations of joy, and indeed the term chag (Arabic hadj) by which their ceremonial festivals were denoted comes from the root which means to dance in a circle, and the *pesach*, or Passover, is the "feast of leaping." The license common in fertility rites, which was originally magic in intention, is also indulged in for its own sake. Rituals connected with agricultural and other cults have given rise to theatrical drama and comedy. Festivals originally intended to promote the activity of nature by sympathetic exertion on the part of the participants have tended to be valued for their own sakes as dances, athletic contests and sports. The vestments, disguises and ritual symbols, which at first possessed a functional magical significance, have given rise to pomp, decoration, ceremonial and display that are enjoyed on their own account. Dispositions generally disavowed and inhibited, such as the interest in bloodshed and cruelty, are afforded in primitive ritual an outlet which has long survived in popular festivals, as, for instance, in the Roman gladiatorial games, in the oaiting of animals, in bullfights, in the torturing and burning of heretics, which formed a part of popular, religious and dynastic festivals in Spain, and in public executions, which were until late times occasions for festive popular holidays in England and on the continent. The potent appeal of license, festivity, merrymaking and the "holiday spirit" has naturally contributed in a large measure to the survival of what were originally ritualistic observances. Clement of Alexandria denounced the attachment shown by Greco-Roman populations to pagan cults as

due to the opportunity which those cults afforded of indulging their passions. It is largely owing to the impossibility of inducing the multitude to forego those opportunities that the church felt compelled to adopt the policy formulated by Pope Gregory VII of transferring pagan festivals to Christian auspices and of bestowing an outward sanction on the gratification of deep scated yearnings, which were afforded an outlet in the occasional release from the austerity of social and moral restrictions.

The social utility of such relaxations of social codes in safeguarding the established order is acknowledged in formulae like panem et circenses. The popularity of Roman officeholders was largely dependent upon their liberality in furnishing popular festivals. The utilitarian purpose of festivals is even emphasized in religious doctrine, as in the chartered license of the carnival as a preparation for the mortifications and privations of Lent or the 'id es-saghir following the Moslem fast of Ramadan. The temporary obliteration of class distinctions, the innocuous fraternization of masters and slaves, characteristic of the Roman Saturnalia and Lupercalia and paralleled in the servants' ball and similar feudal institutions of England, the transitory illusion of affluence and luxury afforded by largess to the populace, the relaxation of rigid sexual codes, all operate as powerful elements in the appeal of chartered festivities and serve at the same time as safety valves against the dangerous effects of continuous restraint. The professedly benevolent concern of established authorities in the supplying of amusements and pleasures suited to the tastes of the multitude is recognized as a valuable means of allaying disaffection, of turning the edge of disloyalty and of distracting the popular mind from more dangerous, if more serious, interests. Organized sports, nearly all of which may be traced to primitive rituals having a magic purpose, are overtly preconized, in the English public school system, for instance, as the most suitable outlet for exuberant vitality that would naturally tend to flow in more perilous channels. And the gravity of periods of political and social unrest may be gauged by the amount of attention devoted by the authorities and the official press to sporting events and festive pageantry.

The extreme license and orgiastic character of festivals directly derived from primitive ritual were from an early date subjected to moderating regulations on the part of religious and political authorities. The drunkenness and disorder which characterized the Jewish harvest festival of chag hasuccoth, the Feast of Tabernacles, called forth the denunciations of the prophets. A similar ascetic disparagement of feasting is found in Buddhism. In Athens the phaltic symbols in the 1 hesmophoria and Dionysian festivals had to be covered or disguised, the obscene hymns submitted to censorship, and Solonic laws, according to Plutarch, regulated the outgoings of the women and their festivals, forbidding all disorder and excess. The corresponding ritual feasts in southern Italy and Rome, the Bacchanalia, were during the second century B.C. the object of much fierce state opposition, amounting to persecution.

In both the Attic and the Italian festivals the image of the god was drawn in a chariot shaped like a ship-originally, as in Egyptian processions, the ship in which the deity navigated the waters of the celestial ocean—and the engine, similar to the floats in modern pageantry, was known as the currus navalis, an expression which has given rise to the term carnival. An identical usage obtained in Flanders, the deity being in this instance the goddess Bertha (the Nerthus of Tacitus) whose wheeled ship was followed in torchlight processions by disorderly crowds of scantily dressed women. The festival despite its extremely licentious character was, like other pagan observances, adopted by the Catholic church. The Teutonic feast of Fastnacht (Fasenacht, or Vigil of Folly) and the Celtic brandon feast were similar, although less pronounced in their license. The carnival feasts, in which the participants wore masks and were often dressed in white shrouds to represent ghosts (the pierrots and the punchinellos of later times), excited, notwithstanding their adoption by the church authorities, the repeated denunciations of the clergy.

The Roman feast of sowing, known as the Saturnalia, or *Libertas Decembri*, was of a like character. It began on the seventeenth of December and originally lasted three days but was gradually extended to the first days in January. In their Christian form the December or Christmas festivities constituted what was known as the Feast of Fools, the revels being under the mock presidency of a personage variously known as the Lord of Misrule, the Abbot of Unreason, the Boy Bishop, some of whose traits have been transferred to the adopted Teutonic Santa Claus. The guisers, or Christmas waits, of Scotland still wear miter shaped caps of brown paper. The adopted pagan festival was, like the carnival, the

constant object of ecclesiastical denunciations. The Lord of Misrule was suppressed in Scotland in 1555, and the Feast of Fools succumbed to the repeated condemnations of ecclesiastical councils. Protestantism, fundamentally hostile to all festive manifestations, was keen in scenting out the pagan character of church festivals and in waging war against their chartered license. May Day festivals, once among the most popular in England, were all but suppressed by Puritan zeal. In like manner the weekly feast of rejoicing, or Day of the Sun, taken over by the early church from current Roman Mithraic usage has, like the continental Sunday, been the object of the fierce denunciations of Puritanism; and the observance of the Sabbath or Saturday, which had been severely condemned by the early Christian church and tradition for its Judaizing tendency, was adopted and with strange inconsistency transferred to Sunday. Early Puritan opposition to Christmas and other church festivals led for a time to their neglect. The commercial interests involved in the observance of those festive seasons has, however, operated as a potent factor in preserving them from obsolescence. The celebration of Christmas and the New Year, of Easter and of minor feasts, such as St. Valentine's Day and April First in France, is encouraged on account of the benefits which accrue to trade. New festive occasions, such as Mother's Day, have been promoted from similar motives.

Secular authorities have never neglected the many social advantages to be derived from the encouragement of festivals, pageants and holidays. State festivals, although deriving their pattern from religious ritual, have commonly been purely secular and political in origin. In China the utmost importance was attached to the celebration of the birthdays of the emperor and of the empress, to the day of receiving the imperial message at the monastery and to the anniversaries of the deaths of all the emperors of the reigning dynasty. The feasts of the new moon and the full moon were likewise associated with concern for the welfare of the Son of Heaven. Democratic, republican and even communist states have taken over much of the tradition of civic policy from autocratic and theocratic states and have shown themselves no less eager to use the solemnity and pageantry of festivals as means for cultivating civic loyalty and patriotism. The pomp and circumstance that had been devoted to inspiring martial ardor and to stimulating loyalty to the throne have come to be used to

inculcate enthusiasm for peace, for liberty, equality and fraternity and for the social revolution against capitalism and militarism.

Collective festivals, the symbolism of pageantry and ceremonials are among the most powerful means influencing the psychology of crowds and will doubtless always serve their purpose as the most concrete expression of collective emotions and loyalties. The chief disadvantage attaching to such collective expressions lies in the inevitable tendency of formalism and ritual to take the place of genuine feeling and conviction and in the hypocrisy which frequently attends the customary, formal or compulsory participation of the individual in regulated expressions of sentiments which he may not always truly share. The wasteful expenditure lavished on frivolous occasions of festivity has, since the Middle Ages, been the object of protest and criticism.

ROBERT BRIFFAULT

See: RITUAL; CEREMONY; RELIGION; MAGIC; SOCIAL ORGANIZATION; CALENDAR; FERTILITY RITES; BIRTH CUSTOMS; DEATH CUSTOMS; MARRIAGE; AMUSEMENTS, PUBLIC.

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FETISHISM is the magico-religious belief in and use of material objects held to possess supernatural virtue either in their own right or because of the presence of a spirit. In a more popular sense the term stands for any sort of materialism in religion, any tendency to treat divine power or mind as having a body or as operating like a physical force. The word was first used by the Portuguese, who reached west Africa in 1481 and classed the cult objects of the natives under the loose and general head of feitigos, or charms.

At first the term and its derivatives referred only to west African practises. Purchas in his Pilgrimage (1613) described "strawen rings called Fatissos or Gods," and used fetissan for fetishlike and fetiséro for the fetish-man. Dapper (Naukeurige beschrijvine der afrikaensche, Amsterdam 1668; French translation Amsterdam 1686, p. 307, 313) wrote of fetisis and the fetiséro, the former including "idols of wood and green herbs" and an "old earthenware pot." Bosman (Nauwkeurige beschryving van de guinese Gond-Tand-en slave-kust, Utrecht 1704; English translation 2nd ed. London 1721, p. 348), while allowing a general belief in "one true God," supposed it to have been acquired through contact with Europeans and contrasted with it the fetish as represented by "the false god Bossum," as also by animals, plants and stones. Most ethnographers dealing with this part of Africa have been wont to refer in the same indiscriminate way to the fetishes, or jujus, without trying to indicate how far such terms of purely European origin and of decidedly dyslogistic import have any precise counterpart in the indigenous vocabulary or scheme of thought. Rattray, however, in Religion and Art in Ashanti (ch. ii, p. 322-24), while vigorously protesting against fetishism as a suitable description of Ashanti religion in general, is prepared to identify the fetish with the suman, defined as "an object which is the potential dwelling-place of a spirit or spirits of inferior status, generally belonging to the vegetable kingdom; this object is also closely associated with the control of the powers of evil or black magic, for personal ends, but not necessarily to assist the owner to work evil, since it is used as much for defensive as offensive purposes." The power of such objects is not derived from the gods (abosom-Bosman's Bossum) but from spirits of an inferior order such as the sunsum of plants and the mmoatia, or "fairies." The priest of the high god Ta Kora would have no suman in his temple, declaring that "suman spoils the gods." The samanfo, or ancestral ghosts, which Rattray regards as "the predominant influences

in the Ashanti religion," have nothing to do with suman. The latter, in short, are the instruments of a supernatural power conceived as relatively blind and unmoral in its workings, whereas gods and ancestors are definitely beneficent beings. The word ought then to be used only in reference to the suman even when strictly confined to west African phenomena. Its use as a technical term is hampered by the fact that it belongs to the slang of the coast and having a derogatory implication leads to an undervaluation of the higher elements undoubtedly present in the complex of native beliefs.

Fetishism was first promoted to the status of a general category of comparative religion when President C. de Brosses published his famous work, Du culte des dieux fétiches (Paris 1760). Until Tylor's animism displaced it fetishism stood as the established name for the most primitive type of cult, treated as a stage through which humanity as a whole had passed and regarded as a sort of lower idolatry, in which the idol is rather the embodiment than the symbol of the associated spiritual power. De Brosses thought fétiche to be connected with chose fée, fatum—an etymological error which may have helped to invest the phrase with additional vagueness. By the time that Comte tried to envisage it as the initial stage of human religion it had become equivalent to the veneration of the powers of nature as revealed in any of its forms and manifestations. It is in accordance with this sweeping conception that McLennan, the discoverer of totemism, described the latter as "fetishism with certain peculiarities." When Tylor in Primitive Culture (1871) proposed animism, "the belief in Spiritual Beings," as a minimum definition of religion he virtually sounded the death knell of fetishism as a classificatory term by directing attention to the principle that causes a given object to be accounted sacred. Tylor, who believed that in all cases an indwelling spirit of some kind is held to be implicated, retained the term fetishism as a "subordinate department" of animism, which consists in "the doctrine of spirits embodied in, or attached to, or conveying influence through, certain material objects" including the worship of "stocks and stones" and passing "by an imperceptible gradation into Idolatry" (vol. ii, p. 144). He denied, however, that all objects "to which ignorant men ascribe mysterious power" amount to "real fetishes" and excluded "symbolic charms working by imagined conveyance of their special

properties, as an iron ring to give firmness, or a kite's foot to give swift flight." He restricted the use of the term fetish to an object which "is treated as having personal consciousness and power, is talked with, worshipped, prayed to, sacrificed to, petted or ill-treated with reference to its past or future behaviour to its votaries." By this definition the word which originally meant charm now had that very meaning expressly disallowed.

Tylor's authority held undisputed sway until the end of the century, when his doctrine of animism was attacked or rather supplemented from two sides at once. It was urged that room must be found within the complex of primitive religion both for a dynamism involving notions of the type of mana—a contagious wonder working power of a more or less impersonal kind—and for an anthropomorphic theism involving high gods conceived as "magnified non-natural men," not wholly explicable in terms of animism.

Modern anthropology would do well to treat fetishism as an obsolete term for ethnological purposes. Moreover, the scientific ethnographer might be wise to dispense with the word fetish even in its historic sense, namely, as it applies to "a limited class of magico-religious objects in Africa." Meanwhile popular writers will doubtless continue to use fetishism and fetish, together with phrases such as "making fetish" (i.e. holding a ceremony) and "taking fetish" (i.e. swearing an oath), without regard to consistency of meaning and as if concerned with one dead level of base superstition.

R. R. MARETT

See: Magic; Religion; Cults; Totemism; Animism. Gonsult: Tylor, E. B., Primitive Culture, 2 vols. (3rd ed. London 1891); Waitz, T., Anthropologie der Naturvölker, 6 vols. (Leipsic 1859-72) vol. ii, p. 174-75; Ellis, A. B., The Tshi-speaking Peoples of the Gold Coast of West Africa (London 1887) ch. xii; Kingsley, M. II., West African Studies (2nd ed. London 1901) chs. v-vii; Nassau, R. H., Fetichism in West Africa (London 1904); Lippert, Julius, Kulturgeschichte der Menschheit, 2 vols. (Stuttgart 1886-87) vol. ii, p. 363-504; Haddon, A. C., Magic and Fetishism (London 1910) p. 64-94; Hoste, W., "Fetichism in Central Africa and Elsewhere" in Victoria Institute, Journal, vol. liii (1921) 149-65; Nieuwenhius, A. W., "Der Fetichismus im indischen Archipel und seine psychologische Bedeutung" in Archiv für Religionswissenschaft, vol. xxiii (1925) 265-77; Rattray, R. S., Ashanti (Oxford 1923), Religion and Art in Ashanti (Oxford 1927) ch. ii, and Ashanti Law and Constitution (Oxford 1929); Spencer, Herbert, Descriptive Sociology: African Races, compiled by E. Torday, vol. iv (London 1930); Schmidt, Wilhelm, The Origin and Growth of Religion, tr. from German ms. by H. J. Rose (London 1931) ch. v.

FEUDALISM

European	MARC BLOCH
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EUROPEAN. The adjective feodalis (relating to the fief) and the French substantive feodalité, used in the restricted sense of a quality peculiar to a fief, date the first from the Middle Ages, the second probably from the sixteenth century. But it was not before the eighteenth century that the custom arose of using for the designation of a whole system of social organization either compound expressions like feudal regime, government or system or, a little later, abstract substantives such as féodalité or feudalism. German historians in general have adopted Lehnwesen from Lehn, the German equivalent of fief. The extension of the use of a word derived from a particular institution, the fief, which can scarcely be considered the central and only significant institution of feudalism, to characterize the social regime prevailing widely during the Middle Ages, and more particularly from the tenth to the thirteenth centuries, in the greater part of western and central Europe is mainly attributable to the influence of Montesquieu. Although Montesquieu considered the establishment in Europe of "feudal laws" a phenomenon sui generis, "an event occurring once in the world and destined perhaps never to occur again," modern sociologists and comparative historians have detected in other civilizations the existence of institutions analogous to those of the Middle Ages. Consequently the term feudalism has come to be applied to a mode of social organization that may recur in divers forms in differing periods and environments. Mediaeval European feudalism nevertheless remains the model of all feudal systems as well as the best known.

The origins of the European feudal regime have too frequently been discussed under the form of an ethnic dilemma: are they Roman or Germanic? As a matter of fact the social type that is called feudalism was born in Europe of conditions peculiar to the society from which it sprang. Since feudal society did not stamp itself upon a clean slate, but evolved little by little through the slow adaptation and modification of older usages, it is not difficult to discover in it traces of earlier systems of organization. But these elements were borrowed from very diverse environments. The feudal vocabulary itself, which combines Roman elements—one of

them, the term vassal, taken by the Romans from the Celts—with Germanic elements by its very medley represents the singularly mixed character of the society in which feudalism took its rise.

The most remarkable characteristic of the western world at the beginning of the Middle Ages was the fact that it had been constituted by the encounter and fusion of civilizations existing at very unequal stages of evolution. On the one hand, there was the Roman or Romano-hellenic world, itself hardly a unit in its foundations. For under the apparent uniformity of the imperial façade many local usages persisted which imposed conditions of life at times quite dissimilar upon the various social groups. On the other hand, there was the still comparatively primitive civilization of the peoples of ancient Germany, who had invaded the Roman domains and carved kingdoms out of it.

The bankruptcy of the state represents the most potent fact during this period. Whatever care the kingdoms of the barbarians may have taken to turn to their profit the formidable administrative system of ancient Rome—already, moreover, far advanced in decay at the time of the great invasions--however remarkable an effort at rehabilitation the monarchy of the first Carolingians may have represented after a century of extreme disorder, the powerlessness of the central government to exercise an effective control over a territory much too extensive for the forces at its disposal betrayed itself more and more glaringly, and for a long period after the middle of the ninth century, in a manner truly irremediable. Undoubtedly the reenforcement accruing from the Germanic traditions was not in this regard entirely negligible; the conception of royalty as the appanage of a sacred family, which derived from the most primitive notions of ancient Germany, resulted in a dynastic perpetuity better established than any that the Roman Empire had ever known. The idea of the state-or, more accurately, the idea of royalty-never entirely vanished. Likewise the institutions codified by the Carolingians long continued, more or less deformed, to exercise an influence. Men, however, lost the habit of expecting protection from a too distant sovereign. They sought it elsewhere and supplanted their obedience to the more remote ruler by other ties of dependence. The state tax ceased to be collected and the administration of justice was parceled out among a crowd of local authorities that had little or no connection with a central organism.

Less apparent but not less grave was the disturbance among social groups founded but lately upon a kinship more or less remote and fictitious, such as clan or tribe. It is impossible to ascertain to what degree the tradition of the old clannish relations had been able to survive in Roman Gaul and Italy, although in Great Britain the history of the imperfectly Romanized Celtic lands at the beginning of the Middle Ages shows them still very strong. On the other hand, it cannot be doubted that this kind of social group was of great importance among the German peoples during the period immediately preceding that of the invasions. But the great turmoil of the conquest, together, no doubt, with certain tendencies from within, weakened these ties. Not that kinship relations ceased during the entire Middle Ages to be a human bond of immense strength. The numerous family feuds which jeopardized the active and passive solidarity of groups in all grades of the social hierarchy bear witness to the strength of these ties. So do various institutions juridical and economic. But these ties came to apply only to a comparatively restricted group whose common descent was easy to establish, namely, the family in the strict sense of the word and no longer the clan or the tribe. This group, which made room for paternal as well as maternal kinship, was not very clearly defined and most of the obligations or modes of living imposed upon its members resulted rather from habits and feelings than from legally defined constraints. The ties of kinship continued to exist very powerfully in the feudal society but they took their place beside new ties after which they tended to pattern themselves and to which they were at times considered inferior.

The social environment in which the feudal relations developed was characterized by an economic system in which exchange although not entirely absent was comparatively rare and in which the not very abundant specie played but a restricted role. It has sometimes been said that at that time land was the only form of wealth. This statement needs explanation and qualification. It cannot be denied that the paucity of commercial relations caused the very

existence of every man to depend narrowly upon his possibility of disposing in some way of the resources furnished by a portion of the soil placed under his control. But an important fraction of the population drew its revenue from the land only indirectly under the form of personal service in money or in kind for the use of the land. Moreover, the possession of superior rights to the land was for the possessor in many respects but a means of exercising an effective power of command over the men to whom he conceded or permitted the direct enjoyment of the fields. One of the essential characteristics of feudalism is that prestige and social worth sprang less from the free disposal of property than from the free disposal of human forces. But the difficulty of commercial exchange had a considerable effect upon the structure of society. The absence of an easy flow of sales and purchases such as exists in present day societies prevented the formation of agricultural or industrial salaried classes and of any body of functionaries remunerated periodically in money.

In the absence then of a strong state, of blood ties capable of dominating the whole life and of an economic system founded upon money payments there grew up in Carolingian and post-Carolingian society relations of man to man of a peculiar type. The superior individual granted his protection and divers material advantages that assured a subsistence to the dependent directly or indirectly; the inferior pledged various prestations or various services and was under a general obligation to render aid. These relations were not always freely assumed nor did they imply a universally satisfactory equilibrium between the two parties. Built upon authority, the feudal regime never ceased to contain a great number of constraints, violences and abuses. However, this idea of the personal bond, hierarchic and synallagmatic in character, dominated European feudalism.

Societies before the rise of feudalism already contained examples of relations of this sort. These did not, however, play the preponderant role that they were to assume later. Rural lordship existed in the Roman world and also at least in germ in the Germanic world. Roman society never ceased to give a large place to patron and client relationship. Around the powerful surged a great crowd of persons—at times themselves of high rank—who commended themselves to them. In addition these clienteles included as a general rule numerous former slaves freed by their masters in exchange for certain obligations

of an economic nature and a general duty of fidelity (obsequium). Celtic society before the conquest also contained similar groups. In Germany alongside the normal relations that united the freeman to his family, his clan and his people others more transitory had grown up in the form of bands of faithful men of every origin gathered around a chief. Nourished in his dwelling, receiving from him horses and armor, they accompanied him to battle and constituted his strength and prestige. In this way people became accustomed to a certain conception of social bonds which developing in a favorable environment were to give rise to feudalism proper.

The leading features of feudalism in its fully developed form are the system of vassalage and the institution of the fief. As early as the Frankish and Lombard periods a great number of freemen of all ranks felt the need of seeking the protection of someone more powerful than themselves or of securing a decent livelihood by offering their military services to a superior. The poorest became slaves or simply tenants. But all who could clung to their dignity as men legally free and preferred not to lower themselves to the less honorable services which burdened the tenant liable to the corvée. They "commended" themselves ingenuili ordine. Exalted persons, on the other hand, sought to surround themselves with loyal people who should be attached to them by solid bonds. Thus arose the contract of dependence most characteristic of the feudal system.

In Frankish law, at least, the relations of vassalage were established by means of a formal act to which a little later the name homage was applied (in German Mannschaft or Hulde). The future vassal placed his hands in the lord's joined hands while repeating a few words promising loyalty, after which lord and vassal kissed each other on the mouth. As this ceremony, probably borrowed from old German traditions, gave no place to any religious elements, the custom early arose of following it up with an oath of fealty taken by the vassal on the Gospel or on relics.

The obligations created by homage and fealty held as long as both contracting parties were alive. They were extinguished upon the death of either. When heredity later came into play it undermined the whole system of vassalage. But heredity itself, as applying to the vassalic bonds, always remained rather a matter of practise than of law. In case of the death of lord or vassal a new offer of homage was in every case

considered necessary to revive the tie. Being attached to concrete forms the vassalic right held bound only the two persons whom the ceremony brought face to face.

The reciprocal obligations of lord and vassal rested upon general simple principles susceptible in their details of infinite modifications and regulated with an increasing precision by local custom. The vassal owed the lord fidelity, obedience in the face of the whole world and aid in all circumstances in which the lord might need it. He supported him with his counsel, assisted him on occasion in his judicial functions and opened his purse to him in case of necessity. Little by little the cases in which this pecuniary aid—also called tallage—was legitimately exactable tended to become more defined and restricted to such occasions as the celebration of the knighthood of the lord's eldest son and of the marriage of his eldest daughter, ransom and so on. Above all the vassal owed the lord military service. This form of aid gradually came to predominate over all others.

In return the lord owed his man his protection; he assumed his defense before the tribunals, when there still were state tribunals; he avenged his wrongs and cared for his orphans until they became of age. Besides he assured him a livelihood in various ways and especially in the form of an economic grant generally known as a fief.

In the absence of a salary system there existed but two means of remunerating services. The master could receive his dependents in his own house, assure them food and shelter (*provende*), even clothe them; or he could assign them a piece of land upon which they might support themselves either directly or through returns received from those allowed to work it.

Of "provided" vassals nurtured in the lord's dwelling there were certainly a great number in the ninth and tenth centuries. They were still to be met with in the France of Philip Augustus. But vassals and lords early agreed in preferring the system of allotments of land, which provided the former with a greater independence and relieved the latter from the responsibility of looking after the support—particularly difficult under a rudimentary economic regime—of numerous and at times turbulent bands. Gradually most of the vassals found themselves "housed" (chasés, casati). The land assigned to them derived its peculiar features from the fact that it carried with it certain clearly defined services that were to be performed for the grantor. The property thus granted was at first called beneficium. Then little by little in the countries of Romanic speech which had adopted Frankish customs this term was supplanted (to such an extent that it has left not a trace in the Gallo-Roman dialects) by a term of Germanic origin: fief (fevum or feodum). The possession of land without obligation to any superior was, after the Frankish period, called alodial tenure. When a freeholder of this kind felt the need of commending himself he was in most cases forced to turn over his holding to the lord and receive it back as a fief. With the more complete feudalization of society these alodia decreased in number.

As the tenure service was a general institution of the economy of the period, there always existed a very great number of fiefs whose holders were not vassals: fiefs of artisans attached to the lord, such as painters and carpenters; of servants, such as cooks and doorkeepers; of officials charged with the administration of the manors, such as mayors and provosts. But any land granted to a vassal could be only a fief. Little by little, in proportion as the class of vassals tended to be transformed into nobility their fiefs appeared of a superior condition to those that were encumbered with humbler services, and eventually the jurists inclined to regard them as the only true fiefs. The institution of the fief, like that of homage, retained its personal character and was effective only for the lifetime of the contracting parties. Whenever either of them died the concession had to be renewed in the form of the symbolic tradition of investiture. With the establishment of the hereditary principle this ceremony became the means whereby the lord collected a sum of money (relief) as the price for the renewal of the fief.

On the other hand, it frequently happened that the vassal himself disposed of the very fiefs he held from a superior lord as fiefs for his own men. This subinfeudation, in principle, presumed the assent of the grantor of the original fief, but social necessities made it more and more customary to dispense with this. Thus alongside of and to a large extent parallel to the chains of personal dependence there arose chains of landed dependence. Mediaeval law in contrast with the Roman and modern notions of landed property conceived the soil as being subject to a great number of real rights differing among themselves and superimposed. Each of them had the value of a possession protected by custom (saisine, seisin, Gewehr) and none was clothed with that absolute character which the word property carries with it.

The seigniory, or manor, was the fundamental unit of the feudal regime. Under the name of villa it was very widespread in Gaul and in Roman Italy and in both cases doubtless went back to very old traditions such as those of village or clan chieftains. The seigniory usually consisted of several small farms. The cultivators were not the owners of the land but owed various duties and services to a lord who exercised over them a general power of command and from whom they held their lands on condition of a renewal of the investiture and the payment of a certain sum with every mutation. Generally in the Frankish period the lord also possessed a vast farm, the demesne, whose cultivation was assured in large part by the corvées due from the tenants. After the twelfth century these demesnes, chopped up into small farms, decreased in importance, first in France and Italy, more slowly in Germany, and the lord tended to become a mere receiver of land rents.

In gathering round the seigniory humble folk obeyed the same need of protection that men of a higher rank sought to satisfy in vassalage. The small peasant handed over his alodium to the lord and received it back under the form of a tenure with dues and corvées attached. Often he pledged his person and that of his descend ants by the same act, thus entering into personal service. The life of the seigniory was regulated by custom. As the lords had every interest in keeping their lands peopled, the habit speedily arose of considering the peasant tenures, even the servile ones, as hereditary. Again, the seigniory fortified itself in the feudal period by appropriating a great number of state functions and by assuring the remuneration of the military class, which tended to rise above the others.

The churches figured among the principal possessors of seigniories. Some of them from the end of the Roman Empire obtained the right to retain the taxes levied upon their subjects. These privileges, confirmed and extended to churches more and more by the Frankish sovereigns, were the first form of immunity. This soon carried with it another advantage: the prohibition of representatives of the law—exacting and prone to be tyrannical—from trespassing upon immunized land to exercise their functions, notably their judicial powers. Analogous immunities were early obtained by lay lords.

In theory the men who lived upon a seigniory thus privileged remained answerable to the royal courts; their lord was responsible for their appearance. In reality the lord more and more

tended to become a judge; he always had been so for his slaves, who at least in their relations to one another and to their master were answerable by the nature of things only to him. On the other hand, his role as protector seemed to confer upon him the right to maintain good order among his free tenants and his vassals. Under Charlemagne the state itself considered his intervention a guaranty of good order. After the fall of the Carolingian state the judicial power of the lord found a new lease of life in the usurpation of public functions, itself the consequence of the utilization of vassalage by the sovereigns.

In the Frankish period all freemen were liable to military service. But more and more the strength of armies seemed to center in horsemen equipped with complete armor and serving as leaders for little bands of other horsemen and of footmen. To remunerate the services of these knights, who accompanied them to the royal army or aided them in their blood feuds, the noblemen had acquired the habit of distributing fiefs among them; and, to make sure of their fidelity, of requesting homage. The sovereigns soon did the same. Notably Charles Martel, engrossed in his struggle against the Arabs and domestic enemies, created numerous military fiefs, carved largely from the domains of the churches which he usurped. Commendation, which had in the beginning been a sure means for men of every class to find a protector, tended thus to become a social tie peculiar to a class of military vassals (of the king or the nobles), who were at the same time possessors of seigniories. By a parallel tendency the old ceremony of the delivery of arms, a heritage from Germanic traditions originally distinguishing the majority of all freemen, now applied only to specialized warriors. This was the "dubbing"; whoever had received it could give it in his turn and thereby make knights. This class, until the twelfth century still open to adventurers of every origin, had an ethics of its own, a code of honor and fidelity tinged more and more with religious ideas, and felt itself to be virtually an order.

On the other hand, to reward their representatives throughout the country, in particular the counts, the kings, not being able to put them on salary, distributed fiefs among them consisting either of lands or of a share of the royal revenues in the provinces. To bind them by a tie that had some strength they chose them from among their vassals or exacted homage of them. The royal vassals in their turn and the churches surrounded themselves with their own vassals and

confided to them a part of their functions and the administration of a part of their property.

Social and economic conditions thus made for decentralization and produced a veritable parceling out of all the powers of the state, such as justice, the right to coin money, tolls and the like. The profits accruing from these powers fell not only to the former direct representatives of the state, such as the counts, or to the immunized churches, but also by a sort of secondary appropriation to the representatives of these first usurpers.

The introduction of the principle of heredity into the feudal system was of paramount importance. The lord, who had need of men, sought to retain the services of the dead vassal's sons. The vassal's son was usually quite willing to do homage to his father's lord, in whom he found a natural protector. Above all it was at this price alone that he could keep the ancestral fief. In fact heredity was adopted little by little as a rule of conduct demanded first by public opinion, then by custom, and the lord who demurred ran the risk of offending his men. Charles the Bald considered it to be normal. In Italy the emperor Conrad II established it as law for fiefs below those of a count. Neither in France nor in Germany was it ever the subject of any legislation. In France it was early made general with but few exceptions and in Germany it was adopted more quickly for fiefs of a lower order and more slowly for fiefs of greater importance.

At the same time that they became hereditary the fiefs tended to become alienable. Of course the lord's assent would always be necessary for alienation. But it became less and less admissible to refuse it. The fiefs, together with the authority attaching to them and with the fragments of state functions that often went along with them, became hereditary, resulting in a confusion of powers over men and things. Heredity, however, while it put a seal on the feudal system certainly compromised its very foundations.

In all consistency the vassal system would have required each vassal to have but one lord. That was the very condition of the entire devotion which was the first of his duties, and the Carolingian legislation had so decided. But it was a great temptation to take fiefs wherever one could get them; when the fiefs had become patrimonial it sometimes happened that a vassal received by inheritance or purchase a fief that was held from some lord other than the one to whom he had first done homage. Cases of vassals of

two or more lords are found from the tenth century and they become more numerous in the later period. How was one to apportion obligations to the various masters? In France in the eleventh century the custom arose of choosing one of these allegiances as more binding than the others. This was called liege (pure) homage. But in the thirteenth century this system, in its turn, was rendered ineffectual by the very multiplication of the liege homages offered by the same vassal to different lords. One was then reduced to consider, among the liege homages, which always took the first place, and, among the simple ones, the first homage in date, or sometimes the one attached to the greater fief as the strongest. In Germany and Italy, where the liege homage never took root, these classifications by dates or according to the importance of the fiefs had always been in vogue. But such multifarious allegiances could no longer count for much.

An essential characteristic of the feudal contract was the theory that if one of the two contracting parties broke his pledges he thereby freed the other party from all obligations. But precise definition as to the circumstances under which non-fulfilment of the contract, whether on the part of the lord or of the vassal, justified the rupture was completely wanting. In spite of the efforts of Carolingian legislation this salient point remained vague. The absence of all recognized superior authority left it to the interested parties to arbitrate the particular case. This uncertainty, the unforescen consequence of the synallagmatic character of the bond, smoothed the way for all kinds of felony.

Although the salient features of the feudal regime were very nearly the same in all countries of western Europe there were, nevertheless, certain national differences and peculiarities. Thus in France the parceling out of the powers of the state, notably the appropriation of justice, was carried farthest. There too the military class became most solidly constituted and developed its chivalrous code, which from there spread over all Europe. In Germany feudal conceptions did not pervade the judicial life so profoundly, and two codes of customary law developed side by side, the general laws of the different countries (Landrecht) and the laws of fiefs (Lehnrecht). The alodia there, as in Italy and the south of France, persisted in greater numbers than elsewhere. The exclusive right to invest the superior judges who dealt with criminal cases involving the death penalty remained in

the hands of the royal power. The emperors also maintained a long and effective struggle against the inheritance of the great fiefs. But they had to accept the obligation to enfeoff again the fiefs having the powers of earldoms when they were left without heirs or had been confiscated. This, unlike the case of France, prevented the increase of the royal domain itself. In Italy the previous importance of the cities and the urban habits of a great part of the knights themselves early created a formidable rivalry to the powers of the landed lords.

In Russia a real feudal regime was in full process of development up to the moment when it was stifled by the power of the Muscovite state. As in the west, the vassalage of the boyars became transformed into a state nobility. They were, however, more strictly subject to the czar since the synallagmatic character of the contract of service had always been less marked than in the west. The seigniory, vigorously constituted, survived for a long time. In the Byzantine state of the first centuries there existed tenures burdened with military service for the state but these were tenures of peasant soldiers. The emperors viewed these free peasants as constituting the strength of the army and struggled against their being crushed by the seigniories. From the eleventh century their resistance weakened and finally the seigniory, favored with immunities and obliged by way of compensation to furnish soldiers to the state, became the keystone of the military organization. But these seigniories were not themselves subdivided in hierarchical form by bonds of fiefs and vassalage; so that one of the essential characteristics of feudalism-that gradation of obligations which in Europe preserved the homogeneity of the political organization—was always lacking in Byzantium. The Scandinavian peninsula offers a clear case of a country in which for want of one of the primary elements of feudal organization, that of seigniorial economy, a real feudalism failed to arise.

Much more significant is the distinction between countries in which feudalism had grown up spontaneously and those in which it had been planted by conquest. In the former the feudal regime was never able to attain that systematic character that hardly belongs to any but institutions formed fully accoutered and thereby unembarrassed with survivals. It appears, on the contrary, as a much more symmetrical edifice in the countries in which it was planted by conquest, such as the Latin states of the Holy

Land, the Norman kingdom of southern Italy and especially England.

The social condition of England at the time of the conquest was in many respects analogous to that of Frankish Gaul at the time when the feudal system began to take shape. Both were marked by a slow absorption of the free peasants in the framework of a seigniory whose dependents still obeyed juridical statutes of extreme variety, by a tendency toward the generalization of dependent relations, by the appropriation of justice by the powerful, by the existence of tenures burdened with military service and called as in Germany Laen, and by the importance of the thanes, a class fairly similar to that of the Frankish royal vassals. But all that was poorly coordinated and the fusion of the relations of fief and vassalage had not been effected. The Norman kings imposed upon the country a feudal system conceived to their advantage. The boundaries of the seigniories (called manors) were definitely fixed; a sort of serfdom was introduced which, however, was in the course of time to evolve in a very different direction from the French; in spite of the much greater power of royal justice than in France the English lords were considered the exclusive judges of their tenants in their relations with them, which was finally to prevent the inheritance of tenures. Above all, the kings divided the whole country into military fiefs according to a system brought over from their Norman duchy. The tenants in chief were each to furnish the king with a certain number of knights. To be able to do so they distributed fiefs in their turn. But these chains of dependence soon becoming practically hereditary all led back to the king, from whom in the last analysis all land was held, even that of the church (under the form of the "free alms"). The alodium, a foreign body in the feudal world of the continent, dld not exist at all in England. Finally, the king could demand the oath of fealty of his vassals' vassals.

At the end of the twelfth century a profound change took place in European society characterized by the formation of classes, economic transformations and the development of the state. In the tenth or eleventh century society consisted primarily of groups of dependents. As the sense of personal ties wore away, the human mass tended to organize itself in large classes arranged in a hierarchy. Knighthood became hereditary and changed into nobility. In England indeed the noble never had precise lawful privileges clearly separating him from the free-

man. In Italy, habituated to a kind of life increasingly urban, he was hardly to be distinguished from the rich burgher. In France, on the contrary, the nobility made of itself a single closed class to which only the king could introduce new members. In Germany a whole hierarchy established itself within the nobility, and according to the theory of the *Heerschild* no member of one of these subclasses could without derogation accept a fief from a man occupying a lower grade.

Beginning in the twelfth century economic exchange became more active. The cities developed and relations quite foreign to the feudal type came to light. Bound to his fellow townsmen by an oath of mutual aid, which unlike the vassal oath united equals, the townsman needed no other protector than the community to which he belonged. His social code too was quite different from that of the military vassal. Moreover, the advent of a new economic regime founded upon exchange and money payment permitted the extension of the salaried class and at every step of the social scale took away from the fief and the enfeoffment any raison d'être for their functions.

This economic transformation in turn contributed to the rebirth of the state. Hired troops took the place of the vassals, who nearly everywhere had greatly succeeded in limiting their obligations. Corps of salaried officials subject to dismissal were formed. Such concentration of power did not redound solely to the advantage of the kings. In France and Germany certain royal vassals had brought under their control a great number of earldoms and multiform seigniorial rights and exalted their power above the crowd of lesser seigniories. While in France the great principalities thus formed were at last absorbed by the royal power, in Germany they well nigh annihilated it. In Italy the states formed around and by leading cities chiefly benefited from this movement. Everywhere the state, whatever its nature, was henceforth a master and protector. He who now depended only on it without "commending" himself to anyone no longer felt isolated.

The rural seigniory lasted much longer. Being adapted to the needs of the capitalistic era it still continued to flourish throughout the sixteenth, seventeenth and eighteenth centuries; it was transplanted by Europeans into various colonies, notably French Canada. It was not abolished in France until the revolution; it disappeared definitely from Germany—aside from a

few survivals—in 1848; in England it disappeared but very slowly from the statute book and left behind a very strong imprint on the constitution of rural society.

The same needs from which vassalage took its rise long continued to make themselves felt, at least intermittently in troubled periods. The homage, now but an empty rite, had its substitutes. The English liverymen in the time of the Wars of the Roses are reminiscent of the mesne tenants of the early Middle Ages. In the France of the seventeenth century to belong to a great lord afforded the gentry the best means of getting on. The orders of knighthood were invented by the princes at the close of the Middle Ages to insure the fidelity of those admitted to them; Napoleon himself in establishing the Legion of Honor had much the same idea. But those orders that have survived, as well as their contemporary imitations, have lost every role but that of honorific distinction.

In the last centuries of the Middle Ages the states had sought to turn to account the old feudal organization, requiring of vassals if not an active military service at least a compensatory tax. But these attempts had little success. In England a law of the Commonwealth in 1656, confirmed by the Restoration in 1660, abolished all distinction between the fiefs of knights and the free tenures (socages). The fiction that all land is held from the crown, the use of the word fee to designate the highest form of landed rights, are relics of the systematic organization introduced by the Norman kings; primogeniture applied in the absence of a will to all succession in real estate is a legacy of the law of fiefs. In certain German states, such as Prussia under Frederick William 1, the fiefs were transformed into alodia in the eighteenth century by legislative action. France waited until the revolution of 1789 to abolish fiefs and vassalage, which had ceased to bring any considerable revenue to the coffers of lords and king. In the nineteenth century these antiquated institutions finally disappeared in Europe. The class of military vassals had given birth to the nobility. In France the latter saw its privileges completely abolished along with the feudal organization itself, and by the same act its social role was doomed to extinction. But in some other countries it has long outlived the fiefs both in fact and in law.

The clearest legacy of feudalism to modern societies is the emphasis placed upon the notion of the political contract. The reciprocity of obligations which united lord and vassal and caused

with every grave dereliction by the superior the release of the inferior in the eyes of the law was transferred in the thirteenth century to the state. Practically everywhere, but with peculiar clearness in England and Aragon, the idea was expressed that the subject is bound to the king only so long as the latter remains a loyal protector. This sentiment counterbalanced the tradition of royal sanctity and finally triumphed over it.

MARC BLOCH

SARACEN AND OTTOMAN. The conditions which gave rise to feudalism in Moslem countries varied fundamentally from those under which it arose in western Europe. The economic basis of western feudalism was a natural economy, while the economic organization of the East resembled more closely a money economy. In the West the feudal system had its roots in the problem of military protection, whereas the Moslem military fiefs developed not as a means of insuring military protection, but as an abuse of the existing system of revenue collection. In the Saracen Empire of the ninth century feudal disintegration was apparently more an effect than a cause and was the result of a decline of capacity in the ruling house, corruption in the central government and the influence of mercenary soldiers.

Feudalism in Moslem countries grew out of the administration and the disposition of lands conquered by the Arabs. Governors were appointed to rule over the conquered provinces, which were known as the governors' iktā'. At first fiscal and political administration were kept distinct. The provinces paid a fixed tribute which was farmed and was in charge of the financial administrator, called the 'āmil. With the weakening of the central government the provincial governors succeeded in becoming financial administrators as well, and as soon as this fusion occurred independent states and dynasties grew up. Egypt under the 'Tulunids is the most outstanding example of this process.

A similar disintegration was taking place within the provinces. In the tax districts the administration of taxes was divided between the village communities, which were collectively responsible for their taxes, and the great Arab landholders, called *muktas*, to whom the government had assigned in return for a fixed rent or tax the uncultivated lands and those deserted by their former owners. The tax farming system extended through the districts and village com-

Feudalism

munities. There was very little difference between the tax farmer and the large landholder who guaranteed the taxes on the land granted him by the state, for both derived their revenue from the coloni. Gradually the great landholders became the tax farmers of the districts and the two spheres of activity grew closer together. Unlike the fiefs of the West, however, these grants, or $ikt\bar{a}^i$, entailed no military service; the only dues which the grantees owed were money dues.

In the course of time, however, a process of militarization took place within the empire. The Turkish slave guards with whom the Abbasides surrounded themselves grew very powerful, raided the treasury and threw the empire into a state of anarchy. The Turkish generals took over wide districts as tax farmers and great estates as emphyteuticaries, rarely turning the revenue into the state treasury. The mercenary soldiers had formerly been paid in wages, but it gradually became the custom, whenever the treasury was depleted and the soldiers grew unruly in demanding their pay, to reimburse them by assigning to them the collection of revenue in various localities. These grants to the soldiery were also known as $ikt\bar{a}$. Gradually the estates granted to the military formed the great majority. Although technically the grants were for a limited period and only for the surplus over the required tax, in practise it became increasingly difficult to regain control of the district or to collect any funds whatsoever from the grantees. Gradually also the distinction between giving the revenue of the land and giving the land itself tended to disappear. This process went on during the tenth and eleventh centuries; toward the end of the latter century the Seljuk Turks legalized the existing state of affairs by acknowledging the right of the grantees to the entire tax or rent collection, not merely to the surplus, and by making the fiefs hereditary in return for continued military service by the heirs of the holders. This practise was introduced into Egypt by Saladin. The grantees of the fiefs were primarily, however, the beneficiaries of the revenue; their interest was not so much in the land as in the rents and taxes. The changed legal status of the fief holders tended, on the one hand, to settle the nomads and fix their allegiance; on the other, it permitted an escape from the control of the central government and became a strong force working toward the break up of the Seljuk Empire.

In Egypt under the Mamelukes the whole

country apart from private property, endowments and fallow or desert land was regarded as the feudal property of the sultan. Beginning with the reign of Kalāun (1279-90) Egypt was divided into twenty-four parts, of which four were reserved to the sultan. Out of these he gave fiefs to his personal guards, while ten were similarly assigned to the great amirs and ten bestowed upon mercenary soldiers. Redistribution was supposed to take place at least once in thirty years after a survey. Some sultans took as many as ten or even fourteen parts for their own troops.

Once perfected, the institutions of the Moslem feudal regime were analogous in many instances to those of western feudalism. In both military service became the basis of tenure and the fief holders had similar political rights over tenants. But Moslem feudalism, by reason partly of geography and climate, partly of Arab traditions embodying looser organization and partly of Moslem allegiance to the central government as succeeding to the authority of Mohammed, never developed the close knit and durable hierarchy of western feudalism. The complexity of feudal dues, prestations, succession and marriage fees did not approach that of the West.

Saracen feudalism was superseded in time by the feudal system of the Ottoman Turks. From an early date the Ottoman sultans granted land in return for military service, establishing a system which avoided the Seljuk disintegration and continued through five centuries. Practically all of the conquered territories in Anatolia and southeastern Europe were made into fiefs not only in conformity with Saracen and Seljuk custom but responding also to the Byzantine feudalism which preceded the Turkish conquest. The acquisition of Mesopotamia, Syria and the Arabian borderlands provided territory held under older arrangements, much of which was already in smaller and greater fiefs as iķṭā' of the kharāj, or tribute lands. In Egypt the lands were resurveyed and divided again as imperial estates and fiefs according to Ottoman principles. The lands in Arabia over which the sultans came to rule were tithe lands and so not subject to the feudal system. In case of the acquisition of original tithe lands by Christians such lands might be classified temporarily as tribute lands.

In the formation of the Ottoman feudal system rigid rules were laid down and were administered for some generations with considerable exactness. Fief holders, regularly called spahis, had the right of receiving the public revenues

from the lands assigned to them. With this went seigniorial jurisdiction over tenants residing on the land. The unitary fief, which was called a kilij, was one whose revenue amounted to 3000 aspers. Fiefs whose yearly revenue was less than 20,000 aspers were called timars; those with an annual revenue of from 20,000 to 100,000 aspers were called ziamets, and the larger fiefs with annual revenues above 100,000 aspers were called khasses, or treasures. Holders of timars were timariots and holders of ziamets were zaims. The fief holder must render military service on horseback when summoned by the sultan. From the smallest fiefs he might come alone; from the larger he must bring additional cavalrymen in proportion to the amount of revenue from the lands.

The system was controlled through a hierarchy of officers who belonged to the sultan's slave family. The spahis were commanded by subbassi, who in time of peace governed the towns and whose rank in the army resembled that of captain. Next were the alai-beys, or colonels, and above these the sanjakbeys, or brigadier generals, who governed the important cities and held superior rule over the district in which they were located. The sanjakbeys were under the rule of beylerbeys, or mirimirans, comparable to major generals. The first beylerbey was Lala Shahin, appointed in 1362 and commanding all the feudal spahis. From 1376 this office became that of beylerbey of Anatolia, and a beylerbey of Rumelia was appointed. As the empire grew, other beylerbeys, regularly called pashas, having under them similar organizations, were appointed; but the first two, advanced to a position similar to that of full general, commanded all the beylerbeys on their own sides of the Bosporus. At the head of the entire military organization was the sultan. In its fully developed form this system produced two great territorial armies, one in Asia and one in Europe, all of whose officers lived from lands held in fief and in time of peace exercised functions of local government.

From 1376 fiefs were made hereditary in the male line. No crime of a possessor could impair the rights of his children to succeed him. In the absence of male descendants the property reverted to the state and the beylerbey could bestow such a fief on another spahi of the same province or on some veteran soldier. There was a tendency for fiefs to increase in size, as the law permitted the timars to be united into ziamets but forbade the division of the latter. In the case

of small fiefs one son only had the right to succeed to the fief; other sons received nothing. In the case of large fiefs not more than three sons of the holder might receive small fiefs. In time of war deaths in battle led to frequent changes. Volunteers accompanying the armies competed for the fiefs of slain men by conspicuously brave deeds. The feudal spahis of Anatolia were more obedient than those of Europe, but were not so well paid, had less practise in fighting and were not so highly esteemed as soldiers.

When the Ottoman feudal system was working properly the country gentry were kept under control, the hereditary accumulation of estates was prevented and any tendency toward independence could easily be thwarted. The sultan, moreover, obtained regularly the service for which the lands were granted. In addition most of the subject Christian population was governed locally without any trouble to the sultan and was held down well and uniformly by resident seigniors. A great advantage of the system was that by the granting of new fiefs in newly conquered lands the territorial army was automatically increased in proportion to the increase of the empire.

In the sixteenth century the great Suleiman found that serious disorders had arisen through favoritism and venality in the disposal of fiefs, the distribution of which had been left to the local governors. To correct this he issued decrees that the pashas could dispose of only the smaller fiefs and that all others were to be bestowed only by imperial orders, thus once more attaching the control of the large fiefs to the central government. The central treasury took charge of such estates when they were vacant. At this time the feudal armies contained about 200,000 men. By the time of Murad III enormous abuses had appeared. Feudatories did not answer the call to arms and yet remained unpunished; pashas sold fiefs at auction, sometimes to several persons, with resulting quarrels and murders. The empire was then divided into forty-four eyalets under pashas and subdivided into 220 livas under sanjakbeys. These offices were given at first for three years, later for two and finally for one year. Theoretically this was intended to prevent too great strengthening of governors, but it also made the fortunes of ministers, who exacted heavy bribes at each of the frequent changes of office. In the course of time the pashas resumed the distribution of the larger fiefs. Mustapha II endeavored to improve the situation by again enforcing distribution

from the central government, but corruption was so deep seated that the abuse only changed its location, appearing in the office of the minister rather than in that of the pasha. When war broke out in 1768 only 20,000 feudal troops came together, the remainder of the fiefs having passed to the palace, to civil officials and to private citizens. In 1776 'Abdul-Hamīd 1 tried to restore the old system, but such tremendous clamors arose that the plan had to be abandoned. After that time many fief holders provided payment for substitutes. The reorganization of the army on European lines hastened the end of the system. Sultan Mahmud II delivered the final blow to the military fiefs by adopting the policy of converting the fiefs, as they fell vacant by the death of their holders, into wakf, or religious foundation lands. The situation was definitely settled by the land legislation of 1856. In Egypt all the land had been taken over for the government during Mehemet Ali's reign and had been leased out again with the abolition of military tenure.

ALBERT H. LYBYER

CHINESE. Nothing is known of the beginnings of feudalism in China. According to the earliest literary sources feudalism was already in existence in the third millennium B.C. These sources, however, have little claim to real authenticity. The earliest definite and credible information concerning feudal tenures refers to the time of King Wu Wang, the founder of the Chou dynasty (about 1100 B.C. according to the corrected chronology). After that date it is possible to observe over a very long period of Chinese history the feudal principles and customs which played so important a role in shaping the character and evolution of the empire.

The form of the first grant of fiefs under Wu Wang shows clearly the character of the system. Immediately after the conquest of the kingdom of the Shang dynasty the king distributed large territories to his relatives, to several of his deserving generals and ministers, to the descendants of certain ancient rulers and to the son of the last king of the fallen dynasty. Not full ownership but unrestricted use of these tracts of land was granted, and the grantees were under certain obligations to the emperor; the grants were accordingly very similar to the fiefs of western Europe. All the fiefs were situated within the borderlands of the newly founded empire, a circumstance which cannot have been entirely fortuitous.

There were several reasons for the granting of these fiefs. The customary law of the clan obviously demanded that its members share in the newly acquired possessions of the chief. Another factor was the sacred rules of ancestor worship; a landed estate was necessary for the maintenance of the ancestral temple and its sacrifices; and generally this was conceded even to a subduced enemy. There was also the problem of defending the borderlands, and the location of the larger fiefs along the frontiers shows clearly that the feudal lords had to undertake the protection of the newly conquered territories against the warlike outer tribes.

The underlying principles of feudalism as it appeared in this period were very ancient elements in the social organization of China. They cannot have come into existence as late as the time of the foundation of the new Chou state, but must date back to a much earlier period. The constitution of the clan, demanding on the one hand the unrestricted power of the eldest in distributing the common property to the members under his supreme control, and on the other the common right of usufruct on the part of all the members together with the maintenance of the ancestral sacrifices, forms the bases upon which Chinese feudalism developed. The old Chinese state was conceived as a large family, and its character was shaped according to this notion. Thus the ruler, as the paterfamilias, distributed the territories as fiefs to his relatives and adherents, while he himself, according to the theocratic theory of the state, held the empire as a fief from God. To these religious and ethical elements were added practical political considerations. The distances in the country were too great, the means of communication too defective, to allow the collection of taxes, the administration of justice and the protection of frontiers to be controlled directly from the capital. It was necessary to decentralize the administration, and this decentralization was effected most simply by feudalism. The feudal lords were responsible for the discharge of taxes in the form of a fixed tribute and for the safety of their territories. The exigencies of administration and the protection of the country were the two powerful incentives in the development of feudalism in China as elsewhere. Part of the obligations of the feudal tenant was undoubtedly, as in European feudalism, the rendition of military service; i.e. the raising at the king's order of a fixed contingent of troops, the size of which was proportional to the size of the fief.

The legal character of the Chinese feudal system is rather difficult to define. Some scholars, influenced by the concepts of European feudalism, have been inclined to regard the Chinese feudal relationship as a legal contract by which the sovereign and the grantee were bound to mutual obligations. Such a conclusion, however, is scarcely tenable. In the light of Chinese thought it is contradictory to hold that the "son of heaven" dealt on a contractual basis with ordinary mortals; for the king or emperor of China was always not only the political ruler but also the highest priest, the mediator between God and men, a position to which no other mortal could attain. The duty of protection was rather a one-sided obligation which was enjoined upon the feudal tenants by the king, who could moreover alter or withdraw at any time the grants he had made. It must be remembered that feudal relations in China had not only a juridical but also an ethico-religious basis and that therefore they cannot be explained solely by the legal stipulations of a constitution or contract.

In the course of time, however, the ethicoreligious elements in feudalism were more and more undermined and almost entirely displaced by political and social ones. The growing weakness of the central power, caused by the inability of its incumbents as well as by geographical political conditions, resulted in the feudal tenants becoming independent princes who practically refused to recognize their feudal relationship to the sovereign. Politically although not in religious theory they became his equals or even his superiors, a development similar to that which occurred in the German Empire of the Middle Ages. This course of evolution led to the overthrow of the dynasty and the thorough reorganization of the old state in the third century B.C. The earlier type of feudalism disappeared and was replaced by a unified empire under the control of a much stronger central power, whose public functionaries were in charge of the administration of the different provinces. Nevertheless, feudalism constantly endeavored to reassert itself. According to the tradition of Confucianism feudalism on account of its ethicoreligious character was essential to the imperialpapal conception of the state; on the other hand, past experience had shown what an actual or at least possible danger to imperial rule its further development might prove. This inconsistency between theory and reality enabled feudalism to continue for a long time although in an entirely altered form within the body politic of China. Only gradually did it disappear as a constituent element in the organization of the state. Grants of land to members of the imperial family or high functionaries after the second century B.C. were of another nature and were intended only to provide the tenant with sulsistence worthy of his rank. The official's entire salary or at least part of it came from the revenues of his land grant, but sovereign powers were no longer connected with the grant or at least were no longer supposed to be. The maintenance of the ancestral temple also naturally influenced the situation.

In the course of time even this later kind of feudalism disappeared entirely. The great provinces of the empire were placed under the administration of governors who, although their legal powers were of a very wide scope, always remained mere public officials and might at any time be transferred from one province to another by the central government. The former feudal lords became the provincial satraps; this fact explains the latter's unusually wide independence.

O. Franke

JAPANESE. The ultimate origin of Japanese feudalism must be sought in the maladjustment between the Chinese regime, which was introduced in the seventh and early eighth centuries, and the primitive social habits of the nation, which reacted upon the alien institutions. Heretofore Japan's polity had in general been built upon the patriarchal organization of her ruling tribe, having its hereditary sovereign in the house father of the family, which was believed to be the main trunk of the whole tribe, and its subordinate chiefs in the heads of clans and families, which were arranged more or less in the order of kinship. As the population had grown and the territory expanded, the tribal system had become increasingly untenable; and an immense growth of clientage and of the aggrandizement of land at the hands of great families had brought the whole political scheme to the verge of dissolution. With a view to saving the country from the impending danger and once again securing the imperial power, the entire fabric of the state and society was now remade from top to bottom in a most daring and thorough program of reforms, which was almost wholly patterned after the centralized government of the T'ang empire of China.

The reforms made the emperor the apex of an elaborate system of bureaucratic administra-

tion cast in a logical and hierarchical mold. The entire free population was freed from private control and placed under the direct rule of the government. All the economic land of the country was rescued from the domanial lords and put under the ownership or at least the superior right of the state; and nearly all the rice land under cultivation was allotted equally to the people according to a plan of periodical redistribution. Immediately the ingrained native habits of the people began to react upon the artificial structure: the powerful would regain control over the persons and lands of the weak; the peasants would cling to their lots of rice land, for the success of its cultivation depended upon intensive care of long duration. These forces had to work through and around the new regime; nevertheless, they succeeded during the next four or five centuries in remodeling the elaborate organization bit by bit until at last a new sort of national life atterly unforeseen by the reformers emerged. In the eleventh century one may observe two groups of phenomena which had resulted: the progress of great private domains called $sh\bar{o}$ and the rise of the private warrior, the two factors which were destined to be combined in this and the following ages.

The typical shō at its full maturity was an extensive landed possession of a noble personage or of a religious institution, which was more or less exempt from public taxation and exercised more or less jurisdiction upon its inhabitants. These domains grew immensely in number and in extent and steadily absorbed into themselves the publicly controlled lands and people, whether by purchase or exchange, by gift or commendation or by compulsion. Moreover, the private as opposed to the public point of view, which was at once the cause and the effect of the $sh\bar{o}$, prevailed over the country so much that even public lands and public offices came to be regarded in the light of private possessions and tended to become patrimonies of influential families. It was thus that $sh\bar{o}$, as also the diminishing public "domains," came to include among their tenants of lands and offices the private warriors who had also come into being.

These warriors like the $sh\bar{o}$ were a spontaneous product of the age. The social unrest caused by the very failure of the reformed polity had increased and had compelled capable people to arm themselves for self-protection. At the same time ambitious sons of noble families, who had chafed under the enervating life at Kyoto, the tapital, had descended upon the country as offi-

cials of the shō or of the local government; they had already multiplied and formed well organized groups of families. Among the most influential were the two clans, the Minamoto and the Taira, both descended from the imperial house. Men of this new local nobility were also armed; and between them and local warriors there gradually arose relations of vassalage much in the same manner as in the Frankish commendation and benefice. At first the innumerable groups of lord and vassal that had thus sprung into being were largely independent of one another and in that ill organized form took part in small wars that occurred in many places whether as soldiers of fortune or in the service of public expeditions. While so serving, the separate bands were by the exigencies of war and by the increasing coherence of the clan organization among the lords welded into larger and larger bodies of vassalage, at first slowly and then from the middle of the twelfth century more rapidly. Thus arose new classes, with their new moral code of fidelity and valor, which in the next ages were to be the real political masters of the nation.

In this era of scarce currency the warriors like other people could subsist only upon the land. Did the institutions of fief and infeudation therefore come into existence? Here was a singular state of things. Most of the lands that supported the warriors were neither their own alodia nor fiefs granted by their military chiefs, but, on the contrary, tenures of land and office held under the local government or under the owners of $sh\bar{o}$; and on this material basis the vassals served their lords in war. So the typical warrior had two masters, non-military and military; to the former he as a tenant did official service or rendered merely pecuniary dues, but to the latter he as a vassal owed personal faith and gave services of life and death; from the former he received material support, while from the latter he enjoyed the necessary armed protection and sometimes also a benefice by way of subgrant made out of the tenure which the chief himself held of a landlord or the local administration. These early forms of the fief, which would remind one of the tenures of church land that were held pro verbo regis by the vassals of Pepin or Charlemagne, continued in Japan far longer than in Europe and did not cease until the prolonged civil war after the fourteenth century gradually crushed the non-military domanial lordship out of existence.

In this state of fief and vassalage the feudal

control of Japan passed in 1186 into the hands of the head of the Minamoto clan, Yoritomo; for in that year the imperial government permitted Yoritomo to instal his vassals throughout the country as military governors and as collectors of local taxes and domanial dues. In 1192 Yoritomo was granted the old title shogun ("leader of the army," originally, sent against rebellious aborigines of the north), the title which henceforth came to be identified save for brief interruptions with the supreme suzerainty of all the vassals and rear vassals of the country. Since Yoritomo was the first chieftain who succeeded in introducing an effective control of the nation through vassal relationships, the feudal ages of Japanese history in the political sense, which were to continue for nearly seven hundred years, may be said to have begun in 1186 or 1192.

Before attempting a discussion of feudal institutions it is necessary to make clear the sequence of the political history of the successive feudal ages. Yoritomo established the seat of his feudal government at Kamakura, near the present Tokyo. The Minamoto line of shogunate continued only for three short generations until 1219, but the rule of Kamakura was maintained a century longer until 1333 under the real control of the seven successive shikken, or lieutenants, of the Hōjō family; they upheld nominal shoguns of the imperial or a noble house. Then followed a brief period from 1333 to 1336 in which the imperial court at Kyoto succeeded in recovering the actual government but immediately lost its control through the dissatisfaction of the feudal classes. Again was established a shogunate, this time at Muromachi in Kyoto by the Ashikaga branch of the Minamoto clan; fifteen shoguns succeeded one another until 1573; meanwhile their easy going rule and loose organization plunged the country into a period of civil war. The Muromachi period may be divided into two parts: from 1336 until 1392 the struggle for supremacy between rival factions of warriors caused the imperial house to be divided against itself into two dynasties of emperors; in 1392 the dynasty supported by the Ashikaga shogun prevailed over the other and the imperial court was again united, although its fortunes as also those of the civil nobles in Kyoto sank to the lowest depths. The civil war which now raged with increasing fury for more than two centuries and wearied and exhausted all classes of people finally produced three leaders of superior ability; Nobunaga Oda

from 1573 to 1582, Hideyoshi Toyotomi from 1582 to 1598 and Iéyasu Tokugawa from 1600 to 1616 successively carried forward the heroic work of subduing disorder and unifying feudal control. It was Iéyasu who finally gave the nation the peace it sorely needed and founded at Edo, the present Tokyo, the Tokugawa shogunate which lasted through fifteen shoguns until 1867. Their administration rigidly bound as it was by rules and precedents could not cope with the political and economic troubles that gradually accumulated nor with the unforeseen difficulties caused by the advent of foreign powers demanding diplomatic dealings with a responsible central government. The years after the visits of Commodore Perry in 1853 and 1854 saw a tremendous upheaval of reform movements, which at last brought about the downfall of the feudal regime and the restoration of the emperor as the true sovereign. With this summary sketch of the political history as a background we shall glance at a few of the larger institutions which developed and then decayed during these seven centuries.

Many a singular aspect of Japanese vassalage was due to the abiding presence of the emperor as the sole fountain of all sovereign rights. This fact had constituted the basis of the great reforms of the seventh century; when the reformed polity had slowly died, the theory of imperial power survived. It was the sovereign who sanctioned the office of shogun and enabled the latter to give his feudal rule a hierarchical organization; and whenever that structure was weakened it was again loyalty to the imperial authority which was invoked as the justification of all movements for feudal unity and control and finally for the overthrow of the feudal regime itself.

When the shogunate first made its appearance its control over the warrior classes was very incomplete, for the suzerain's immediate vassals still held tenures under non-military lords and rear vassalage was still poorly developed. Then vassalage slowly advanced and embraced more warriors hitherto unattached. Feudal evolution was, however, much confused in the middle of the fourteenth century, when many opponents of the suzerain followed the non-military government of the rival imperial court. The shogun of the Muromachi age proper saw for a moment a perfect feudal hierarchy formed under his supreme command; for now almost all warriors had become vassals of some lord or other, while at the same time the domanial lords of the $sh\bar{o}$

and the local civil governors had nearly disappeared under the impact of war. The shogun and the baron, who had formerly been mere protectors of their vassals' fiefs, had gradually become their real grantors; the true fief—that is, the fief which was given by the lord out of his own fief or alodium to the vassal—had thus come slowly to prevail. Soon, however, the shogun lost hold of the political situation and the unitary hierarchy split into many regional hierarchies under warring lords; these ruled over vassals and peasants like autonomous princes. The worst state of anarchy was reached in the sixteenth century.

When Nobunaga and then Hideyoshi rapidly gathered up the military forces under their unified control they built their regime upon the existing state of society, in which men and land had been as completely feudalized as was possible; but they, especially Hideyoshi, held down the local barons with a strong hand, while permitting them to retain their seigniorial powers so long as their fidelity and service toward the suzerain were irreproachable. The public powers of suzerain and baron were firmly established, but the personal rights of the vassal in relation to the lord, which had risen hopefully during the civil war, were rudely curbed.

Such was the regime which Iéyasu, the Tokugawa shogun, inherited and perfected. He and his immediate successors carefully elaborated rules and institutions of government and built up a polity in which feudal and centralizing forces were combined and balanced with great ingenuity. Under this system the baronies (han) remained throughout as self-governing as before; but at the same time the shogun's autocratic control over them was even more thorough and effective than that of Hideyoshi. The shogun also created large domains for his immediate support, which he administered bureaucratically, not feudally. The barons (daimyo), on their part, generally copied this pattern in their respective spheres: they too became more or less autocratic lords and therewith combined the capacity of territorial princes.

It has been intimated that the true fief developed and prevailed in the period of civil war. The full differentiation of the warrior class from the peasantry took place somewhat earlier, in the course of the Kamakura age; and then its special privileges as a class rose steadily until it was during the shogunate of Edo raised in legal status far above the commoners. There are certain peculiarities of the class of warriors, or

samurai (literally, attendants or servitors), as they were called, in comparison with the chevaliers in mediaeval Europe. In Europe, generally speaking, the vassal and the chevalier were after a time one and the same person, and then from the thirteenth century there were a great many vassals who were not chevaliers; in Japan, on the contrary, once vassalage had triumphed, there existed few samurai who were not vassals, save the men who were by chance momentarily thrown out of feudal relations. Nor were there, as was usual in Europe, vassals who had plural lords at the same time; questions of ligeance were here practically non-existent. The samurai's moral tenets, called sometimes in late feudal ages bushido (the way of the warrior), present at once similarities to and differences from the attributes of European chivalry. The fundamental principles of personal faith and of personal honor in relation to it were common in both, for their origins and causes were much the same tradition and the same social needs and class interests, and the principles of *fides* were by no means a peculiar heritage of the Germanic races only. But the special virtues based upon personal faith which were demanded of the samurai and the chevalier were singularly different. The former was bound to far more than his contractual obligations and owed to his lord an absolute and unlimited devotion. As for lapses from mere duties, they were many and flagrant during the civil wars but were, particularly in the last period, swiftly and severely punished by a relentless system of sanction. Such onesided emphasis upon the vassal's virtues is a proof of the peculiar spiritual heritage of the race, as also of the peculiar character of the Japanese feudal contract, a discussion of which would take us too far afield. A corollary of the doctrine of duty was the accurate control of detail in the daily life of the samurai: he should at all times have a perfect mastery of the circumstances which were within his control, so that when a supreme moment of sacrifice supervened he should instantly accept it without leaving to lord or peer any possible cause for embarrassment. Finally, a remarkable contrast with European chivalry is seen in the absence of the cult of the woman. What may be said to have taken its place in the bushido was a ready understanding of and sympathy for the feelings of one's comrade and enemy—the enemy always included. This the samurai had inherited from the earlier ages when men and women of the court nobility cultivated what they termed mono

no awaré (feelings of things); the warrior deepened its meaning into a code of bushi no nasaké (the samurai's compassion). The resultant discipline of these and other moral qualities, strongly fused as they were in the crucible of war and of rigorous mutual sanction, was, when the feudal regime had passed away, translated into a staunch loyalty to the emperor and devotion to the country and has in this new form proved thus far an invaluable asset of the nation in its new career of struggle and ascent.

From the middle of the nineteenth century Japan saw a great national upheaval which after a bewildering succession of events swiftly and completely swept away feudal institutions and laid the foundations of a totally different regime. The primary motive force for the general change was the imperious need which was universally felt of effecting national unity in the face of foreign aggression; this was immediately followed by an ardent desire to compete with the western powers with the very weapons with which they confronted Japan. But the feudal system could hardly have been broken with such rapidity and thoroughness had it not been for the fact that it had been long outworn: the use of money and the growth of commerce and capital had for centuries been slowly loosening the feudal fabric of society; and the institution of the emperor, which had often seemed incompatible with the shogunate ever since its beginning, had remained as a potential rallying ground upon which the elements of discontent could find a common justification. The rigid structure of the Tokugawa shogunate after more than two hundred and fifty years of existence had grown out of joint at some crucial points, especially in the balance of power between the baronies and in the hierarchical order of the vassal classes: some baronies had passed beyond the central control, and almost everywhere the ability and courage for action were found much more in the lower strata of the samurai than in the higher and also in the men of dispossessed fiefs, whose numbers the autocratic shogunate had been multiplying, as it now saw, to its own injury. Bushido had trained loyalty at the expense of initiative and the spirit of adventure, but it was precisely these latter qualities of which the lower and outlawed samurai appeared as an embodiment; and with these they combined that disciplined sense of sacrifice which in its new forms often meant a desire fearlessly to go about doing things, no matter what, which they considered as disinterested. At first extremely confused,

their motives and aims gradually clarified themselves and impelled them to the accomplishment of definite ends, first destructive and then constructive.

The first great destructive effort was directed against the shogunate. The movement was inspired chiefly by men of the two strong baronies of the south, Satsuma and Choshū (Nagato), which had long been half hearted in their allegiance to the suzerain; often at odds with each other, they were finally united. Men of some other southern baronies and many unattached samurai bent their energies in the same direction, using whatever pretext they could seize upon to embarrass the authorities at Edo, although not always in concert and not always under the leadership of Satsuma and Choshū. At length in 1867 the last Tokugawa shogun, Yoshinobu (Keiki), surrendered his governmental powers to the emperor; he was at once deprived of his office and rank and in the next year retired into a pension fief which the imperial government granted him.

The shogunate was no more, but there still continued the old baronies and vassalage; in them were vested the intrenched interests of half a million armed samurai and their dependents. The surprising success with which these formidable historic institutions were obliterated must be attributed to the enlightened public spirit with which their long training in bushido inspired many lords and vassals. In 1869 the barons of Satsuma, Chōshū, Hizen and Tosa, all of the south, voluntarily returned to the emperor their land and their public powers, which they declared their forefathers had "usurped" from him; the example was followed by many others and then forced upon the rest in 1871. The 263 baronies were reorganized upon a semifeudal basis under imperial control, and the men of the old feudal classes were left as administrators and as holders of fiefs and pensions in the improvised seigniories. This system, whose incongruity with true national unity was obvious, was soon destroyed root and branch and replaced by a radically reconstructed, centralized system of administration. Between 1871 and 1874 a national army was created by conscription of all classes of people; beginnings were made of a new law and a new system of courts completely replacing the feudal jurisdiction; the currency, the land tax and popular education were likewise started on novel principles; and preparations for a new national constitution and even agitations for the establishment of representative assemblies began. Soon after, the samurai were disarmed and their revenues were redeemed by public bonds representing a total capitalization which, based as it was upon the samurai's own claims, was far below the real value of their old fiefs and pensions. Thus was the historic feudal regime of Japan eradicated rapidly and thoroughly and without great injustice.

The sweeping revolution was not accomplished altogether peacefully. The shogunate offered feeble armed resistance near Kyoto, but the great battle which impended at Edo in 1868 was happily averted by a remarkable personal understanding between a few men on the imperial and the feudal sides. Certain conservative baronies of the north which still held out against the new government were easily reduced by force in the same year.

K. Asakawa

See: Manorial System; Serfdom; Military Orders; Religious Orders; Guilds; Commune, Mediaeval; Appanage; Allegiance; Chivalry; Class; Status; Nobility; Kinship; Land Tenure; Landed Estates; Colonate; Revenue Farming; Mfrichary Troops; Alienation of Property; Entail; Escheat; Inheritanct; Primogeniture; Canon Law; Civil Law; Courts; Islamic Law; Statt; Empire; Government; Monarchy; Centralization; Decentralization.

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FEUDS are relations of mutual animosity among intimate groups in which a resort to violence is anticipated on both sides. The historical blood vengeance feud (q.v.), common in primitive society, constitutes the most characteristic feud pattern. The family feuds which are to this day frequent in certain isolated regions are closely related to it, and many other forms of violence in contemporary society are also complicated by elements highly reminiscent of the true feud. While there is no actual historical continuity between the primitive and the modern feud, there is in many respects a continuity of pattern. The chief difference is that while the blood vengeance feud was itself the expression of primitive law, the modern feud is at least formally illegal and characteristically fills the interstices left in the functioning of the prevailing system of legal organization. A feud element is to be found in racketeering, which abounds where an opportunity exists to organize a market which remains active although under the ban of the law or which cannot be organized due to legal obstacles in the path of organization. The inspection of the racketeer and his mob frequently discloses the presence of many intimate ties which add to the business of violence the fillip of inter-racial or interfamily rivalry. Italian gangs in bootlegging wars in Chicago are often aligned against Irish gangs and the members of one clan battle the members of another. Personal loyalties to particular gang chiefs or to members of an old club stand out prominently in the history of organized violence. Armed conflict between the warring business factions becomes glorified and not infrequently distorted by the complicating motives of a more intimate and less calculated nature. Those who fall by the wayside are often those who have allowed "sentimental" considerations to mislead them into overestimating their power and into refusing to accept a working arrangement while yet there was time and opportunity.

The family feud is distributed chiefly where isolation and sparseness of population have developed a tradition of legal self-help. It is characteristically associated with the Balkans, Corsica, Sicily, Scotland and the southern mountain areas of the United States. The latter, the most spectacular feud areas in the United States, are isolated localities where self-help was once the dominating necessity and where decentralized judicial administration has enfeebled the enforcement of the law. The notorious Hatfield-McCoy feud may be taken as typical. It was fought out between families which lived on opposite sides of a small river fork which separated Kentucky from West Virginia. The land where they lived had been prized by several Indian tribes for its game, and the early settlers unprotected by any official authority did their own hunting, farming and fighting. They adopted the fighting tactics of the Indians, who shrewdly took advantage of the cover offered by the forests. During the Civil War property was endangered by marauders from both armies and the Hatfields and the McCoys organized separate bands to protect themselves and their neighbors. Although on the same side of the conflict, these bands frequently brushed with one another, but it was not until fifteen years after the war at an election quarrel that the feud broke out. Each family had been so long isolated that it was related to nearly everyone in its own vicinity, and it was utterly impossible to secure the punishment of a Hatfield on the Kentucky side or of a McCoy on the West Virginia side of the line. Each side was reenforced by desperadoes who were fugitives from justice in more settled communities. They all gloried in the unbounded freedom of their lives; indeed, one reason for the rekindling of the feud pattern is precisely the vivid excitement which accompanies the release of primitive human impulses and the revival of the code of an earlier epoch.

Something of the primitive immediacy of the feud appears also in the relations between races and nationalities whose relative status is undergoing rapid change. If the former slave challenges the economic position of the master, if the foreign wage earner applies for a job, if the foreign cultivator possessing a low standard of life bids for a farm, if the foreign manager operates a plantation and disregards local law and custom, if, in short, any sudden upset occurs in the existing pattern of claims for freedom of movement, for income or for deference, there arise the probability of violence and the growth

of malignant hostilities between the opposing groups. Wherever social change begets social conflict the way is open for the appearance of primitive ways of adjusting grievances. Only a few individuals may be adversely affected to start with, and their claims for aid through regular channels have small chance of success in the confusions of the novel situation. The difficulties which arise piecemeal from the exigencies of those who are early affected and who are inequitably burdened by the strain of social development are those which provoke the appearance of local violence, in which personal, family and other intimate differences and affiliations may reenforce the motives to assertive action.

Quarrels within a group pass by easy stages into feuds, which are particularly intense just prior to the dissolution of the unity of the group. The controversy may be essentially trivial in its origins, yet it may occur at a time when the energies of the group are nicely balanced, and thus at once threaten the integrity of the whole. Under these circumstances virulent hatreds are aroused and directed against factional opponents or contending parties. The general sense of danger to the whole fabric of the social order renders it more difficult for each individual to keep his own repressed disloyalties in check. This leads him to project his own disloyalty upon his opponent, thus aggravating the situation.

It is notorious that feuds continue long after the precipitating episodes are lost in oblivion and that every participant is keenly sensitive to matters of honor. A by-product of the feud relation is the relatively permanent concentration of affects upon non-practical matters. There arises a state of continuing sensitiveness about ceremonious deference to emblems, names and associated prestige symbols. The members of each party to the feud are intimately locked together in the bonds of mutual identification, able to get on unusually well with one another just so long as they are able to externalize their aggressions against an outside party. Instances of failure to accept opportunities for aggression threaten the whole structure of intimate understanding, and the aggression turns back against those closely connected with the group. The relinquishment of personal autonomy which is necessitated by the feud can be sustained only when ample targets and occasions of aggression against the outside group are offered. Hence the supporting motives to the cult of honor.

Although it is possible to point to isolated remnants of the feud, modern society has many

elements which are radically incompatible with it and which have contributed to its decline. Industrialism, intercommunication and urbanization have altered both the geographical and the imaginative worlds in which men live. Loyalties to primary associations have been disintegrated through the scattering of families, the growth of new preoccupations and the emergence of larger social aggregates. The decline in the feud pattern can be traced among peoples who have shifted their habitat from rural oppression to comparative urban independence. After a spectacular flare up in the United States the "Molly McGuires" decayed among the Irish immigrants, as did the Mafia among the later Italian immigrants.

The enterprises of those who promote the large secondary patterns of society may be cut across by "private feuds." State and church are consequently hostile to the "petty" loyalties which sustain the feud. Even in the field of international relations, once marked by "private war," violence has been regularized to conform to the exactions of the modern state system and to diminish the role of spontaneous efforts for "justice" and "honor."

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See: BLOOD VENGEANCE FEUD; GANGS; RACKETEERING; MAFIA; MOUNTAIN WHITES; VIOLENCE; CONFLICT, SOCIAL; ISOLATION; HONOR.

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FEUERBACH, LUDWIG ANDREAS (1804-72), German philosopher. In initiating the naturalistic reaction to the absolute idealism of

Hegel, Feuerbach fathered various schools of aggressive materialism which profoundly influenced the tenor of philosophical, political and social thought in Germany. He began his career as a Hegelian but soon rejected the system as a disguised theology which sought to deduce and justify by dubious logic the empirical, non-rational facts of experience. Proclaiming the necessity for a reform of philosophy he urged that man and man's psychological needs be taken as the starting point of all social and philosophical thinking.

Feuerbach's Das Wesen des Christenthums (Leipsic 1841, 2nd ed. 1843; tr. by M. Evans, 2nd ed. London 1877) contained a revolutionary interpretation of theology and converted the left Hegelians to a vague humanistic materialism. He contended that the essence of religion is human feeling, that man in worshiping God is unconsciously worshiping an idealization of himself. Theology is an intellectual sublimation by which man attempts to gratify his feeling of want. Marx and Engels criticized Feuerbach's psychology of religion on the grounds that it was unable to explain the fact that men have different religions at different times and places and that religious feeling itself is a social product. They also took Feuerbach to task for substituting a new religion of humanity for outmoded theology.

Feuerbach's sensationalistic materialism was even more influential in combating orthodox religion than was his religious psychology. Moleschott, Büchner, Vogt and other scientific popularizers who played important roles in the free thought movement avowed themselves his disciples. Mind was declared to be a derivative product of the body and the whole content of man's consciousness was explained as the automatic effect of the external world upon his sense organs. Marx criticized the static nature of Feuerbach's materialism and upheld the activity of the mind and the power of human beings to react upon their environment and transform it. Feuerbach's "vulgar materialism" prevented him from adequately explaining social and historical events. The incidence of the Feuerbachian doctrine that man is a creature of his physical environment was primarily political, as is shown by his attempt to offer a food chemistry as a social panacea: "We can see the important ethical and political significance which the doctrine of foods has for humanity Human fare is the foundation of human culture and sentiment. Do you want to improve the people? Then instead of preaching against sin give them better food. Man is what he eats" (Review of Moleschott's *Lehre der Nahrungsmittel*, reprinted in Sämmtliche Werke, vol. x, p. 22).

Feuerbach's social epistemology and anthropomorphic metaphysics contain *in nuce* many of the views later developed by Dilthey, Durkheim and more recently Heidegger.

SIDNEY HOOK

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FEUERBACH, PAUL JOHANN ANSELM VON (1775–1833), German jurist. Feuerbach studied at the University of Jena, where he became first an instructor and later a professor of law. Subsequently he taught at Kiel and at the Bavarian University of Landshut. In 1805 he was appointed to the Bavarian Ministry of Justice and commissioned to draft the new criminal code. He resigned in 1814 to become second president of the Court of Appeals in Bamberg; from 1817 until his death he was first president of the Court of Appeals in Ansbach.

Feuerbach was an outstanding figure in the history of German criminal law. His scientific works bear the imprint of the great intellectual currents of his time and he was obviously influenced by the theory of natural law and by the zeal for rational reform which characterized the Enlightenment. It was to Kant's method of critical philosophy, however, that he was most responsive. Kant's sharp distinction between legality and morality was reflected in Feuerbach's Kritik des natürlichen Rechts (Hamburg 1796), which attempted to establish the fundamental independence of law as against morality and which opposed the claims of the criminal law to punish the immoral state of mind as such. This point of view accounts for his passionate opposition to Stübel and Grolman's doctrine of prevention, which made a precautionary defense against dangerous characters the goal of criminal law.

Feuerbach's attitude toward legislative reform was expressed in his Revision der Grundsätze und Grundbegriffe des positiven peinlichen Rechts (2 vols., Giessen 1799-1800), a work based upon a narrowly juristic conception of criminal law. Penalties were to be inflicted only where there was an infringement of law, and strict legal retribution was justified by its double aim of protecting the community through its deterrent effect upon crime and of fixing limits for the state's punitive power. Thus the categorical imperative of the Kantian criminal law of retribution found with Feuerbach its justification in the aims and tasks of positive law.

Feuerbach's principles were embodied in the Bavarian criminal code of 1813, which he prepared. It was an epoch making work in German criminal law and was adopted by several other German states. Based upon the theory that a penalty can be meted out only where the law actually provides for it, the code was a logically articulated penal system with graduated penalties and with a clear legal statement of the grounds for mitigating or increasing them; each statement of facts with its fixed concepts and relative penal categories was couched in unambiguous language and left little room for judicial discretion. Feuerbach secured the abolition of torture in Bavaria in 1806, but his plans for a thorough reform of the traditional inquisitorial proceedings met with no success. Through his writings, however, he was successful in arousing an intelligent appreciation of the importance of comparative law in relation to procedure and in preparing the way for the impending turning point in penal procedure which brought with it public arraignment proceedings.

Feuerbach was also the author of masterly studies of individual criminal psychology, of which the account of Kaspar Hauser (Kaspar Hauser, Beispiel eines Verbrechens am Seelenleben des Menschen, Ansbach 1832; tr. by H. G. Linberg, 3rd ed. London 1834) aroused the most widespread interest. These scarching literary studies of crime did not, however, suggest to their author that any psychological differentiation was necessary in the rigid schematization of criminal acts. The limitations of his aims grow increasingly apparent with the development of modern social and social-pedagogical impulses. Nevertheless, the germ of the now widely accepted indeterminate sentence is found

in the Bavarian criminal code with its provision for possible release before the termination of the penitentiary sentence. Feuerbach was the first German jurist to direct effectively the science and legislation of criminal law into the paths needed by the modern constitutional state. He insisted upon unconditional maintenance of the authority of the law and upon respect for the legal guaranties which protect individual freedom and without which protective law degenerates into lawlessness.

Max Grünhut

Other important works: Philosophisch-juridische Untersuchung über das Verbrechen des Hochverraths (Erfurt 1798); Lehrbuch des gemeinen in Deutschland gültigen peinlichen Rechts (Giessen 1801, 14th ed. 1847); Kritik des kleinschrodischen Entwurfs eines peinlichen Gesetzbuchs für die baierischen Staaten, 3 vols. (Giessen 1804); Betrachtungen über das Geschworenen-Gericht (Landshut 1813); Betrachtungen über die Öffentlichkeit und Mundluhkeit der Gerechtigkeitspflege, 2 vols. (Giessen 1821–25); Aktenmässige Darstellung merkwurdiger Verbrechen, 2 vols. (Giessen 1828–29), tr. by Lady Duff Gordon as Narratives of Remarkable Criminal Trials (London 1846).

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FICHTE, JOHANN GOTTLIEB (1762–1814), German philosopher. Fichte was born at Rammenau, the son of a ribbon weaver. He studied at Jena and Zurich and taught at Jena from 1794 to 1799. When he was dismissed on charges of atheism he took up residence in Berlin; there he helped to found the University of Berlin, of which he became the first rector in 1810. After he resigned from this position in 1812 he continued to teach at the university until his sudden death.

The originality of Fichte's ethical system consisted in the synthesis it established between the autonomous ethics originating in Kant and the French Revolution, and social and anti-individualistic ethics. At the opposite pole from the hierarchic superindividualism of

Hegel and the traditionalistic impersonalism of the romanticists and Schelling, Fichte went beyond the individualism of Kant in a transpersonalistic conception which made all moral consciousness participate in a supraconscious flux of autonomous creative activity (mind conceived as "we"). The totality derived from transpersonal activity he considered to be antihierarchical and founded on the equivalency of all the members, who were strictly individualized and indispensable; it was a totality of integration and collaboration, not of domination and subordination. The activistic transpersonalism of Fichte ended in a synthesis between universalism and individualism. He held it to be erroneous to identify the moral ideal totality with the state and not to distinguish between the society and the state as empirical reality. Society opposed as an entity to the state had specific positive values superior to those represented by the state. He insisted that the state was only a relative organization whose end was to render itself useless and to annihilate itself. In his Reden an die deutsche Nation (Berlin 1808, new ed. Munich 1929; tr. by R. F. Jones and G. F. Turnbull, Chicago 1922), which has been wrongly interpreted as the source of pan-Germanism while in fact the work combated it, Fichte declared that it was infinitely more important for the Germans to develop their national culture whose support was society than to dominate by external victories obtained by their state. Since he urged that the national genius be realized in the objective and unpersonifiable community and not in the will of a state, there was nothing aggressive about Fichte's nationalism; it harmonized with his cosmopolitan ideal of humanity—in which all nations were to collaborate in original ways-and with his pacifism.

Fichte was led to socialism, of which he was one of the first representatives in modern times, as a logical consequence of his activistic and at the same time anti-individualistic ethics. In interpreting liberty as a continuous creation and in considering labor as the medium through which this creation was to be realized he was led to demand positive guaranties that every man should be in a position to exercise creative liberty by his labor. Socialistic property should be, according to Fichte, identical with labor and be constituted according to the exigencies of its division: it consisted primarily in the right to follow one's professional bent freely backed by the right to the instruments of production

and the whole product of labor. Property should belong to the guilds into which the three essential professions were divided according to their specialties. The functioning of production was to be ordered by the self-government of these corporate associations and their mutual agreements. The opposition between society and the state thus played an essential role in Fichte's socialistic constructions. The closed state was neither proprietor nor producer. The autonomous economic society governed itself through the mediation of the corporate associations. Fichte's thought tended in the direction of a synthesis between liberalism and socialism, toward an anti-individualistic liberalism and an antistate socialism. It ended, however, in a state socialism and he finally attributed to the corporations a monopoly instituted by the state which uses the corporate associations as its organs. This may be explained by the fact that when Fichte elaborated his socialist theory he was under the influence of juridical individualism, which reduced every positive right to the will of the individual or the state. In perceiving that every economic organization must be regulated by law Fichte held that it must be controlled by the commands of a state, which was in contradiction to his predictions concerning the future disappearance of the state. When later Fichte rejected juridical individualism and prepared the way for a new and larger conception of law directly attached to unpersonifiable objective communities (a conception of social law which later under the influence of the Fichtean ideas was developed by the historical school of jurists, by Christian Krause and the Germanists with their theories of Volksrecht), he no longer had time to recast his socialistic constructions. Fichte's ideas have, therefore, acquired a double influence in the history of socialist doctrines. Through the instrumentality of Krause and his pupils, Ahrens and Darimon, who published in French, they influenced Proudhon (whose philosophy of work is entirely Fichtean) and their traces may be found in syndicalist and guild socialist doctrine. On the other hand, state socialism in Germany, not only of Lassalle but also of Rodbertus, has claimed the authority of Fichte.

GEORGES GURVITCH

Works: Sämmtliche Werke, ed. by I. H. Fichte, 8 vols. (Berlin 1845-46), together with Nachgelassene Werke, ed. by I. H. Fichte, 3 vols. (Bonn 1834-35), and Fichtes Briefwechsel, ed. by Hans Schulz, 2 vols. (2nd ed. Leipsic 1930), represent a complete collec-

cion of Fichte's writings. An edition of his selected works is that by Fritz Medicus, 6 vols. (Leipsic 1911-12).

Consult: Medicus, F., Fichtes Leben (Leipsic 1914); Lask, E., Fichtes Idealismus und die Geschichte (Tübingen 1902); Léon, Xavier, Fichte et son temps, 3 vols. (Paris 1922-27); Kroner, Richard, Von Kant bis Hegel, 2 vols. (Tübingen 1921-24); Weber, Marianne, Fichtes Sozialismus (Tübingen 1900); Wallner, Nico, Fichte als politischer Denker (Halle 1926); Gurvitch, G., Fichtes System der concreten Ethik (Tübingen 1924), and L'idée du droit social (Paris 1931); Walz, G. A., Die Staatsidee des Rationalismus und der Romantik und die Staatsphilosophie Fichtes (Berlin 1928); Vaughan, C. E., Studies in the History of Political Philosophy, ed. by A. G. Little, 2 vols. (Manchester 1925) vol. ii, ch. iii.

FICKER, CASPAR JULIUS VON (1826–1902), German historian. Ficker studied jurisprudence and history in Bonn, Münster and Berlin and was a pupil of Johann Friedrich Böhmer in Frankfort. In politics he was pan-German and deeply regretted the exclusion of Austria from the German Confederation. At the age of twenty-six he became a professor at the University of Innsbruck and taught there in the faculty of philosophy until 1862 and again from 1877 until 1879. From 1862 to 1877 he was a member of the faculty of law.

Ficker's special fields of research were mediaeval history and German and Italian legal history. His knowledge of the archives of Germany and Italy was unsurpassed and his editions and critiques of these sources were contributions of lasting value. Ficker was equally important as a teacher, particularly of the auxiliary sciences and of historical methodology. He was the founder of the Innsbruck historical school and was Count Thun's most valued adviser when the latter as minister of education undertook the reform of Austria's university administration. In later years he boldly attempted to show through comparative law, independently of comparative philology, the kinship of the German peoples, maintaining that law is as characteristic of a nation as language. He saw the chief key to the genealogy of German law in matriarchy. Through his studies in comparative law he established connections between Spanish and German law. He anticipated philologicalgeographical research and reached fundamental conclusions concerning the relationship of law and custom and concerning the influence of custom on the development of law.

EBERHARD VON KÜNSSBERG

Important works: Vom Reichsfürstenstande (Innsbruck 1861), continued by P. Puntschart (vol. ii, pts. i-iii,

Innsbruck 1911–23); Vom Heerschilde (Innsbruck 1862); Forschungen zur Reichs- und Rechtsgeschichte Italiens, 4 vols. (Innsbruck 1868–74); Untersuchungen zur Rechtsgeschichte, 6 vols. (Innsbruck 1891–1904); "Über nähere Verwandtschaft zwischen gothischspanischem und norwegisch-isländischem Recht" in Österreichisches Institut für Geschichtsforschung, Mitteilungen, supplement ii (1888) 455–542. Ficker also edited Der Spiegel deutscher Leute (Innsbruck 1859); Acta imperii selecta (Innsbruck 1870); Die Regesten des Kaiserreichs 1198–1272, 3 vols. (Innsbruck 1881–1901). A complete bibliography of the works of Ficker is found in Österreichisches Institut für Geschichtsforschung, Mitteilungen, vol. xxx (1909) 389–93.

Consult: Jung, J., Julius Ficker (Innsbruck 1907); Caillemer, Robert, "La formation du droit français médiéval et les travaux de Julius Ficker" in Université d'Aix-Marseille, Annales des facultés de droit et des lettres, vol. ii, no. ii (1906) 33-58, and Annales de la faculté de droit, vol. i (1907) 1-39, 207-24.

FICTIONS. In the recent reaction against physical science and its assumption of an independent reality to which ideas must conform if they are to be true, idealistic philosophers and theologians, aided by some humanistic pragmatists and dogmatic positivists, have pressed the point that the concepts of natural science such as law, cause, atom, ether and the like are mere fictions having no correspondence in nature, although they are of aid in controlling things for practical purposes. Among social scientists too there has grown up a tendency to regard abstractions like social law, the economic motive, legal sovereignty, social order and so on as fictions that have no objective significance in real life.

The subject was brought to the fore in 1911 when Vaihinger published his Philosophie des Als Ob, in which he attempted a survey and analysis of the fictions of the various sciences and of practical and religious thought. Interest in this field was further stimulated by the Annalen der Philosophie, which contained contributions from diverse specialists, especially jurists. Aside from the inaccuracy and superficiality of Vaihinger's wide learning the chief weakness of his position is that in trying to stretch the notion of fiction to cover everything he leaves no room for a valid distinction between truth and falsehood, between fiction and reality. If identity and difference, unity and plurality, and all the other fundamental categories are fictional, then every one of Vaihinger's assertions about reality, the order of sensations, convenience and fictions is itself fictional and results in a self-destructive nihilism. This, however, grows out of his unnecessary and mythical dualism between a purely active thought and absolutely passive sensations, as if they belonged to two different worlds. If we realize that the abstract objects of thought, such as numbers, laws, perfectly straight lines, are real parts of nature, even though they do not exist as particular things but as the relations or transformations of such particulars, none of the so-called fictions of science in any way falsify its results. Because numbers or ratios are abstractions it does not follow that there is anything false or fictional in the assertion that the earth has one moon or that the rate of infant mortality has recently decreased.

The contentions of the fictionalists, however, furnish cautions against false interpretations of scientific procedures and results. Abstractions are real parts, phases or elements of things or else their relations. To identify them with things is a widespread fallacy which may be called reification.

The processes of abstraction and classification have been called neglective fictions because the class "man" does not exist and only individuals do. But it cannot be denied that such statements as "John is a man" can have significance only if the predicate denotes something really common to a number of individuals. Even an artificial classification of governments such as Aristotle's cannot be called fictional merely because particular governments do not conform to it. For existing governments may be mixed forms or combinations of the elements of monarchy, aristocracy and democracy and their perversions, and the classification helps us to recognize the significant elements of such mixed forms. Although certain elements always occur in conjunction with others and never in isolation, this is no argument against their reality. The fact that no one can be a brother or a creditor without being other things is no argument against the reality of the fraternal or the credit relation. Science must abstract some elements and neglect others because not all things that exist together are relevant to each other. Hence there is no fiction in talking about purely economic motives if we remember, as Adam Smith surely did, that in actual life these are associated with other motives.

If the reality of abstractions is recognized, then there is nothing fictional (in the sense of false) about perfectly straight or circular lines, perfectly free bodies, frictionless engines and other entities which seem imaginary and indeed are known to be impossible of separate existence. For the relation of distance between things ex-

ists in nature where the things are and is independent of the thickness of chord or chain by which it is measured; while there exist no free bodies (i.e. bodies not acted upon by any forces), all existing bodies do move in such a way that we can detect the part played by inertia and can tell what would happen if all other forces ceased to act. Similarly, while no actual engine is frictionless, we can compute from certain data the part that friction plays in the total work of any engine. It is not true that "artificial" lines of latitude or longitude are fictional merely because such lines are not actually marked on the earth. They do represent certain actual geometric relations. No map is ever a perfect picture of the country it represents. It must neglect all except a very few traits. But it may be perfectly accurate or truthful within the required limits. Another way of looking at neglective fictions such as perfectly rigid bodies, perfect distribution and the like is to view them as ideal limits. No one thing in nature corresponds to them, but classes of things do differ in degrees of rigidity or homogeneity and there is no falsity in using the limit as a real characteristic of a series.

If there is no inherent falsification in abstraction, there is none in proper scientific "construction" out of such elements. Examples of such constructions are the typical vertebrate animal, the typical river valley, the manor or factory as an economic unit and the ideal of a government by law. Much abuse has been heaped on the "social contract" as a fiction. If asserted as a historical fact it is clearly a myth. But thinkers like Hobbes have not advanced it as a historical fact. To them it is rather a logical device for analyzing actual complex social processes. If we apply the term "state of nature" to human conduct apart from the influence of laws, we can regard our actual social relations as those of a state of nature modified in certain ways analogous to the way our conduct is modified by contract. The analogy is helpful only to the limited extent to which it is true.

In its search for the truth science must formulate some anticipation of what it expects to find. Such anticipation is clearly not fictional even if it turns out to be false, provided it has been held as a hypothesis to be tested. In trying to visualize the unknown the imagination must clothe it with attributes analogous to the known. Thus electricity was first conceived as a fluid, then as lines or tubes of force, and is now viewed as a current of mutually repellent "electrons."

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Thus also the mind was viewed by British associationist psychologists as an associated group of "mental states" and by William James as a "stream of consciousness." Each of these, like the various mechanical models of the ether or of various unknown physical processes, suggests verifiable analogies and thus directs research. If these directions prove false, the analogy has acted like a false hypothesis. But the term fiction may properly be applied to certain imaginary and unverifiable entities that vivify our conceptions but are strictly irrelevant to the truth or falsity of our conclusions. Thus Helmholz' and Poincaré's one or two dimensional beings, Maxwell's "sorting demon" and similar entities in social science are really metaphors to express abstract relations. Where one of these figures is used any one of an infinity of others could be substituted, just as according to Poincaré's proof wherever a mechanical model is used an infinity of others is possible. If these metaphors are taken literally we have the myths of which popular science is full.

It must be recognized, however, that metaphors are not always invented to vivify discourse. They are often the way in which creative minds perceive things, so that the explicit recognition that metaphors are implicit analogies comes later as a result of reflection or analysis. Although undiscriminating, such primitive perception is likely to be most vivid and its apt expression may become current coin, so that it becomes difficult if not impossible to discriminate between metaphor and literal truth. As the essence of science is the search for truth, it seeks to eliminate irrelevant fictions through the use of technical terms or symbols that denote the abstract relations studied and nothing else. But as no human terms can adequately express (although they can point to or adumbrate) the unknown, science is engaged in an endless process of self-correction and revision of its language. Such a process is irksome to popular discourse and to the social sciences that employ such discourse. Language itself is a prolific source of mythology.

The foregoing analysis of metaphors will clarify the role of fictions in the primitive mind. It is a pseudo-rationalism to explain primitive animism as the result of an explicit analogy, of attributing souls to inanimate objects because they sometimes move like animated ones. Human perception is vague in its beginnings and such discrimination as that between one's own "papa" and other "papas" comes later. Thus

when a child kicks a chair against which he stumbles he does not personify the chair on the basis of an analogy. His reaction is at first directly organic, and only later does he learn to discriminate between the chair and those who are to be punished. Now if primitive perception is intellectually indiscriminating it is also organically and emotionally vivid. When such metaphoric expressions get established by usage they lose their vividness, but like other habitual practises they are difficult to change. Also words as all symbols absorb the emotional value of the things they symbolize, just as the flag or the scroll of the law becomes sacred apart from that which it denotes.

This points the way to an understanding of the fictional element in ceremonial expressions. Just as the ritual of social life demands certain forms of dress or certain steps or gestures regardless of convenience, so it demands certain accredited expressions regardless of their literal truth. Thus the rules of courtesy among the Chinese and others require the host to say always that his house is mean and that his guest is distinguished and confers an honor. Even those who do not take such expressions literally may be offended at any departure from the social mode. The role of ceremonial expressions in the outer forms of make believe is as important in social life generally as in the games of children and primitive man. The social life of a country like England may be viewed as a game that requires among other things that people should speak of His Majesty's army, navy and treasury (although the debt is "national") or that the actual leaders of the government should speak of "advising" the king when the latter has in fact no choice but to obey. Similarly it is the fashion to speak of the United States as a democracy where the law is the will of the people made by its representatives, even though few know what laws are being made or have much control over those who make them.

These considerations will illumine the nature of fictions as they appear in the field of their greatest development: the law. Here fictions appear clearly as assertions that contain an element admittedly false but convenient and even indispensable to bring about certain desired results. Although fictions border on myths which are genuinely believed and on pious frauds which are intended to deceive in aid of good causes, they can be distinguished from them. Thus when a court asserts that for the purposes of a given suit the high seas are situated in a

given parish in London, no one believes the assertion to be literally true and no one is deceived. But the fiction makes it possible for the court to acquire jurisdiction and helps the parties to settle their case in a convenient court. The Roman jurists explained such fictions by means of the Greek philosophic distinction between convention and nature. In the nineteenth century Jhering called attention to the element of implicit analogy in them. An adopted child is like a natural child in his rights and the rights of a Roman citizen in captivity may be treated as if he were away on state business. So in our own law when a deed or mortgage is recorded a really innocent purchaser is said to have had notice and is not allowed to prove the contrary. For this really means that the act of recording makes the rights of all purchasers (innocent or not) alike, so that the fact of actual ignorance is irrelevant.

Why, however, does not the law use accurate expressions instead of asserting as a fact that which need not be so? Why assert that a corporation is a person, instead of saying that a certain group of rights and duties are analogous to some extent to those of a natural person? Why say that the United States embassy in China and an American boat at sea are on American soil, when we mean to assert that certain legal relations are to be determined by the law of the United States? The answer is partly that the practical convenience of brevity outweighs the theoretic gain of greater accuracy. But more important is the fact that at all times, and not merely (as Maine would have it) in "primitive" society where legislatures are not functioning, the law must grow by assimilating new situations to the old, and in moments of innovation we cling all the more to old linguistic forms. The latter minister to the general feeling of security especially where the prevailing myth or make believe is that the judge merely declares the law and cannot change or extend it. That we can obey the law even when making it grow is more than the legal profession itself can often grasp.

From the point of view of social policy fictions are, like eloquence, important in giving emotional drive to propositions that we wish to see accepted. They can be used, as indicated above, to soften the shock of innovation or to keep up a pleasant veneration for truths which have been abandoned, as when new allegoric or psychologic meaning is given to old theologic dogmas that we no longer believe. But if fictions some-

timer facilitate change they often hinder it by cultivating undue regard for the past. If the social interest in truth were to prevail, we should in our educational and social policies encourage greater regard for literal accuracy even when it hurts national pride and social sensibilities. But no one has seriously suggested penalizing rhetoric and poetic eloquence in the discussion of social issues. The interest in truth is in fact not as great as in the preservation of cherished beliefs, even though the latter involve feelings which while temporarily pleasant prove ultimately to be illusions.

MORRIS R. COHEN

See: PHILOSOPHY; SCIENCE; METHOD, SCIENTIFIC; BELIEF; SYMBOLISM; MYTH; JUDICIAL PROCESS; CHANGE, SOCIAL.

Consult: Vaihinger, H., Die Philosophie des Als Ob: System der theoretischen, praktischen und religiösen Fiktionen der Menschheit, auf Grund eines idealistischen Positivismus (4th ed. Leipsic 1920), tr. by C. K. Ogden (London 1924); Annalen der Philosophie, vols. i-viii, ed. by H. Vaihinger and R. Schmidt (1919-30), especially vols. i and vi; Ellis, H., The Dance of Life (London 1923) ch. iv; Cohen, Morris R., "On the Logic of Fiction" in Journal of Philosophy, vol. xx (1923) 477-88, and Reason and Nature (New York 1931); Demelius, G., Die Rechtsfiktion in ihrer geschichtlichen und dogmatischen Bedeutung (Weimar 1858); Jhering, R. von, Geist des römischen Rechts, 3 vols. (6th ed. Leipsic 1907-21) vol. iii, sect. 58; Tourtoulon, P. de, Les principes philosophiques de l'histoire du droit (Lausanne 1919), tr. by M. M. Read (New York 1922) ch. xi, sect. E and Appendix; Levi, A., La société et l'ordre juridique (Paris 1911) ch. iv; Lecocq, L., De la fiction comme procédé juridique (Paris 1914); Kornfeld, I., Allgemeine Rechtslehre (Berlin 1920) p. 45-60; Smith, J., "Surviving Fictions" in Yale Law Journal, vol. xxvii (1917-18) 147-66, 317-30; Fuller, L. L., "Legal Fictions" in Illinois Law Review, vol. xxv (1930-31) 363-99, 513-46, 877-910; Bernhöft, F., "Zur Lehre der Fiktionen" in Aus römischem und bürgerlichem Recht (Weimar 1907) p. 239-90. For further bibliography see Baumhoer, K., Die Fiktion im Straf- und Prozessrecht, Archiv für Rechts- und Wirtschaftsphilosophie, supplementary no. xxiv (Berlin 1930) p. 8-12.

FIDELITY INSURANCE. See BONDING.

FIELD, DAVID DUDLEY (1805-94), American jurist. Field graduated from Williams College in 1825, studied law in Albany and New York and began a lucrative practise in the latter city in 1828. He continued as a leader of the bar until 1885, when he retired.

Beginning in 1836 Field devoted all his spare time to various phases of law reform. In 1847 he framed a code of civil procedure which simplified the actions of the law and united the courts

of law and equity. This code was adopted in New York and later in other American states and in England and her colonies. A code of criminal procedure and a penal code followed, although opposition from the bar delayed application of the latter. Field's Draft Outlines of an International Code (2 vols., New York 1872; 2nd ed. 1876) was well received and although intended merely as a tentative draft is still cited by supreme courts in all countries on questions of international law. In the same year Field participated in the establishment of the Institut de Droit International at Ghent and also the Association for Reform and Codification of the Law of Nations (now International Law Association) at Brussels, of which he was the first president.

Field was a Jeffersonian Democrat but turned in 1856 to support antislavery, union, Lincoln and the Republican party, to return to the Democratic fold only in 1876, with three months' service in Congress. He continued to the time of his death to labor in the activities of the Free Trade League, the International Law Association and other causes.

PITMAN B. POTTER

Consult: Speeches, Arguments, and Miscellaneous Papers, ed. by A. P. Sprague and T. M. Coan, 3 vols. (New York 1884–90); Rolin, Albéric, in Institut de Droit International, Annuaire, vol. xiv (1895–96) 310–20; Field, Henry Martyn, The Life of David Dudley Field (New York 1898); Phelps, Christina, The Anglo-American Peace Movement in the Mid-Nineteenth Century, Columbia University, Studies in History, Economics and Public Law, no. 330 (New York 1930).

FIELD, MARSHALL (1834–1906), American merchant. Field was prominently identified with the evolution of modern merchandising practises. In 1856 he became clerk and traveling salesman in a Chicago dry goods firm and was made a partner in 1861. After a series of reorganizations, in which Potter Palmer and Levi Z. Leiter participated, the firm became in 1881 Marshall Field and Company, with separate retail and wholesale branches. The growth of the business was bound up with the economic expansion following the Civil War. Chicago was growing rapidly as the industrial and financial metropolis of the middle west, where villages, towns and stores sprang up almost overnight. These changes, bringing with them higher standards of living and new business practises, Field shrewdly measured and capitalized.

In his Chicago department store Field introduced all the new retail merchandising practises characteristic of the period—the one-price system, exchange of goods, cash sales, limited credit and extensive advertising. He appreciated the value of patronage by the rising rich upper and middle classes and catered to their demands for exclusive service by displaying high class goods amid luxurious settings in separate rooms, where purchasers would be "undisturbed by the passing throng." Department stores were becoming cathedrals of trade, and Field led in the introduction of meretricious splendor. But he did not neglect other classes: his store was one of the first to introduce in 1885 an "underprice" or "economy" basement.

Field was an innovator in his wholesale business as well. He practised intensively buying on a mass scale and for cash. The period was one of falling prices and reckless speculation; Field imposed stringent credit terms on his customers and developed a credit system adapted to the needs of merchandising in the rapidly growing middle west. As early as the seventies Field was contracting for the whole output of manufacturing plants, dictating quality and price; offices were established in the most important world centers, where buying agreements were concluded with local manufacturers; and the company finally established its own manufacturing plants in the United States, Europe and Asia. This system, the competitive advantages of which were enormous, is now in general use by chain store organizations.

In addition to his merchandising activities Field was a power in many other business enterprises; probate of his estate revealed ownership of securities in one hundred and fifty industrial, utility and financial corporations. He left \$120,000,000 to two grandsons, both minors. The business became completely institutionalized and after Field's death it expanded rapidly; in 1929 Marshall Field and Company did a business of \$179,059,000, more than twice the business of 1906.

Lewis Corey

Consult: Ditchett, S. H., Marshall Field and Company; the Life Story of a Great Concern (New York 1922) Goodspeed, T. W., The University of Chicago Biographical Sketches, vols. i- (Chicago 1922-) vol. i, p. 1-34; Myers, Gustavus, History of the Great American Fortunes, 3 vols. (Chicago 1910) vol. i, p. 259-96.

FIELDING, WILLIAM STEVENS (1848–1929), Canadian statesman and journalist. Fielding began work on the Halifax *Morning Chronicle* at the age of sixteen and eventually became its editor. In 1882 he was elected from

Halifax to the Nova Scotia legislature; in the same year he entered the cabinet and became head of the government in 1884. In 1896 after a successful premiership of twelve years he was made minister of finance in the dominion cabinet under Laurier, a post which he retained until the defeat of the Liberal party in 1911. His tenure of office synchronized with a period of unparalleled national expansion and development, in which his financial policies played an important part. His administration was marked by a generous expenditure which was never allowed to endanger a balanced budget, numerous tariff revisions embodying a mild protection, and a constant endeavor to develop wider markets by commercial treaties with foreign countries. A notable example of the latter was the abortive reciprocity agreement with the United States in 1911.

His greatest achievement was the introduction in 1897 of the preferential tariff, which gave British goods a substantial advantage in the Canadian market. This preference was gradually extended by Canada to other dominions and to many colonies; it was also incorporated in their tariffs and in that of Great Britain. In recent years the question of reciprocal preferences has become one of the most vital problems facing the British Commonwealth of Nations.

In 1921 Fielding again became minister of finance under Mackenzie King and began the task of rehabilitating the national finances, which had been badly crippled by the war and by heavy commitments on railways. He had realized his objective of a balanced budget when illness forced his retirement in 1924. In 1923 he was appointed member of the British Privy Council, an honor rarely conferred upon a Canadian who has not served as prime minister or chief justice.

ROBERT MACGREGOR DAWSON

FIGGIS, JOHN NEVILLE (1866–1919), English churchman, historian and political philosopher. Figgis was born in an evangelical family; had a brilliant undergraduate career at Cambridge, where he was influenced especially by Maitland and Creighton; and eventually entered the Anglo-Catholic Community of the Resurrection. Except for a few years in a rural parish his career was academic in the best English sense—Cambridge, lectures in England and the United States, active participation in the life of his church, writing for a cultivated but not narrowly

professional public. Figgis was the perfect example of an English type very puzzling to foreigners. He was a most sincere Christian, but his intellect was almost skeptical and his love of paradox extreme; he was an earnest moralist but certainly not a sober one; he carried his learning with a suspicious grace. The fundamentals which Figgis defended are to most men dull and useful and are apt to be corrupted if touched by lighter gifts.

As a historian of political ideas Figgis has few peers. His interest lay mainly in "the embryology of modern politics," in that period specifically in which the clash between church and state for dominance determined the direction of modern political theory. The Divine Right of Kings (Cambridge, Eng. 1896, 2nd ed. 1914) and Studies of Political Thought from Gerson to Grotius (Cambridge, Eng. 1907, 2nd ed. 1916) deal with various aspects of this central interest and The Political Aspects of St. Augustine's "City of God" (London 1921) approaches it less directly. In writing of political ideas he shows them in their setting of political and ecclesiastical institutions. But he is even more concerned to reveal their lack of absoluteness in other ways-how political convenience leads to sweeping doctrine, how general ideas originate in an attempt to rationalize one's aims and justify one's position, how a doctrine created by one camp may come in time to defend the intrenchments of an opposite one. Figgis was not haunted by the modern fear that ideas have no driving force. He was content to write of ideas in the grand manner, as part of a living tradition for men of culture. He is notably fair to outworn creeds, as in The Divine Right of Kings, where he shows how much knowledge of men as political animals the defenders of that lost cause possessed.

Figgis' own contribution to political theory, The Churches in the Modern State (London 1913, 2nd ed. 1914) is one of the most important sources of the pluralist movement. To Figgis any religious group is in itself a societas perfecta, a corporation with a group will of its own; it is a growth and no mere creation of the state. Just as the orthodox individualist holds that men have as human beings certain rights, infraction of which by state action is unethical (and Figgis, although he does not emphasize this view, at bottom accepts it), so Figgis holds that churches have certain rights upon which the state cannot morally-and therefore lawfully-infringe. A church must be respected because it is alive, because it fulfils functions the state cannot fulfil.

Indeed, it is in the church and in other forms of corporate life such as trade unions, clubs, colleges, families (here Figgis points the way to other pluralists) that individual rights become real. Erastianism of any sort—Kulturkampf, the Free Kirk, the Gorham case—must defeat itself, since it is based on a false theory of the sovereignty of the state. Figgis leaves undecided the question as to who is finally to arbitrate a dispute between church and state. He would admit that the possession of armed force often makes the state sovereign in fact; his book is primarily a plea that public opinion be sufficiently enlightened to deny ethical sovereignty to the state.

CRANE BRINTON

Consult: Rockow, L., Contemporary Political Thought in England (London 1925) p. 131-35.

FILANGIERI, GAETANO (1752-88), Italian political scientist, lawyer and economist. Filangieri, who came of a noble family, was called to the court of Naples in 1777 as a result of a masterly defense of a royal decree. Through his contact with the royal court, which continued until his early death, he was able to exercise a practical influence upon the government of Naples. His great unfinished work, La scienza della legislazione (7 vols., Naples 1780-85; tr. by R. Clayton, 2 vols., London 1806), seeks to portray a complete reformatory system, describing the specific content of the laws where Montesquieu had limited himself to their spirit. The work is dominated by the antihistorical rationalism of illuminism. Legislation which makes for the happiness of nations must obey needs that are rational, enduring and universal, not historical, transitory and particular. To Filangieri the fundamental human needs are essentially the preservation and security of life, mutual confidence and cooperation. The state should realize the most perfect civil society; it must for that very reason recognize the solidarity of interests that binds together nations as well as classes and parties within the nation, for the prosperity and progress of one are inconsistent with the misery and degradation of the others. To this end Filangieri proposes: an equilibrium to be maintained by a class mediatory between people and sovereign; an increase in wealth, which equitably distributed is not corruptive but creative of social values; a physiocratic recognition of the preeminence of agriculture, the basis of arts, commerce and the financial system; a definite legal system prepared by a corps of magistrates; and a system of penal law formed upon the principles of Beccaria. The state must not only prevent crime; it must promote virtue. Hence its task of education—a public function differing for the two classes of workers, manual and intellectual, both of which Filangieri recognizes as essential, although he calls the one productive and the other sterile. The *Scienza* evoked wide approbation from liberals and condemnation in the ensuing reaction. Benjamin Franklin praised it and interested himself in making it known in America.

RODOLFO MONDOLFO

Consult: Ruggiero, Guido de, Il pensiero politico meridionale (Bari 1922); Touchard, G., "Un publiciste italien au XVIIIe siècle" in Revue historique de droit français et étranger, 3rd ser., vol. XXV (1901) 319-46, 490-525, 744-66; Gentile, P., L'opera di Gaetano Filangieri (Bologna 1914).

FILIBUSTER, LEGISLATIVE. See LEGIS-LATIVE ASSEMBLIES.

FILIBUSTERING. The term filibuster was originally synonymous with buccaneer or pirate and was applied to the adventurers who plundered the Spanish colonies in the Caribbean in the seventeenth century. About the middle of the nineteenth century the word came to be applied particularly to those who engaged in armed expeditions from the United States under private initiative against nations with which it was at peace. The Jameson raid in South Africa in 1895, however, indicates that filibustering was not a purely American practise.

Armed incursions into nearby territory were not uncommon in the colonial period, when England, France and Spain were disputing for possession of North America, and they continued after the attainment of American nationality. Early in the nineteenth century there was much plotting in the lower Mississippi valley by adventurers who had an eye on the Spanish possessions in Florida and Texas. The so-called Burr conspiracy from 1805 to 1807 is an example. In 1810, while west Florida was claimed by both Spain and the United States, a small band of Americans captured the Spanish fort at Baton Rouge in the disputed area and was planning to seize Mobile and Pensacola when the American government's effective assertion of its claims brought these operations to an end. The revolt of Texas in 1836 led to the organization of expeditions in various parts of the United States to aid the Texans in their struggle for independence from Mexico. None of these activities is referred to as filibustering, although they resemble the later movements so designated,

The period from 1850 to 1860, which may be called the filibustering decade of American history, presented conditions peculiarly favorable to filibustering. Since 1803 the American people had seen their western boundary pushed from the Mississippi River to the Pacific Ocean, and they had grown accustomed to taking the lands next to theirs in whatever way seemed most convenient. The isolation in which they had been reared had left them lacking in that sense of international obligation prevailing among peoples surrounded by stronger neighbors. In 1850 the prospect of further acquisition of contiguous territory by government action seemed remote, but the land hunger of Americans was not yet appeased. Firm in their belief in the "manifest destiny" of the United States eventually to control both continents of the Western Hemisphere, they looked toward the fertile lands of the American tropics. If the government was indisposed to take aggressive steps private enterprise would take matters into its own hands. This general expansionist sentiment was strengthened by the desire of southern political leaders for more slave territory, in order to maintain the balance of power in the Senate between the slave and free states.

The filibusters were a conglomerate lot. Western pioneers, soldiers of fortune, political exiles from Europe, banished "liberators" from Latin America and men who were idle and adrift in the seaboard cities made up most of the rank and file of the expeditions. They were actuated by the desire for power, by the love of adventure, by the opportunities which the weak countries seemed to offer for economic exploitation and the introduction of a new social and political order and in many cases by the mere need of an occupation.

In 1850 and 1851 Narciso Lopez, a disaffected Spanish general, led two abortive expeditions from New Orleans for the liberation of Cuba. Shortly thereafter two French expatriates in California, Charles de Pindray and Gaston de Raousset-Boulbon, organized companies of their stranded countrymen in San Francisco and conducted expeditions into the Mexican state of Sonora. The Mexican authorities were at first friendly, apparently hoping to use French colonists as a buffer against rumored filibustering incursions by Americans; but later the defenders were driven out.

That there was a basis for the Mexican fear of American filibusters was soon evident. In October, 1853, William Walker, a young lawyer and

editor of Marysville, California, landed with a small force in Lower California and proclaimed an independent republic with himself as president. The American authorities cut off reenforcements and supplies, and after a few months the filibusters were driven back across the border. Walker next organized an expedition to Nicaragua in 1855, where he had been invited by one of the revolutionary factions. The aid of the Accessory Transit Company, an American concern carrying freight and passengers between Atlantic ports and San Francisco by way of Nicaragua, assured a steady flow of supplies and recruits from the United States and Walker soon became master of the country, exercising his power as commander-in-chief while a native Nicaraguan served as provisional president. This government was recognized by the United States in May, 1856. A few weeks later Walker had himself elected president. Meanwhile in a contest for control of the transit company he sided with what proved to be the weaker faction, seized the company's property in Nicaragua on the ground that the company had violated its charter, and made a new grant to his favored group. Cornelius Vanderbilt, the head of the opposing group, immediately sent agents to aid a coalition of Central American states against Walker. Vanderbilt's agents cut off Walker's reenforcements, the filibusters were surrounded by the allied forces at Rivas, and on May 1, 1857, Walker surrendered to Commander Charles H. Davis of the United States Navy, who had intervened to prevent further bloodshed. In November Walker eluded the federal authorities at Mobile and landed by a ruse under the very eyes of an American naval force stationed at Greytown, Nicaragua, to apprehend him. Commodore Paulding thereupon landed an armed force on Nicaraguan soil and arrested him. Sent back to the United States as a paroled prisoner, Walker was released soon after his arrival. Still another attempt to return to Nicaragua led to his arrest in Honduras by Captain Salmon of the British navy. Salmon turned him over to the Honduran authorities, by whom he was condemned to death and shot on September 12, 1860.

Two other expeditions worth noting in this period were those of Henry L. Kinney from New York to Greytown in 1855 and of Henry A. Crabb from California into Sonora in 1857. Kinney found Walker already in control and unwilling to share his fortune with a rival. Many of his followers deserted to Walker, and he returned to the United States. Crabb was a schoolmate of

Walker and sought to emulate his example by accepting the invitation of a revolutionary leader in Sonora to bring a force of Americans into the country. The revolutionists turned against them, however, and the entire force was captured and shot.

Filibustering never again attained the importance that it had in the fifties. Yet the Fenian raids on Canada between 1866 and 1870 and the Virginius affair in Cuba in 1873 showed that conditions favorable to filibustering had not wholly disappeared. The growing sense of international obligations among the American people, the closer commercial and financial relations between the United States and Latin America, the development of aviation and radio communication and the complex mechanization of modern warfare have all contributed to make filibustering of the nineteenth century type less likely to recur

It is the duty of the United States government under both international law and the federal statutes to prevent the organization within its jurisdiction of hostile expeditions against friendly nations. Although so many of these filibustering expeditions succeeded in leaving the country, positive evidence of official negligence or sympathy is lacking. Many filibusters, including Lopez, Walker and Kinney, were haled before the federal courts, but public sentiment was so strongly in their favor that evidence was difficult to obtain and even when the government's case was well established juries would not convict. The American public glorified the filibusters very much as did the British the Jameson raiders.

Walker's recruits were not organized on a military basis until they had left the jurisdiction of the United States; they usually carried tickets as regular passengers on the company's steamers and the government officers were practically helpless in preventing their departure, although they searched the ships repeatedly for evidence of neutrality law violations. When President Buchanan in 1857 placed American vessels in Central American ports to prevent the landing of filibusters he clearly went beyond what was required in enforcing the letter of the neutrality laws, but this plan was much simpler than the impossible task of keeping watch on the whole coast line of the United States, and the Central American governments did not regard it as a violation of their sovereignty. The president felt constrained, however, to characterize Commodore Paulding's action in landing armed American forces in Nicaragua as a "grave error" although actuated by "pure and patriotic motives."

The filibustering incursions had evil consequences for all concerned: they were destructive of life and property; they caused European governments to distrust American professions of disinterestedness in the Caribbean; and they engendered a suspicion of the United States in Latin America which still persists.

WILLIAM O. SCROGGS

See: Annexation; Conquest; Imperialism; Neutrality; Revolution; Piracy.

Consult: Roche, J. J., The Story of the Filibusters (London 1891), reprinted as By-ways of War (Boston 1901); Scroggs, W. O., Filibusters and Financiers (New York 1916); Walker, William, The War in Nicaragua (Mobile 1860); Montúfar y Rivera Maestre, L., Walker en Centro-América (Guatemala 1887); Nicaise, A., Les fibustiers américains (Paris 1861); Bancroft, H. H., Central America in Works, vols. vi-viii (San Francisco 1882-87).

FILMER, SIR ROBERT (died 1653), English political pamphleteer. During Filmer's life his works remained little noticed, but after the Restoration the Tory party found in him their best defense. His Patriarcha; or, the Natural Power of Kings (London 1680; 2nd ed. by E. Bohun, 1685) has survived, however, chiefly because Locke and Sidney took him as representative of the views they were attacking. To Filmer, a champion of the divine right of kings and an enemy of the claim of the natural equality of men, the argument for the need of consent on the part of the governed was anathema. He agreed with Hobbes in his absolutism but felt that the contract was a dangerous weapon in its defense. Moreover, Hobbes ignored the question of legitimacy. To avoid these difficulties Filmer developed his patriarchal theory, endeavoring to show that the description of kings as fathers of their country was not mere metaphor but literal truth. To urge indeed that contemporary rulers traced back genealogically to Adam was absurd, as he soon perceived. Nor was he very convincing when quoting Scripture to prove that unlimited monarchy was God's will. Accordingly he chose to rely mainly on the argument that monarchy was natural, showing how it originated in the power of the father over his family in primitive times and developed from that into government in the wider sense. His contemporaries, lacking in historical mindedness and inclined to view men and rights abstractly, were not easily persuaded that an account of origins constituted a justification. In short, the process of development soon rendered antiquated the views of Filmer and of the school which he epitomized. He retains one claim to merit: his theory was, as an account of the origin of the state, more correct historically and sociologically than the fiction of a social contract so widely used by the leading thinkers of the day.

Thomas I. Cook

Other works: Observations concerning the Originall of Government (London 1652); The Anarchy of a Limited and Mixed Monarchy (London 1648); The Necessity of the Absolute Power of All Kings (London 1648).

Consult: Figgis, J. N., The Divine Right of Kings (2nd ed. Cambridge, Eng. 1914) p. 148-60, 248-55; Allen, J. W., in Social and Political Ideas of Some English Thinkers of the Augustan Age, ed. by F. J. C. Hearnshaw (London 1928) ch. ii; Gooch, G. P., Political Thought in England from Bacon to Halifax (London 1914) p. 160-64; Dunning, W. A., A History of Political Theories from Luther to Montesquieu (New York 1905) p. 254-61.

FILOSOFOVA, ANNA PAVLOVNA (1837-1912), Russian feminist leader. Born and brought up in a family of the old nobility, the Diaghilevs, at a time when serfdom was still in full force, she was influenced by the liberal reforms of the sixties. After her marriage at the age of eighteen to a high government official she devoted herself entirely to public activities, chiefly in the field of the cultural emancipation of women. With the exception of exclusive boarding schools for the nobility there existed before 1861 no sclools for women in Russia and their rights were extremely limited. Outstanding women resorted to fictitious marriage, as in the case of the celebrated mathematician Sophie Kovalevski, in order to be able to go abroad for their education. Mme. Filosofova, a woman of great beauty, wit and culture, made use of her husband's prominent position in government circles, but in 1863 she was allowed merely to give popular scientific lecture courses for women in a private home. Despite her social standing in 1879 she was exiled from Russia by the police for two years. Owing to her efforts and those of her associates, Mmes. Stasova, Konradi and Trubnikova, permission was finally granted in the seventies for the opening of the Bestuzhev College for Women and later of the Medical Institute for Women. She was also instrumental in founding a society to provide inexpensive living quarters for working women. Starting with a capital of 540 rubles the society later erected its own building and shops for large numbers of working women. It founded a model trade school and a kindergarten.

Beginning in the nineties Mme. Filosofova took an active part in the International Women's

Movement and in 1899 was elected honorary vice president of the Women's Council but was refused permission by the government to establish a Russian branch. After the revolution of 1905 she organized the All-Russian Women's Congress and became its permanent chairman. As leader of the liberal wing of feminism Filosofova opposed the militant tactics proposed by the more radical socialist groups.

E. Kuskova

Consult: Tyrkova, A. V., Anna Pavlovna Filosofova i eya vremya (Filosofova and her time) (Petrograd 1915); Selivanova, Nina N., Russia's Women (New York 1923) p. 150–58; Bentzon, T., "Femmes russes" in Revue des deux mondes, 5th ser., vol. xi (1902) 850–85.

FINANCE, PUBLIC. See Public Finance.

FINANCIAL ADMINISTRATION is that part of the government organization which deals with the collection, preservation and distribution of public funds, with the coordination of public revenues and expenditures, with the management of the credit operations on behalf of the state and with the general control of the financial affairs of the public household. The term also refers to that part of fiscal science which is concerned with the principles and practises involved in the proper administration of state finances.

Several factors have contributed to the increasing importance of the administrative aspects of public finance in modern times: first, the ever widening scope of state activities and consequent growth of public receipts and expenditures; second, the democratization of political institutions and the establishment of parliamentary control over the public purse; and. finally, the recent tendency of applying a more simplified and rationalized procedure to the business of public administration.

The main principles underlying a sound system of financial administration are: unity of organization and centralized responsibility; strict compliance with the will of the legislature as expressed and formulated in the budget; simplicity, promptness and regularity of functioning; and, finally, an effective but not too complicated system of control over all stages of the financial operations. No system of administration is complete without a trained and reliable personnel, the recruiting of which is a task equal in importance to that of proper organization itself.

The various systems of financial administration are products of slow growth; their develop-

ment is closely associated with that of political institutions. For a long time England and France were the only countries which endeavored to build up a satisfactory financial administration. The constitutional law which regulates the financial administration of England is the Exchequer and Audit Departments Act of June 28, 1866, "an Act to consolidate the duties of the Exchequer and Audit Departments, to regulate the Receipts, Custody and Issue of Public Moneys, and to provide for the Audit of the Accounts thereof," supplemented by regulations contained in the Treasury Minute of March 2, 1867. In France the laws which regulate the financial administration are included in the Règlement général sur la comptabilité publique, the first edition of which was published in the Ordonnance royale du 31 Mai 1838 and the last edition on May 31, 1862. Other countries followed the French or the English example; the French, adopted chiefly on the continent, is more lucid and systematic than the English, but less satisfactory. In adopting it some countries profited from experience and improved on it; for example, Belgium in the law regarding public accounts of May 15, 1846, and the general regulation concerning public accounts of December 10, 1868; Italy in the laws of February 17, 1884, and the regulation of May 4, 1885, concerning the administration and the general public accounts; and Germany in the law of December 31, 1922, concerning the regulation of the budget of the Reich, the codified text of April 14, 1930, and the ordinance of August 6, 1927, concerning the service of the Treasury of the Reich.

Of all countries Great Britain has undoubtedly worked out the most detailed and unified system of handling her fiscal affairs. The central organ of administration is the Treasury. Since 1612 the Treasury has been organized in the form of a board, consisting of the first lord of the Treasury, a title ordinarily given to the prime minister, the chancellor of the Exchequer and a variable number of junior lords of the Treasury (usually three). Actually, however, the chancellor of the Exchequer is the only head of the Treasury. Under his supervision is a trained personnel whose cooperation insures the continuity of tradition and prevents technical errors. The most important members of the staff are the permanent secretary to the Treasury, whose task it is to direct the administration, and the permanent financial secretary, who controls the other governmental departments. These two important officials also have carefully selected staffs.

The Treasury centralizes the estimates of expenditures of all governmental departments. The chancellor of the Exchequer is the official financial counselor of the crown; he requests the appropriations for all national expenditure from the House of Commons and thus exercises a strong control over the other ministers. The House merely votes on the estimates of expenditures; its members do not possess the right of initiating expenditures or of demanding an augmentation of the credits. The credits are always granted according to the demand of the chancellor of the Exchequer.

The Treasury exercises a continuous and direct control over the financial activities of all governmental departments. In fact, the House of Commons grants the credits to the crown and not to the ministers. It is incumbent upon the crown to state whether a credit is to be used or whether certain expenditures are to be made, and the Treasury is the organ through which the crown makes its will known. Accordingly, before making any expenditure a minister must obtain authorization from the Treasury. If it is found by a department that the credits which it had obtained are insufficient, it must forward a written statement to the Treasury in order that the latter may decide whether the expenditures might not possibly be deferred or whether it could present a "supplementary estimate" to the House of Commons. Finally, it is the task of the Treasury to supervise the efficiency of all governmental departments, to which it may issue instructions.

The Treasury supervises the collection of the public revenues and the public debt service, but separate agencies are charged directly with the two respective tasks. It supervises the preservation and distribution of the public funds, which are kept in the Bank of England. The Treasury maintains a current account with the Bank, to which all the receipts collected by the agents of the revenue departments are forwarded. Upon orders from the Treasury the Bank effects transfers to the accounts of the various accounting officers, especially the paymaster general. The practise of depositing the government funds with the Bank of England helps to keep the public funds in circulation and minimizes the restrictive effect of heavy tax payments on the money market.

The comptroller and auditor general, a very high and powerful public official, although nominated by the crown is considered an agent of Parliament and not of the Treasury. He can be recalled only by Parliament, and his salary does not depend upon the annual vote of credit. He takes care that the Treasury withdraws funds from the account of the Exchequer with the Bank of England only in conformity with the will of Parliament; every withdrawal of funds requires his authorization, which is known as a grant of credit by the comptroller and auditor general.

The Treasury has the power of contracting short term loans in order to balance temporary deficits. These loans are either advanced by the Bank of England, in which case they are called ways and means advances, or raised by bankers through the agency of the Bank of England (through the sale of Treasury bills). In case of productive capital expenditures the Treasury may be authorized to issue Exchequer bonds, which are of greater duration than Treasury bills and are usually repaid from the earnings of the investment.

The Treasury does not directly audit the public accounts. It publishes weekly financial statements about receipts, payments and the status of the Exchequer. In addition each year it submits financial tables to Parliament informing it of the financial situation. The auditing of the accounts is performed by a committee of Parliament, the Committee on Public Accounts, chiefly with the assistance of the comptroller and auditor general and one official of the Treasury. This committee also supervises the financial activities of the Treasury. The observations which it makes form the basis of the Treasury minutes, which are instructions forwarded by the Treasury to the various departments. A collection of all instructions given since 1857 has been published in the Epitome of the Reports from the Committees on Public Accounts 1857 to 1910, and of the Treasury Minutes Thereon and forms an excellent digest of English public accounting.

In France the system of financial administration is directed by the minister of finance. Until 1925 there existed unity of administration, but in that year for reasons of political opportunism there was established side by side with the Ministry of Finance a Ministry of the Budget, the principal duty of which is to prepare the budget and present it to parliament. This dualism has not produced good results. The minister of the budget is inferior in position to the minister of finance and is not superior to the other ministers. Although the latter submit to him a proposal of

their expenditures, the minister of the budget has no special power to control them. The authority and responsibility of the minister of the budget and the minister of finance are impaired by the finance commissions of the Chamber of Deputies and the Senate, which possess the right to modify the financial measures of the government. The proposals discussed by parliament are more often those of the commissions rather than those of the government. Finally, every deputy has the right to propose new expenditures as well as additional credits. The legal restrictions intended to prevent gross abuse are ineffectual. According to the constitution senators do not possess the right to propose an increase in the credits, but in practise the Senate circumvents the constitution by voting a nominal reduction of the credit. When the modified budget is again submitted to the Chamber any deputy can propose the additional credit desired by the Senate. Under such conditions the authority of the minister of finance and the minister of the budget depends entirely upon their personalities. The French budget has no responsible author; it is the offspring of an unknown father.

The Ministry of Finance does not exercise a direct, permanent and effective control over the financial activities of the other ministerial departments. Each minister uses the credits granted to him without interference from the minister of finance. Where additional appropriations are necessary, the minister of the budget demands them from parliament in agreement with the interested minister. Because of the weak position of the minister of the budget and the preponderant influence of financial commissions, deputies and senators additional credits are of considerable importance in France. In 1890 the legal power of controlling expenditure was granted to the minister of finance. An official of the Ministry of Finance, a contrôleur des dépenses engagées, supervises the expenditures of each minister. Every project which involves expenditures must be submitted for the countersignature of that official, who examines its conformity with the law and the credits voted by parliament, but not its expediency. The contrôleur has the right to comment on the efficiency of the methods employed. In case the countersignature is refused an appeal is taken to the minister of finance, who renders the final decision. A minister who knowingly incurs expenditures without the indorsement of the contrôleur is held civilly and criminally responsible for his action according to the law of August 10, 1922; the law, however, has

never been enforced. The *contrôleur* does useful work but lacks the authority necessary to render his services effective.

The minister of finance is in charge of the collection and distribution of the public revenues. The custody of the public funds, however, is entrusted to the Bank of France, and the money thus remains in circulation. The Treasury has a current account with the Bank, to which the revenue collectors forward the public funds. The minister of finance, on the other hand, gives instructions to the Bank for placing the necessary amounts at the disposal of the paymasters. The creditors of the state receive pay orders from the respective ministers, which are honored by the accountants only if they bear the countersignatures of the contrôleur and the Direction du Mouvement Général des Fonds du Ministère des Finances. The first confirms the authority of the minister in regard to this expenditure, while the second guarantees that no creditor is given a pay order without previous verification of the fact that the national Treasury contains the amount necessary for honoring it. Every month after calculating the funds at his disposal the minister of finance informs each minister of the amount up to which he may issue pay orders during the following month. The accountants are held personally responsible in case they honor orders which lack the correct form. The extent of their personal responsibility is, however, determined in the last instance by the minister of finance.

The minister of finance is the only authority charged with securing compliance with the law and the will of parliament. There exists no authority comparable to the office of the comptroller and auditor general in England to prevent the minister of finance from violating the will of parliament. He has the power to incur public expenditures regardless of their legality. His orders, even if unlawful, must be obeyed by the comptrollers of expenditures and the accountants. He has the power of releasing the accountants from their responsibility. Moreover, the law of August 10, 1922, authorizes the government to open credits, by a decree of the Council of the Ministers, for expenditures required in the interests of public security, providing the credits are subsequently ratified by the parliament; the fact that the government frequently makes use of this power considerably decreases the effectiveness of the parliamentary control. The legal prerequisites which insure the publicity of the financial transactions are disregarded. For instance, in 1929 the public was astonished to learn that the national Treasury had at its disposal reserves of approximately 20,000,000,000 francs which were unknown to parliament. In 1930 a law was enacted which vainly tried to establish a control over the Treasury; its provisions, which are very poorly drawn, are not enforced.

The minister of finance is in charge of the administration of the national debt as well as of the issues of public loans. In order to balance the temporary deficits of the Treasury he floats short term loans in the form of Treasury certificates. Until 1928 the Bank of France gave the Treasury a standing non-interest bearing advance of 600,000,000 francs, which was indirectly abolished when the franc was stabilized.

The minister of finance supervises the public accounts of all ministerial departments and even examines the statements of the accountants before they are forwarded to the Cour des Comptes for the final verification. Actually, these statements are forwarded to the Cour des Comptes only after a delay of several years; the verification is therefore ineffective. Parliament is completely uninterested in the matter.

Although the financial administration of Germany is influenced by the French system, nevertheless German tradition favors the institution of powerful executives confronted by an impotent parliament. This tradition is evident in the very considerable power granted to the minister of finance as the head of the financial administration. His share in the preparation of the budget is larger than in France, although not so large as in England; he himself draws up the budget of the receipts and for the preparation of the budget of expenditures he utilizes the proposals which the other ministers submit to him, and which they formulate uniformly according to a model prescribed by him. He possesses the right to criticize the proposed expenditures of the other ministers. In the case of a conflict decision rests with the Council of Ministers; the minister of finance may, however, demand that the council take a new vote at a meeting at which all the ministers are required to be present. The credit requested by a minister against the advice of the minister of finance is granted only if the majority of the ministers are in favor of it and if the chancellor of the Reich votes with the majority. The plan of the budget approved by the Council of Ministers is then submitted to the Reichsrat, a body composed of delegates from the states, where it is examined by a commission headed by the minister of finance. The latter may ask that

modifications proposed by the Reichsrat be submitted to the Council of Ministers, who may approve or reject them. The project approved by the government is next submitted to the Reichstag. Although the budget commission of the Reichstag may tend to encroach upon the prerogative of the minister of finance, it lacks the power of the Finance Commission of the French Chamber and cannot propose a new budget. Every member of the Reichstag has the right to propose additional expenditures; actually, however, the right is exercised by the strong political parties in their negotiations with the government. In 1931 the regulations of the Reichstag were changed and its members prohibited from increasing credits or reducing receipts without indicating the ways and means of reestablishing a balance. If in order to comply with these regulations a reevaluation of the receipts is proposed, it must be submitted to the approval of the government. Moreover, if the Reichstag augments the credits demanded by the minister of finance, the increase must be submitted to the approval of the Reichsrat. If the latter does not render its decision or vetoes the increase the president of the Reich must either submit the matter to the referendum of the electoral body within three months or order the Reichstag to reconsider the matter; in the latter case the increase is sustained only if it is supported by a majority of two thirds. So far the second course has always been followed. Even if, as usually happens, two thirds of the members of the Reichstag vote for the increase, the president of the Reich may decree a referendum by the people. Finally, article 48 of the Weimar constitution of August 11, 1919, authorizes the president to promulgate the necessary ordinances in case the Reichstag should reject the budget or in case it should be dissolved before it can vote. Thus on July 18, 1930, when the Reichstag was dissolved after having rejected the budgetary proposals of the government, fiscal ordinances were promulgated by the president of the Reich and the budget for 1930 was established by decree subject to a subsequent law.

Actually the German method of financial administration has not been successful in securing a balanced budget. All budgets since that for 1924 have resulted in deficits. The deficit of an ordinary budget must figure as an ordinary expenditure in the second budget thereafter, which means that new taxes are to be raised in order to cover the deficit. In reality the deficits have been covered by loans, especially short term foreign

loans; this has given rise to a floating debt which in August, 1930, exceeded the sum of 1,300,-000,000 marks.

The minister of finance does not possess the power, as does the chancellor of the Exchequer in England, to control his colleagues when the budget is carried into practise; his position in this respect resembles that of the French minister of finance. He is not even authorized, as in France, to place comptrollers of expenditures beside each minister; the ministers have their own special officials who account for their expenditures. The system of the monthly distribution of funds is modeled after the French pattern. The minister of finance decides upon the total amount to be passed for payment, but no control guarantees that the limit is not exceeded; the only check consists in a refusal of the accountants to honor orders beyond the amount determined.

The minister of finance is in charge of the collection of most revenues. In the Ministry of Finance there exist departments and subdepartments which direct the assessment and collection of taxes and other revenues subject to his jurisdiction. The local treasuries forward the funds at their disposal to the central Treasury, either by depositing them with the Reichsbank to the account of the Reich or by postal checks. The amount due the Reich from its postal checking account is cleared through the Reichsbank. Certain treasuries are authorized to maintain an account with the Reichsbank. On the whole the part played by the Reichsbank in financial administration is inferior to that of the Bank of England or the Bank of France.

The minister of finance issues the public loans authorized by the Parliament and has charge of the conversion of debt. The administration of the national debt is reserved to an independent organ, the Reichsschuldenverwaltung. Up to 1924 the temporary deficits of the Treasury were covered by advances from the Reichsbank against unlimited Treasury certificates; but since that date the Reichsbank has been permitted to open credits for a maximum period of three months up to the amount of 100,000,000 marks, which must be entirely refunded not later than July 15 following the end of the financial year (March 31). Furthermore, the Reichsbank may discount Treasury certificates of three months' maturity up to the amount of 400,000,000 marks, providing the certificates bear the signature of a solvent person. The Treasury may also grant short term loans to the Railroad Administration and the

Post Office Department, both of which enjoy a large degree of financial autonomy.

The financial administration possesses no organ whatever to insure compliance with the laws and decisions promulgated by the Reichstag, but in every administrative branch a "special budget officer" or a "budget office" nominated by the minister or by the head of the respective department has charge of that function and works under the supervision of the minister at the head of the respective administrative branch. The Reichstag itself is not interested in the compliance with its decrees. Expenditures exceeding the budgetary credits are made without authorization from the Reichstag and at times are submitted for approval only after the financial statements have been published. Yet even in such cases the Reichstag has given its approval without comment.

Since May, 1929, the minister of finance has published a monthly account of receipts and expenditures as well as a Treasury report and a statement concerning the floating debt. With the assistance of other departments he also draws up the budgetary accounts of the Reich which are published and submitted to the Reichstag. The accounts rendered by the accountants are submitted to the autonomous Rechnungshof, which has power to investigate the proper execution of the budget, the compliance with the law, the proper handling of expenditures by the administration and finally whether unnecessary or excessive expenditures were incurred. This body has also the right to decide on the introduction of reforms and incorporates its observations in an annual report addressed to the government. After the accounts and the report of the Rechnungshof have been submitted to the Reichsrat and Reichstag these bodies pass resolutions by which they release the government from responsibility. Actually the Reichstag is not interested in exercising control.

The financial administration of the United States was very deficient up to the passing of the Budget and Accounting Act of 1921. The preparation of the appropriation bills was in the hands of the numerous committees of the House of Representatives and the Senate. There was no interest in balancing receipts and expenditures. The Treasury did not possess the legal power to examine the demands for expenditures of the various departments, to prevent the grant of expenditures recognized as unnecessary or to check the misuse of credits granted. Congress maintained that the appropriations were com-

pulsory for the government and by no means optional and that the government was compelled to spend the amount it had been granted. Logrolling, the pork barrel, inconsistency and waste were the outstanding characteristics of the management of the finances of the United States.

The legislation of 1921 reorganized the entire system of financial administration. Although the English system was accepted as a model it was not followed in every detail. It would have been impossible, for example, to give to the secretary of the Treasury the power possessed by the chancellor of the Exchequer in England. The forces which resisted any radical change were the preponderant position of the president, the subordinate position of the ministers as simple assistants to the president, the large measure of financial control granted to Congress by the constitution and finally the strength of a tradition more than a century old.

The task and responsibility of preparing, elaborating and presenting the annual budget are vested in the president. In this task he is assisted by the Bureau of the Budget, created by the law of 1921. The function of the Bureau corresponds to that of the permanent secretaries to the Treasury in England; its task is to coordinate, revise and increase the estimates of the various departments and services, a function which practically amounts to a control of the entire administration. The Board of Estimates, a division of the Bureau of the Budget, is charged especially with maintaining the connections with all branches of the federal administration. In every branch of service there is a special official, the budget officer, nominated by the head of the service, whose task it is to prepare the estimates and to deal with the Bureau of the Budget. The executive departments are compelled to supply the Bureau of the Budget with all the information which it desires and the director, assistant director and duly authorized employees of the Bureau have the right to examine the books of all departments and services.

Credits are granted to each department or service. The head of a department or service has the right to employ them without consulting the Bureau of the Budget, but no official or administrative branch may use them for a new purpose without consulting the Bureau of the Budget and receiving its approval. On the other hand, immediately upon the publication of the budget and before June 30 each service must inform the Bureau as to the "Apportionment of Appropriations"—the monthly, trimestrial or other appor-

tionment of its credits which it intends to make. Any subsequent change in the apportionment must also be reported to the Bureau and endorsed by it. Besides, every service must inform the Bureau at the end of each trimester of the amount actually spent during the period. The coordinating agencies, commissions of officials headed by the chief coordinator and supervised by the director of the Bureau of the Budget, serve the purpose of finding the most economical way of using the credits granted by Congress, of insuring the most rapid and most simple functioning of the federal service and of eliminating friction and delay.

Because of the preeminence of the president and the Bureau of the Budget the position of the secretary of the Treasury cannot be compared with that of the chancellor of the Exchequer or of the ministers of finance of France or Germany. The secretary of the Treasury proposes to the president the creation or the reduction of taxes, loans and other financial measures. He has complete supervision and control of the collection and preservation of public funds. The absence of a central bank in the United States formerly raised great problems in the matter of the custody of the funds. At first they were deposited in various banks, but favoritism on the part of Treasury officials and frequent bank failures led to their segregation in Treasury vaults. The economic waste and disturbing effects caused by the withdrawal of large sums of money from circulation brought about, however, a gradual return to the bank deposit system in the years following the Civil War. With the passing of the Federal Reserve Act in 1913 the Federal Reserve Banks were designated as fiscal agents and government depositories, although the secretary of the Treasury retained the right to select other banks as well. In 1920 a division on deposits was created and charged with all matters pertaining to the designation of depositories. The present policy is to maintain the national banks as depositories only in places which are remote from Federal Reserve Banks or their branches and in which a depository is necessary for pay roll purposes. In 1928 the secretary of the Treasury was authorized to designate state banks and trust companies to carry public deposits and act as fiscal agents of the government.

The Treasury is also charged with carrying on credit operations on behalf of the government. The short term borrowing is effected through the sale of Treasury certificates and Treasury notes issued usually in anticipation of revenue.

These operations help the Treasury in distributing the public expenditure more evenly and to that extent have a stabilizing effect on the economic life of the country.

The control and auditing of financial operations are vested in the General Accounting Office established by the law of 1921. It is under the supervision of the comptroller general of the United States and the assistant comptroller general, both of whom are nominated by the president for fifteen years subject to the approval of the Senate. They may be recalled only with the consent of both houses of Congress. The General Accounting Office is to a certain extent an agent of Congress; its function may be compared with that of the comptroller and auditor general of England. Since 1921 its power has been considerably increased. It prescribes the forms and methods of accounting which must be employed by every department and service, as well as the forms of the accounts and the methods for their examination; actually, it has introduced very important simplifications by making uniform the methods of accounting and recording. It has the right to demand information from any office and to examine on the spot every ledger and document. It investigates whether expenditures and collections are effected in conformity with the law and the will of Congress. Similarly, upon the request of the services and particularly the paymasters it interprets the provisions of the laws governing the budget and decides whether a certain credit may be employed for a certain purpose. Congress alone possesses authority to change its interpretations. In spite of its extensive jurisdiction it does not exercise the same power as a comptroller of expenditure in France. Its control extends only to the orders issued by the chiefs of the various services previous to the actual making of payments, but even this sort of control is not general. The General Accounting Office forwards to the president of the United States and to Congress reports in which it proposes measures intended to render the working of the federal services more simple and economical. Both houses and their committees as well as the Bureau of the Budget frequently ask the Office to investigate certain problems and to report on its findings. If the Office discovers that certain expenditures or the terms of a contract infringe upon the law, it is its duty to notify Congress of this fact through a special report.

In addition to these functions the General Accounting Office exercises various competencies in the interest of which it is divided into severa'

sections. The Claims Division investigates private claims, based on administrative acts, which the services are unable to satisfy because of the lack of credit. If the General Accounting Office considers the claims justified, it makes recommendations in their favor to Congress. The Audit Division is in charge of the examination and the auditing of the accounts of all departments including the Post Office Department. The Office of the General Counsel has the task of giving legal advice, especially on questions of interpretation of the budget regarding the appeal taken by a service against the decision of other sections of the General Accounting Office. The Records Division is in charge of the archives. i.e. the preservation of accounts, contracts, checks and other documents.

GASTON IÈZE

See: Public Finance; Revenues, Public; Expenditures, Public; Budget; Accounts, Public; Administration, Public; Central Banking; Federal Reserve System.

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FINANCIAL ORGANIZATION. The most intricate and delicate structural component of modern economic society is its financial organization, consisting of its financial institutions, the arteries through which flows credit, the life blood of the entire economic structure. The characteristics of the financial organization of a country depend upon the degree of its economic development. The more minute the division of labor, the more intensive the growth of industry and trade, the greater the dependence upon foreign

countries as sources of raw materials or as markets for finished goods, the more complex is the financial organization and the greater its significance in the economic system of the country. In highly industrialized and commercialized countries such as the United States, Great Britain, Germany and Holland the financial organization is therefore much more intricate and sensitive than that in predominantly agricultural countries.

Financial organization in a modern sense is of recent origin. So long as the larger part of the population was engaged in agriculture, with trade only local in character, financial organization was unnecessary. As the local communities became less and less self-sufficient and trade transcended local boundaries the use of money as a medium of exchange and as a standard of value became more widespread. With it there developed the new business of money changers and later of money lenders, the progenitors of modern bankers. Yet neither these nor the financial centers which flourished in northern Italy, southern Germany and certain parts of France in the later Middle Ages could at this stage be regarded as constituting a financial organization. The incipient bankers were primarily merchants whose banking activities were merely incidental to their commercial transactions and had no firm foundation in the law. Furthermore, the numerous coins then in use did not represent money in the true sense of the term. Since each sovereign had complete power to change the metallic content of the currency in his own territory, the coin was merely a particle of metal, whose value fluctuated with its fine gold or silver content.

The growth of international trade coupled with the great uncertainty involved in shipping coin and bullion from one market to another led of necessity to the development of credit instruments such as bills of exchange. These credit instruments could become widely used only if they attained unquestioned legal standing and if the rights of the drawers, drawees and holders were properly safeguarded by legal provisions. When this was secured through the development and codification of the law merchant, credit instruments acquired an increased circulatory power. Thus were laid the foundations for a development of the modern financial organization.

In the course of time the functions of banking institutions widened in scope; at first merely the safekeepers of the funds of their customers—as were the goldsmiths in England and the *kassiers* in Holland—they soon became bankers in the

modern sense, operating more with their customers' funds than with their own. At the same time as enterprises became larger the funds supplied by individual capitalists, whether they assumed the guise of silent partners or of outside money lenders, became insufficient. A larger investing public had to be drawn upon and the development of negotiable shares became one of the first prerequisites to the establishment of larger enterprises. The appearance of negotiable securities made necessary the creation of a trading center to make them marketable and to give them a market value. These new trading centers, the stock exchanges, are the earliest visible expression of a financial organization. Here for the first time one may clearly discern the nucleus of a financial community.

The development of credit instruments, the creation of stock exchanges and the gradual evolution of legal protection paved the way for the next step, the shift from a money to a credit economy. This unheralded change soon profoundly affected the economic development of nations. It freed economic activity from concern over the availability of precious metals for use as money and substituted therefor the transfer of claims between buyer and seller, creditor and debtor, on the books of financial institutions. Moreover, as the drafts or bills of exchange of merchants or banks of an established reputation became the equivalent of money, there appeared the possibility of increasing the volume of purchasing power by expanding loans. The placing of bank credit on an equal footing with money and the further development of credit instruments created wealth of a new type. Whereas up to this time immovable property, chattels, goods, precious metals and ships had been regarded as the principal forms of wealth, the latter were now frequently represented by credit instruments and particularly securities, which in the more advanced countries such as Holland soon constituted a considerable portion of the total national wealth.

The growth of financial institutions and the increased use of credit instruments, notably stocks and bonds, now began to exert a decided influence on the disposal of wealth. The liquid resources of a large number of individuals could be concentrated in the hands of a few, who although not the owners had the power of free disposal over them. This concentration of control, which is in part the result of organization of large enterprises and in part the cause of their further expansion, has transformed finance from

a subordinate aid of commerce and industry into an important force dominating an ever increasing area of the economic field. In their aggregate, financial institutions regulate the rate of flow and the distribution of capital among various branches of production and through their representatives on the board of directors of the various industrial enterprises they exercise a direct influence on the economic life of nations. To a large extent they have taken the place of the entrepreneur in the promotion and organization of new enterprises; in many instances they appear as the actual managers of large manufacturing, transportation and mining enterprises.

In assessing the significance of the financial control of economic activities it must be borne in mind that the interests of the financial institutions and those of the owners of the funds with which they operate do not always coincide. The banks, particularly when privately owned, are chiefly interested in carning large profits and will at times dispose of the funds under their control without much concern over the effect on the welfare of the country or of the depositors. The overexpansion of security and real estate loans may be cited as cases in point. Furthermore, since financial institutions are usually under the control of one or a few individuals they generally favor the enterprises in which those individuals are interested, often to the exclusion of the interests of the depositors. While depositors often borrow from the banks, the majority of them are not the real beneficiaries of the funds accumulated therein. While there is not accurate information on the subject for every country, a banking inquiry made by the German government in 1930 revealed that much more than half the total of loans made by the large German banks were issued to large industrial and commercial enterprises whose deposits did not exceed 20 percent of the total deposits of the banks. In general one may state that where banking is concentrated in the hands of a few institutions large enterprises are favored at the expense of small, which often find it difficult to obtain credit accommodations at moderate rates.

The development of the financial organization of individual countries was not uniform. In some cases it grew up concomitantly with the industrial expansion of the country, in others it was imposed from the outside in order to stimulate industrial development. Thus in Great Britain, the United States and Holland the financial organization developed slowly and more or less in

adjustment to the economic status of the country. In pre-war Russia and Japan, on the other hand, the financial structure was erected under the tutelage of the government and prior to the achievement of requisite status by industry and trade. But whatever their historical antecedents financial institutions soon made their influence felt in the economic life of every country. This applies not only to the continent of Europe, where a close relationship between banking and industry has existed for a number of years and where corporations are spoken of as belonging to the sphere of this or that bank, but also in a steadily increasing degree to the United States. It may be safely stated that the power of financial institutions at present rivals that of sovereign states; in fact the former have at times dictated the financial policies of the latter. It is not uncommon for bankers before making a loan to a government to insist that certain fiscal measures be adopted or that a foreign receiver of revenue be appointed with powers wider than those of the government. The financial history of the Central American countries and of postwar Europe is replete with such examples.

Modern financial organization is generally divided into commercial and investment banking. This division, however, is to a large extent arbitrary because both types of banking are closely related and greatly overlap. The distinctions between the two systems lie mainly in the length of time and the purpose for which funds are made available and in the method of operation. Commercial banking is concerned primarily with receiving deposits and with granting short term loans-through discounting for their customers and lending to them or through purchasing acceptances and commercial paper in the open market-to finance goods in process of manufacture and in the various stages of distribution. In general the functions of commercial banking are to meet the seasonal credit needs of industry, trade and agriculture and to provide a mechanism for facilitating national as well as international payments. Another function, the legitimacy of which is questioned by the more orthodox opinion, is the financing of the stock market through granting of security loans to brokers and individuals. Investment banks, on the other hand, have as their main function the furnishing of long term capital for investment in fixed assets such as plant and equipment or to serve as permanent working capital. They also float long term obligations of governments and their political subdivisions. While commercial banks

operate chiefly with the funds of their depositors, to whom they stand in the relationship of debtor to creditor, investment houses in the proper sense of the term act merely as middlemen between investor and borrower without assuming any obligation to the buyers of the securities.

The principal types of institutions engaged in commercial banking are commercial banks and trust companies, acceptance and discount houses, commercial paper houses, finance companies, industrial loan companies and credit unions. Of these, commercial banks and trust companies are the most important and represent by far the largest part of the banking resources of a country. Through the development of the trust function, which is exercised in many countries by both commercial banks and trust companies, these institutions have brought immense wealth under their control; their influence is much greater than their balance sheets would indicate. Acceptance, discount and commercial paper houses are merely auxiliaries to commercial banks and concern themselves almost exclusively with open market transactions, such as the acceptance of the drafts and the buying and selling of acceptances and commercial paper. These specialized functions are also carried out by the large commercial banks through their various departments. As opposed to these three classes of financial institutions which finance the producer and distributor of commodities engaged in domestic or foreign trade, finance companies, industrial loan companies and credit unions operate primarily as financial agencies for the consumer or small scale business.

On the continent of Europe the same institution ordinarily engages in both investment and commercial banking, but in the English speaking countries the two types of financial activity are nominally carried on by separate agencies. In the United States, however, the functional distinction is gradually disappearing; commercial banks are establishing security affiliates and bond departments, and large investment houses are gaining control over commercial banks. Investment banking comprises the following institutions: private investment houses, investment security affiliates of commercial banks, mortgage banks, savings banks, investment trusts and the institutions centering around the stock exchange, such as stock brokerage houses. Of these the private investment houses and the security affiliates are the most important because they take a leading part in floating a majority of the capital issues of the country. If their policies are prop-

erly coordinated they are able to exert a considerable influence on the flow of capital into the various channels. The savings banks must be classified as belonging to the investment banking group, for they invest their deposits in bonds or real estate mortgages, thereby directly or indirectly furnishing long term capital to industry, agriculture and political units. Yet unlike the investment house and the security affiliate, which act merely as middlemen between the borrower and the investor without guaranteeing the payment of principal and interest, the savings bank stands in a debtor and creditor relationship to its depositors. The mortgage bank although it represents the oldest form of investment banking is still further removed from the pure investment banking type. Having for its purpose either the financing of the long term needs of agriculture or the furnishing of loans secured by urban real estate, it lends money to individuals on mortgages and on the basis of these issues its own bonds, thus providing the link through which the mortgage credit of the individual is tied up with the capital market. Most countries have established agricultural mortgage banks which operate under special charters, very often with government funds or with government guaranty of their obligations.

The division of financial institutions into commercial and investment banking has led to the development of two separate markets, the short term money market and the long term capital market, although here too the distinction is more theoretical than practical. The capital market is the central meeting place of the demand and supply of long term capital. It embraces the activities of the various types of buyers and sellers of securities and effects the distribution of shares and bonds. The function of the capital market is to assist in the transformation of fixed assets which cannot as a rule be readily appraised nor easily marketed into securities which are not only easily appraised but can be converted into cash practically at a moment's notice. The capital market may be divided into two separate parts: the original distribution market, which embraces the issuance and distribution of new securities, and the secondary distribution market, which deals with the buying and selling of securities already issued and outstanding. The latter market is largely represented by the various stock exchanges. Whether the exchange functions under strict supervision by the government, as in France, or is organized as a more or less independent private association, as in the

United States, trading on the exchange is closely regulated and the number of traders is limited. Although stock exchanges have often been accused of fostering speculation they perform an important function in modern financial organization as the principal media for the trading of securities and the greatest factor in their marketability.

The money market plays a most important role in the modern financial organization of society. It functions as the equilibrator of the entire system, for it is the central meeting place of the demand and the supply of short term funds. On it the financial institutions dispose of their liquid funds or increase their cash reserves through the calling of loans, the selling of bills and short term government notes or, as is the case in central Europe, by obtaining day to day loans. The rates of interest on the open market move in harmony and have a decided influence on the rates charged to individual borrowers. The large money markets, notably New York and London, attract the surplus funds of the world because of the ease with which they can employ large volumes of short term funds and because of the high financial standing of their banking institutions. Balances kept in these centers and bills of exchange drawn on their large financial institutions represent a substantial part of the reserves of a number of countries on the gold and gold-exchange standards. The fact that London and New York are the bankers of the world places an added responsibility upon the agencies operating in these markets, particularly upon the respective central banks; their policies exercise an international influence. For this reason they are also more susceptible to world conditions; London in particular, which has always operated on a narrow gold margin, is exposed to grave dangers whenever a withdrawal of foreign funds takes place on a large scale.

The money market is divided into a number of individual markets, the most important of which are the call money market, the acceptance market, the commercial paper market, the market for short term government notes and bills and the foreign exchange market. Yet the mechanism and structure of money markets display considerable differences, since each is an outgrowth of the industrial and commercial development of the economic unit which it serves. In New York, for example, due to the preponderant influence of the stock market and the daily settlement of securities the call money market is by far the most important; in London, which for

over a century has financed the world's international trade, the acceptance market leads; while in Amsterdam the one-month loan prolongatie is most important. For this reason most of the liquid funds in London flow into the acceptance market, while in New York they are in normal times absorbed by the call market. Aside from the fact that this is partly responsible for the different relationship between the banks and the central banks, it has also an important economic bearing. In New York a large inflow of gold from abroad and easy money conditions lead in the long run to an increased absorption of funds for security transactions, while in London they lead to a lowering of the bill rate, which in turn makes cheaper the financing of international trade.

The activities of the various financial institutions on the money market as well as of the market itself are considerably influenced by the central banks. Despite differences in origin, historical development and legal framework central banks perform today more or less the same functions in every country. They are the custodians of the metallic reserve, they have in most countries the sole privilege of issuing notes, they are the fiscal agents of the government and it is their duty to regulate the volume of currency and credit. If before the World War the policies of central banks were conditioned chiefly by the stability of foreign exchange rates, in post-war years they have been determined to an increasing degree by the movement of prices of commodities and of securities as an indication of the state of industry and trade. While it is still a debated question to what extent central bank policy is able to influence business conditions, it is generally conceded that the central bank is an important factor in the money market and that through its discount and open market policy and through credit rationing it can exercise a powerful influence on the cost of money which in the long run does not fail to affect business. Central banks, particularly in the post-war period, have been looked upon as the nerve center and regulator of the credit structure of the various countries; and, in fact, their policies have exercised great influence over business conditions and at times have had tremendous social consequences. The currency and credit inflation pursued by most continental European countries in 1919-24 with the resulting pauperization of the middle class in these countries forms one of the most striking examples of the effects of a faulty central bank policy.

The great power wielded by the central banks and the strong influence exercised by them not only over the money market but also over the entire economic life of the country have induced most countries to regulate closely their activities and in many instances to direct their management. Whether the central bank is owned by the government, by member banks or by private stockholders, the governments have in practically all cases, with the notable exception of England, the right to appoint the governor of the bank and exercise control over its management. Even in England, although officially no connection exists between the Treasury and the Bank of England, it is well known that they cooperate very closely in all matters affecting the financial policy of Great Britain.

The regulative power of the government is not restricted to central banks but in a number of countries extends also to the commercial banks. Control is exercised through special bank laws regulating the chartering, organization and operation of banks and through government bureaus whose duty it is to examine the banks as to their solvency and their possible infringement upon the bank laws. Although direct government regulation concerns itself only with technical aspects of banking, in post-war years central banks have endeavored to influence also the distribution and use of bank credit.

European countries have for a long time been reluctant to establish government supervision over banks and in some countries the latter still operate as ordinary corporations. But the banking difficulties which set in after the war, the large number of bank failures with disastrous results to the entire national economy and the growing realization of the tremendous influence exercised by financial institutions have convinced many governments that banks are more than ordinary corporations and that government supervision is essential. The Scandinavian countries and Japan offer noteworthy examples of banking crises resulting in bank laws and rigid government regulations. The banking crisis in Germany during the summer of 1931 has not only strengthened the tendency to supervise the operation of banks but has resulted in the addition of two of the largest financial institutions of the country to the list of banks under direct or indirect government control. At the same time the growing concentration of private control over banking through mergers, the organization of chain and group banks and similar devices, both in Europe where branch banking has reached a

high degree of development and in the United States where nation wide branch banking is prohibited, has given an added impetus to the movement for strict government supervision. In fact proposals for the nationalization of banking have received scrious attention in many quarters.

In contrast with commercial banking investment banking in almost all countries is carried on without any government supervision. Although the listing requirements of the stock exchanges, blue sky laws and similar enactments have endeavored to impose some control over the issue of securities and have removed some of the abuses, neither the interests of the investor nor of society are really safeguarded. Except during war periods governments have restricted themselves to the regulation of the flow of capital from and to other countries. Chiefly for political reasons embargoes on foreign loans, the requirement of government permission to list foreign securities on the stock exchanges and the exertion of direct pressure by the government have been used and are still being used with varied success by lending countries. In post-war years a number of borrowing countries have also endeavored to regulate the inflow of foreign capital either through special boards or by insisting that all foreign loans must be sanctioned by the minister of finance. So far, however, no capitalistic government has attempted to regulate the domestic flow of capital in normal times. This lack of interest is surprising in view of the fact that the influence exercised by the investment banks over the economic activities of a country is in many respects much greater than that of the commercial banks. Investment banks regulate the flow of long term capital and thus determine the channels into which it shall go. Since capital is the prime mover in any enterprise the careful direction of capital into industries where it is most needed and the cessation of the flow of capital to industries which are overbuilt would be one of the most effective means of eliminating business cycles. Furthermore, investment bankers determine to a considerable extent the type and quality of security in which investors place their savings, for most private investors are unable to judge security values accurately and rely on the advice of investment bankers or security dealers. In any system of planned economy, however little developed, the regulation of the flow of long term capital would be undertaken as one of the first steps. In Soviet Russia, for example, the distribution of long term capital is regulated and

planned in the same manner as the output of industry or foreign trade.

Capital is international in character and flows to centers where it can bring the highest return, provided the risk involved is not too great. Financial institutions, the channels through which capital and credit flow, have therefore for many decades been internationally oriented. This was accomplished through the establishment of branches and overseas banks in foreign countries, the creation of affiliates or the maintenance of special representatives and correspondence relationships. Irrespective of the motive for which these overseas connections were created and which caused the movement of capital from one country to another, the internationalization of financial organization had wide economic, social and political effects. It greatly facilitated the international interchange of commodities, it opened up the natural resources of undeveloped countries, thereby greatly affecting the social and economic habits of large groups of people who had hitherto remained unaffected by the blessings of the machine age, and it played an important role in the development of the policy of imperialism.

The close connection between the various leading financial centers has led to the development of the international money market, which links these centers together and through which a community of interest among them has been established. The international money market, however, embraces only those countries whose currencies are definitely linked up with gold, which have well organized banking systems and which are not handicapped by any foreign exchange restrictions. This market is not only the seat of settlement of all international financial transactions but through it is regulated the flow of funds to centers where the highest return can be secured. Thus the international money market levels out the volume of short term funds available in the various financial centers, brings about an equalization of interest rates and is an effective agent in maintaining the stability of the various exchanges. Under stable economic and political conditions the international money market has worked well. In post-war years, however, due to the abnormal economic and political situation and to the measures adopted by some of the leading central banks, notably the Federal Reserve system and the Bank of France, to offset the inflow of gold, the international money market has lost to a large extent its power of leveling out interest rates and of regulating the internacional flow of funds and gold. Because of this and the great problems confronting the international money market, such as reparations, war debts, maldistribution of gold and the like, efforts were made to establish a concrete connection among the various central banks; this was effected through the creation of the Bank for International Settlements in 1929. While the powers of this institution are greatly limited since it cannot operate in any money market without the prior consent of the corresponding central bank, it has proved to be of real assistance to weaker central banks when the stability of their currencies was endangered.

Although the term international capital market is often used, its operations are in fact closely interwoven with those of the international money market. The term international capital market, however, is justly applied to certain individual centers such as London and New York, because through them a large part of the long term capital needs of the world is met. Transactions usually carried out on this market are the flotation of loans through international syndicates and arbitrage on securities listed on various exchanges. While the economic and political importance of foreign loans has led to government supervision and control in some countries, nothing has so far been done to provide a machinery for the regulation of the international flow of capital. This is left entirely to the initiative of a few large investment houses. While it has worked out more or less satisfactorily, there have grown out of it a number of defects and malpractises, such as overborrowing, creation of uneconomic public works and overexpansion of certain industries, which affect adversely not only the investors but also the borrowing countries. Furthermore, the international flow of capital usually breaks down almost completely at the time when it is most needed. At present there is therefore a movement afoot to establish under the auspices of the League of Nations an institution similar to the Bank for International Settlements, the duty of which would be to coordinate and supplement the international flow of long term capital.

Marcus Nadler

See: Organization, Economic; Credit; Debt; Money; Public Debt; Corporation Finance; Mercantile Credit; Loans, Personal; Banking, Commercial; Central Banking; Money Market; Investment Banking; Investment Trusts; Stock Exchanges; Land Mortgage Credit; Agricultural Credit; Credit Cooperation; Savings Banks; Small Loans.

FINANCIAL STATEMENTS by business concerns include balance sheets and profit and loss statements. Balance sheets or property statements are the accounting reflections of conditions found to exist in the dollar facts of business operation. They consist of a listing of values owned or owed by the subject, totaled by related groups. The owned values or assets consist in general of cash; notes or accounts receivable; merchandise in either a raw, a semifinished or a finished state; investments reflecting the ownership of securities; real estate, buildings, machinery and fixtures; and prepaid expense items for which the subject will receive services and the like. The owed values or liabilities consist primarily of notes or accounts payable; amounts due or estimated to be due in the payment of taxes; claims for moneys that may have been deposited with the subject; debts for machinery, real estate and buildings not due immediately. The excess of assets over liabilities is the net worth or owned capital of the subject. The net worth may be listed under this caption or it may be made up of capital, surplus and undivided profits. Another item may appear on the liability side of the statement, usually between the subtotal of the outside liabilities and the net worth, under the caption of "reserves." To be true reserves such items should represent sums set aside from net worth to take care of declines in value of any asset items.

Although frequently considered as a separate and distinct report the profit and loss statement is closely connected with the property statement. The two should not be separated as this often destroys the value of one or both. Management scanning the record of its past performance to detect errors in policy or execution or the banker analyzing financial statements to protect himself against an overextension of credit and to secure a basis of advice to the customer with a view to insuring the soundness of his business should combine the comparison of a series of balance sheet items, reflecting the condition at the end of a number of successive periods, with a study of the profit and loss statements for the same periods. While the property statements show changes in assets, liabilities and net worth items, the profit and loss statements indicating the gross and net profit yields of the various lines of business carried on by the subject explain how and why these changes occurred.

The practise of submitting financial statements to the bank together with application for a loan became established long before statement analysis, as it is now understood, became prevalent. The early statements were frequently fragmentary memoranda lacking a great deal in accuracy and suggestive rather than convincing. They were read by loan officers and filed, perhaps with a penciled memorandum or two on their container.

The system of formal and recorded analysis of statements took form in the decade between 1895 and 1905. It was of slow growth and of great unevenness—here a record kept, there a mental reservation made. As business began to be nationalized and the contact between borrower and bank became less closely personal, a need developed for something more detailed and permanent in analysis. This led to the columnar comparison sheet on which the banker transcribed the memoranda of the statement under a more formal and regular nomenclature. The use of such comparison forms has been continued, although a great variety of styles has developed. Their chief advantage is that within any single bank they standardize comparison; their disadvantage is that they may overemphasize mere size and minimize the importance of proportion.

Shortly after the adoption of the comparison form a growing appreciation of the importance of proportion in or between statement items became evident. Analysts began to speak of "quick" and "current" assets and liabilities, funded or mortgage debts, fixed assets and the like. These phrases cover detailed segregation of assets or liabilities massed in totals for comparison. A confusion still remains in the use of the two terms quick and current as applied to assets. Frequently they are used as meaning the same thing and again as having distinctly different meanings. Quick assets are such values as may be turned into cash by immediate sale. It is obvious that in many instances an item may be both quick and current. A current asset is such an asset as will change into cash in the ordinary course of business. For example, raw material becomes merchandise in process or partly fabricated, then finished goods and later receivables; as these are collected they become cash with which current indebtedness may be paid.

At first analysts were content to compare the dollar amounts of current assets and liabilities, establish the fact of an asset margin and gauge the safety factor by this margin. But it was soon discovered that the relation rather than the difference between current assets and liabilities was the significant factor. From this point analysis acknowledged the importance of pro-

portion. The first such proportion to be adopted was the current ratio, derived by dividing the current assets by the current liabilities. It may well be said that this acknowledgment marked an epoch in analysis. But current ratio rating for credit strength brought upon its worshipers a host of dangers. One such danger was that a ratio of two to one was accepted as indicating satisfactory strength and no allowance was made for economic or trade variation. A second and greater danger lay in the tacit reliance on this one proportion, which could easily be window dressed; there was no general appreciation that other proportions or ratios might have almost as great indicative values. The significance of these other proportions has received tardy and as yet incomplete recognition, too many analysts treating them as general impressions rather than as facts susceptible of recording and comparison.

"Top heavy with debt" is an example of such an unrecordable stigma against credit strength. When the net worth is too small in its relation to debt, then the top heavy condition prevails. A ratio developed between net worth and debt, by dividing the first by the second, will produce a recordable figure. This will move up or down as the capital structure condition improves or weakens. A reading of these movements eliminates the misplaced confidence arising from an apparently small dollar figure for debt or the apprehension caused by an apparently large figure for debt. This ratio expresses capital structure strength in figures that can be compared year by year or as between two similar companies or as between any company and the average for the trade. It substitutes accuracy for impression and its use strengthens analysis.

Analysts used to rely on their intuitive belief in the merchandising capacity, tinged by sales volume only. Now sales volume as such may be a poor index of strength or weakness in merchandising capacity. There is a definite connection between sales and inventories, because merchandise is purchased or fabricated so that it may be sold. The merchant who can achieve sales of \$600 for each unit of \$100 of inventory is a better merchant than one who can develop only \$400 of sales on the same inventory, for he is able to balance his inventory more closely to current demand. A ratio as between sales and inventory reduced to a recordable percentage figure is much superior as a measure of merchandising to general impressions based on subjective judgments.

The figures for fixed assets, which generally

represent manufacturing and distributive equipment, form a component part of two significant ratios. By and large such equipment must be paid for in funds representing the owners' investment in the business. In some cases long time borrowed capital, or funded debt, is the source of purchase money for such assets; but this is sound only when resale value remains at all times sufficient to repay such loans. Therefore, the proportion between net worth and fixed assets is a recordable and comparable fact, measuring the reasonableness of fixed investment. Similarly any investment in fixed assets must be justified by a reasonable productivity on sales. The proportion between sales and fixed assets provides a definite figure by which this productivity can be measured and compared year by year or for several companies.

The absolute figure for sales, or the volume of business, is a measure of activity which may be worth while to the subject or simply an overtrading fever. It becomes more significant when related to profits. The ratio of net profits to sales is an illuminating measure of the effectiveness of sales. If this ratio is too low while volume is high, then a company is doing business simply for the joy of doing it. The ratio of sales to net worth is a related measure of the effectiveness with which owned capital is being used. The effectiveness of sales is reflected to some extent also in the figure for receivables, because it represents the still uncollected sediment of sales. But the amount in dollars is not as significant as is the relation of sales to this item. If this ratio is too small, then poor collecting or too great liberality in sales terms are indicated.

No set figure for any of these ratios can be a safe standard of strength, because each type of business is subject to different trading, fabricating, marketing and economic strains. These trade strains tend to produce differing relations in the component factors of any ratio. Yet it has been found possible to study a large group of statements within single trades and to evolve ratios that are sufficiently typical to offer a general criterion by which to estimate the relative soundness of a single company. This is different from the process of ordinary analysis only in that it uses as the standard of comparison a set of trade averages rather than the vague and unformulated notions of the analyst.

ALEXANDER WALL

See: Accounting; Auditing; Credit; Mercantile Credit; Corporation Finance; Management.

Consult: Wall, Alexander, and Duning, R. W., Ratio

Analysis of Financial Statements (New York 1928); Bliss, James H., Financial and Operating Ratios in Management (New York 1923).

FINES. The fine is a pecuniary penalty paid to a public authority for the violation of a criminal law. In Roman law the term multa designated a public fine. In modern French law it is called amende and in modern German law Geldstrafe. The fine is usually distinguished from the penalty which is collectible by civil action for the benefit of a private party or by administrative order for the benefit of the state, and also from the primitive composition which went to the injured party or his kin. The modern fine is believed to have developed from the court fine, or peace money, of the system of composition, but it is not always clear that such sums were paid because of the breach of the public peace. The fine did not so much develop from the wite as replace it. Among the earliest public fines were the fines of judicial procedure so common in mediaeval French and English law. Because of its importance as revenue the modern fining system everywhere grew with the expansion of royal power. It was in effect a relaxation of the system of total confiscation. The king must have more than compensated himself for the loss in the forfeitures by the frequency of the fines; the former, moreover, often went not to him but to the lords; the subject preferred the lesser of two

The early English amercement which replaced the forfeitures of Edward the Confessor illustrates this evolution. It came to be imposed for many minor offenses which caused the property but not the liberty of an offender to fall into mercy. In mediaeval England amercements were levied frequently, especially for missteps or defaults of procedure. The severity of the practise was mitigated by the fact that the amercement was enforceable by distress only. Moreover, the amercement had to be assessed by a jury of the offender's neighbors, a privilege which was preserved by Magna Carta, with the result that the king began to evade its provisions by resorting to fines.

The very term fine has an interesting history in the common law. In cases less than felony an offender was liable to imprisonment until he "made fine," or ended his imprisonment by paying an amount fixed not by any jury but by the judges. As Fox, who had delved thoroughly into the subject, put it, "the form of the judgment was not that the offender be imprisoned.

simply, nor that he be fined but that he be imprisoned for his fine . . . capiatur pro fine," or again, "It is not the Court that fines, but the offender." The active verb to fine dates from the sixteenth century. The power both to fine and imprison is now wrongly assumed to have existed at common law in cases of misdemeanors. The confusion arose because of the influence of the practise with respect to statutory fines, because the Star Chamber imposed fine and imprisonment, a practise which later was taken over by the King's Bench, and finally because the distinction between fines and amercements had fallen into obscurity.

The modern fining system, while it reveals some historical vestiges, has everywhere been of statutory formation. It took shape in the criminal codes and legislation of the era of Enlightenment. The ancient and mediaeval alternatives to the non-payment of a fine or a composition had usually been such harsh ones as slavery, loss of civil rights, banishment or corporal punishments. The predominant characteristic of the modern fining system became the commutation of unpaid fines into substituted terms of imprisonment of definite duration, calculated under a schedule establishing a ratio of days to the monetary value of the fine. Indeed, the development of the public fine coincided generally with the gradual introduction of imprisonment as a penalty in contradistinction to its earlier use as a means of preventive or subsidiary detention. While after the thirteenth century the first general use of imprisonment to compel the payment of pecuniary penalties was generally indefinite imprisonment, it was provided in some early laws of the Netherlands that a part of the penalty should be canceled by each day's imprisonment. Short terms of definite duration first appear in the Germanic countries in some north German town laws of the fourteenth century, as in Lübeck and Hamburg. The famous and very influential penal code of the empire, the Carolina, which still allowed half of a thief's penalty to go to the injured party, nevertheless limited the duration of imprisonment if penalties were not paid, for it was provided that imprisonment should last only etliche zeit lange. In at least one modern code, the French Code pénal, is contained a compromise with the older law in the institution of the contrainte par corps. The substituted imprisonment is limited to a definite term but it does not constitute a discharge of the fine, which may be subsequently collected from the offender if he comes into means. The

use of distress as a preliminary to imprisonment is now provided in most codes

The assessment of the amount of fines within general maximums and minimums for specific offenses as well as for various classes of offenses. with discretion in the judges within the limits imposed, became another very marked feature of the fining system. One of the first continental provisions of this character was contained in the Prussian Allgemeines Landrecht of 1794. The provisions of maximums and minimums bespeak the general background of arbitrariness in the assessment of public fines, which, unlike the fixed tariffs of the system of composition, tended to be too large. Limitations upon the length of imprisonment in case of non-payment did not in themselves affect the severity of the fine. Provisions that the fine itself should be reasonable, i.e. proportioned to fault, had never been very effective. The provision of the English Bill of Rights against unreasonable fines has been copied in the American federal constitution and very widely in the American state constitutions, but in view of the all but universal statutory maximums and minimums these provisions may be regarded as largely anachronistic. Curiously, in some codes minimums without maximums are sometimes found.

The acceptance of the penalty of imprisonment first relegated the fine to a comparatively minor role as a punishment for slight misdemeanors and police offenses. In ancient and mediaeval times pecuniary penalties often had to be discharged in highly valuable domestic animals or agricultural goods; a money economy now made it particularly easy to measure and secure the fair price of an offense, but for that very reason it must have been felt that the deterrent value of such a punishment as the fine was bound to be small. Toward the latter half of the nineteenth century, however, the fine slowly gained in importance as a penal method. It came to be increasingly prescribed not only in serious misdemeanors but even in major crimes as a supplementary penalty. Such criminologists as Garofalo, Liszt, Wach, Rosenfeld, Wahlberg, Schmölder and others argued for its extension. There has generally been a great deal more preoccupation with the problem of the fine in continental countries than in England and the United States because judges in the former have not had very great discretion in imposing sentence. Among continental countries legislation since the World War has been most abundant in Germany, which from 1921 to 1924

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accomplished important reforms in its fining system in accordance with the democratic spirit of the post-war German constitution.

The growing favor of the fine in recent decades may be ascribed largely to the realization of the great evils of short term imprisonment, which often results in converting casual offenders into confirmed criminals. Apart from the effect of prison conditions, the withdrawal of a worker from his livelihood frequently proves disastrous to him and his family under the competitive pressure of modern industrial organization. The social stigma that usually attaches to even a day's imprisonment also has its evil effect. The problem of avoiding short term imprisonment has received especially great attention in Germany, despite the fact that fines already were imposed in about fifty percent of all cases under the Reichsstrafgesetzbuch and supplementary criminal laws. The law of December 21, 1921, limiting short term imprisonments had the effect of almost cutting them in half in the same class of cases.

The problem of short term imprisonment, however, cannot be completely solved by the fine. Since imprisonment is the ordinary substitute for the unpaid fine, short term imprisonment may again result—a dilemma that works especially to the detriment of poor offenders. To avoid it some of the German codes of the era of Enlightenment provided curiously that the poor were not to be fined at all. In some countries, such as Italy, Norway and Mexico, the expedient has been tried of allowing fines to be earned by labor on public works, and a few American states in the south have even had laws providing that an offender might be put to work for a surety who would pay his fine, a practise that resulted in the involuntary servitude of many Negroes but has been declared unconstitutional by the United States Supreme Court. The prevailing remedy in recent times has been to permit the payment of fines in instalments. In England and the United States it is a common provision under the system of probation, and it is also permitted in many European countries.

The objection to the payment of fines upon the instalment plan lies in its tendency to undermine the deterrent value of the fine, which is never very great. While, however, fines certainly are not deterrent to the rich, the mere fact that they are pecuniary penalties must make them very impressive to the poor. Where professional criminals are concerned the fine presents one of its most acute dilemmas. It has a tendency to lead to repetitions of criminal activity arising from efforts to balance the loss represented by the fine, a tendency most marked in crimes against morality, such as prostitution. In habitual crimes such as drunkenness the fine is also ineffective as a deterrent. Despite the fact that the fine is not much of a deterrent in the case of purely technical offenses such as traffic violations, it is not objectionable since it thus amounts to hardly more than a privilege tax. The fine in the nature of things can be the only possible penalty in countries where the criminal capacity of artificial persons is recognized, as in England and the United States. In the latter country at least one sensational fine of \$20,-240,000 was imposed, on the Standard Oil Company of Indiana under the Elkins Act in 1907, although the decision was later reversed.

The fine as a mode of restitution for those injured by crime has been urged by the Italian positivists, especially Garofalo. They argue in effect for a reversion to some of the elements of the system of composition. Two fines are to be imposed, particularly in crimes of cupidity: one to go into the state's treasury and the other to the victim of the crime, the defaulting offender to be kept in prison until he has discharged his indebtedness through his labor. While the civil remedy of damages is often a failure even in the continental countries, which already permit the injured party to demand reparation in the criminal prosecution, the positivist proposal seems extreme. The discretionary power to order restitution as a condition of probation should suffice. A supplementary proposal of the positivists to concentrate all fines in a special state fund for the compensation of the victims of crime seems much more feasible.

At present practise with regard to the disposition of fines varies considerably. In their early history, where they did not go to the crown they went most frequently to the court as fructus jurisdictionis. They now generally inure to the benefit of the central government or one of its subdivisions. In Germany fines ordinarily go into the national or state treasury depending upon whether national or state courts impose them in the first instance. In France fines go into the national treasury in case of crimes, are divided in the case of délits between the national treasury, which gets twenty percent of the fine. and the department treasury, which gets eighty percent, and go to the commune in which the offense was committed in the case of contraventions. A French peculiarity is the décime, a tax levied by the central government upon fines, which has been increased since the war. In England fines go into the Consolidated Fund and form part of the national revenue except in the case of summary offenses, when they inure to the Police Pension Fund. In American states fines frequently go to county and city as well as to state governments and also into special funds, determined usually by the character of the incurred violation; for instance, fines for violating the game laws may go into the state conservation fund.

The fine as a source of revenue has become of little importance to modern governments. Fines have rarely exceeded one half of one percent of the total revenue of the state and federal governments in the United States, where they are certainly imposed at least as frequently as in other countries. The percentages generally are higher for the city governments, probably because of the prominence of traffic fines. Indeed, in the smaller municipalities the authorities must often be tempted to equip a few more motor cycle traffic officers in preference to raising the tax rate a point or two.

Since the fine is a money penalty, it has at all times been subject to depreciation. In mediaeval times depreciation made the persisting harsh penalties of the old law relatively mild, so that their express abolition became unnecessary. In modern times, however, with fines generally low, legislation either increasing the amount of fines or establishing a new basis of payment has been more commonly necessary. The latter adjustment became imperative in Germany after the World War.

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See: Imprisonment; Punishment; Criminal Law; Criminology; Probation; Confiscation; Motor Vehicle Transportation; Revenues, Public.

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FINK, ALBERT (1827-97), American railroad manager and publicist. Fink was trained in Germany as a civil engineer, emigrated to the United States and acquired recognition as an early designer and builder of iron bridges. As general manager and vice president of the Louisville and Nashville Railroad from 1865 to 1875 he analyzed railway costs and rates, laying the basis for the classification of fixed and variable ex-

penditures and demonstrating the competitive origin of rate discriminations. His annual reports, one of which was reprinted in pamphlet form under the title Cost of Railroad Transportation, Railroad Accounts, and Governmental Regulation of Railroads, constituted an early and important contribution to the science of railway economics.

In 1875 Fink aided in organizing the Southern Railway and Steamship Association and became its general commissioner. This association of twenty-five competitive railways was one of the first successful pooling organizations in the United States. Two years later he was made head of a similar association among the four trunk line roads centering in New York City, formed to end a disastrous rate war. Fink's chief influence on railway affairs was exerted during the twelve years that he served as commissioner of the Trunk Line Association; his methods of organization and administration were followed by pooling and traffic associations throughout the country.

Fink was a strong advocate of voluntary association of railways as a defense against rate wars and unnecessary rate discriminations. He hoped to secure for railway pooling the legal authorization required for its effectiveness and opposed the legislative control of rate schedules. The program aroused opposition as tending to increase the arbitrary power of the railways. His reports as commissioner and the evidence he gave on numerous occasions before legislative committees, much of which circulated widely in pamphlet form, had an important educative effect, while his personal influence was instrumental in maintaining the precarious railway "peace" of the eighties and in developing the technique of railway cooperation. This cooperation was later realized through government regulation and the formation of a few great systems under centralized financial control.

H. L. CAVERLY

Consult: Langstroth, C. S., and Stilz, Wilson, Railway Cooperation (Philadelphia 1899) p. 39-49; unsigned article in Railway Age, vol. xxix (1897) 262-63.

FINLAY, GEORGE (1799-1875), English historian. Finlay was a philhellene who was profoundly impressed by the struggle of the Greeks for their independence and was convinced that after obtaining independence the Greek kingdom would enter a period of peaceful progress. Finlay went to Greece in 1823 and lived there for most of the remaining years of his life. He became absorbed in the history of

Greece and published numerous studies, which were later collected and edited by H. F. Tozer as A History of Greece from Its Conquest by the Romans to the Present Time (7 vols., Oxford 1877). The importance of this work rests on the fact that it turned the attention of English scholars toward the hitherto neglected and unpopular study of the history of the Byzantine Empire and of mediaeval Greece. Finlay was more a student of law and economics than of history, and his work reveals a greater emphasis on social and economic problems in the internal history of the Byzantine Empire. He emphasized the importance of the imperial laws to protect the poorer class of land proprietors from the encroachments of their wealthier neighbors; the significance of the middle class, which provided the emperors with money; and the importance of the Byzantine commerce with Genoa and Venice. He does, however, overestimate the importance of the reforms of Leo III (717-41), whom he considers the initiator of a mighty social revolution.

A. A. Vasiliev

Consult: Finlay's autobiography in A History of Greece, vol. i; Freeman, E. A., Historical Essays, Third Series (London 1879) p. 241-73, 310-46; Miller, William, "The Finlay Papers," "George Finlay as a Journalist," and "The Journals of Finlay and Jarvis" in English Historical Review, vol. xxxix (1924) 386-98, 552-67, and vol. xli (1926) 514-25, and "The Finlay Library" in British School at Athens, Annual, vol. xxvi (1923-24, 1924-25) 46-66.

FINLEY, ROBERT (1772-1817), American educator and social worker. Finley held a Presbyterian pastorate at Basking Ridge, New Jersey, until he became president of the University of Georgia in 1817. In the early part of his career he taught school at Charleston, South Carolina, where his observations of slavery made a profound impression upon him. He never advocated emancipation, feeling that neither northern nor southern public opinion would support such a drastic proposal. He sought some way of relieving the country of the sometimes scorned and sometimes pitied free Negroes and, at the same time, of bringing about gradual and peaceful manumission. As a class, the free blacks were not wholly free; in the north their poverty caused them to be looked upon as public burdens, and in the south they were feared as a constant threat to the institution of slavery. In his Thoughts on the Colonization of Free Blacks (published anonomously, Washington 1816) Finley proposed the formation of colonies for

free Negroes on the African coast, a plan which had been discussed by the Virginia legislature as early as 1777. Finley's efforts, in conjunction with those of his brother-in-law, Elias B. Caldwell, led to the founding of the American Colonization Society in Washington in 1816.

ABRAM L. HARRIS

Consult: Carey, M., "American Colonization Society" in North American Review, vol. xxxv (1832) 118-65; Brown, Isaac V., Biography of the Reverend Robert Finley (Philadelphia 1857); Fox, Early Lee, The American Colonization Society, 1817-1840 (Baltimore 1919).

FINOT, JEAN (Jean Finckelhaus) (1856-1922), French publicist. Finot was born in Poland. After studying at the University of Warsaw he became a naturalized citizen of France in 1897 and changed his name. He was editor of the Cri de Paris and later of a journal known successively as the Revue des revues, the Revue and the Revue mondiale. His persistent themes were the equality of races and of sexes, Franco-British solidarity and the quest for happiness. After 1914 he wrote with evident patriotic sentiment on war policies, war finances and European and world peace. He was unusually erudite and wrote trenchant and effective criticism of widely accepted doctrines, but his optimistic temperament and emotional intensity led him into frequent exaggeration and ill-supported generalization.

His most influential work was Le préjugé des races, which, translated into many languages like most of his other works, made him popular with darker skinned peoples everywhere and with race egalitarians in Europe and America. In this work he successfully combated many of the favorite contentions of the Gobineau-Chamberlain school of Teutonic racialists and of the related anthroposociologists. He showed that opinions as to the psychological traits of the great historical races were almost entirely subjective and deeply affected by social tradition and that the social milieu exerts a powerful influence on the mental traits of a race. He exaggerated the plasticity of human mental and physical traits under geographical and cultural influences and even explained the increasing brachycephalization of western Europe on the ground that a complex culture enlarges and broadens the brain. Believing in the future unity of all mankind he favored the crossing of races and argued that the diffusion of culture reduces racial differences.

FRANK H. HANKINS

Works: Le préjugé des races (Paris 1905, 2nd ed. 1906),

tr. by F. Wade-Evans (London 1906); Agonie et mor! des races (Paris 1909, new ed. 1913); La philosophie de la longévité (Paris 1900, enlarged ed. 1908), tr. by II. Roberts (London 1909); Prolongeons la vie (Paris 1919), tr. by F. Rothwell (London 1924); La science du bonheur (Paris 1900, new ed. 1913), tr. by M. I. Safford (New York 1914); Progrès et bonheur, 2 vols. (Paris 1914); Préjugé et problème des sexes (Paris 1912, 8th ed. 1923), tr. by M. J. Safford (New York 1913); Muselières pour femmes et autres supplices (Paris 1920); Union sacrée contre l'alcoolisme (Paris 1916); Sa majesté l'alcool (Paris 1922); Français et anglais (Paris n.d., 3rd ed. 1903); Français et anglais devant l'anarchie européenne (Paris 1904); Civilisés contre allemands (Paris 1915), of which one chapter was translated as The Anglo-French Nation (London 1916); L'agonie et la naissance d'un monde (Paris 1918); Saints, initiés et possédés modernes (Paris 1918), tr. by Evan Marrett (London 1920); L'atelier des gens heureux (Paris 1922); La maîtrise de la vie et des hommes (Paris 1923).

Consult: Revue mondiale, vol. cxlviii (1922) 129-59.

FIORE, PASQUALE (1837–1914), Italian jurist. Fiore was a professor of law at various Italian universities from 1863 until his death. He served as legal adviser to the Italian government and as counsel in many important international cases, and he took an active part in the constructive work of the Institute of International Law.

His published works, notably Il diritto internazionale codificato e la sua sanzione giuridica (Turin 1890, 5th ed. 1915; tr. by E. M. Borchard as International Law Codified, New York 1918), embody his ideas for the regeneration of the international legal order. He was a disciple of Wolff in his views on the safeguarding and progressive development of international law through a periodic legislature, a conference of nations to make the necessary political readjustments and to interpret ambiguous rules, and a court of arbitration. He opposed any permanent confederation of states in which the Great Powers should prevail and any combination, such as Rousseau's Project of Perpetual Peace, designed to maintain the status quo. International law, he believed, should not be fixed but should change with the times. He maintained that individuals had certain rights which should be available to them through judicial and political protection in and against any state. These international rights of man would include freedom of emigration, of entry and of ownership of property in a foreign state. He believed that foreign policy should be controlled by public opinion and opposed both secret diplomacy and alliances. Many of the ideas which he advocated have since been adopted in formal instruments:

others command general intellectual support. Fiore was a realist and a persistent fighter against the chauvinism and political and economic shortsightedness which have made war an inherent part of the international system.

EDWIN M. BORCHARD

Works: A complete list of Fiore's works will be found in the introduction to the American edition of his International Law Codified. Other important works are: Nuovo diritto internazionale pubblico (Milan 1865; 4th ed., 3 vols., Turin 1904-06); Diritto internazionale privato (Florence 1869; 4th ed., 4 vols., Turin 1902-09).

Consult: Marzano, U. R., Pasquale Fiore (Bari 1923); Catellani, Enrico, in Rivista di diritto internazionale, vol. ix (1915) 141-51; Müller, Joseph, Die Stellung des Menschen im Völkerrecht nach der Theorie Pascal Fiores (Lucerne 1921).

FIRE INSURANCE

AMERICAN, American fire insurance grew along lines first developed in England. The great fire of 1666 shocked the inhabitants of London into a realization of the folly of not setting aside reserve funds against such an emergency, and the next year Nicholas Barbon took the first step toward creating the modern fire insurance industry when he agreed to repair or indemnify any building attacked by fire, timber houses to be charged double the rate for brick. In 1680 he and several partners founded the Fire Office. From 1681 to 1683 the City of London underwrote fire risks at rates lower than those asked by the Fire Office but the courts ended this experiment, deeming it a usurpation of power. The first so-called mutual fire insurance company, the Friendly Society, began operations in 1684; the first mutual fire company to share profits as well as losses was founded in 1696. The insurance of personal property was first undertaken by the Sun Fire Office, organized for this purpose in 1706. When in 1720 the Bubble Act chartered the Royal Exchange Insurance Company and the London Assurance Company, accepting the £300,000 which each offered the crown for the privilege of conducting a joint stock insurance business, the organization of the British fire insurance industry became substantially what it is today.

As the American colonists accumulated wealth in the new world they too felt the need for protection against loss from fire. There are records that a "Friendly Society for a Mutual Insuring of their Houses against Fire" was founded in Charleston, South Carolina, as early as 1736. The effective beginning of organized American

fire insurance, however, dates from 1752, when Benjamin Franklin helped to organize the Philadelphia Contributionship, a mutual company which is still in existence. Its plan of operation was similar to that of the Amicable Contributionship of London, known as the Hand-in-Hand, and it had the same house mark of clasped hands. The Insurance Company of North America, the first American stock company, was founded in 1794. By the close of the century there were about ten mutuals and four stock companies in the United States.

The pioneering stage in American fire insurance extended to 1835, when the great New York fire of that year wiped out twenty-three of the twenty-six New York companies. There was little state regulation during this period, and policyholders' security depended principally upon current premium income and the good faith of the men behind the companies. In smaller communities fire losses were generally borne by neighbors, who made voluntary contributions to the unfortunate family.

The years from 1835 to the close of the Civil War, using Oviatt's classification, may be characterized as the second period in the development of fire insurance in America. As early as 1837 Massachusetts required the maintenance by insurance companies of an uncarned premium fund; this policy was followed by the state of New York in 1853, thus establishing the modest beginnings of state supervision for the protection of the public. At the same time the public distrust resulting from the destruction of the great majority of New York companies by the fire of 1835 led to the wholesale creation of mutual companies. Sixty-two mutuals had reported to the New York comptroller by 1853; most of them later failed. The short lived prohibition of foreign corporations was lifted as a result of the fire of 1835. The period is also noteworthy because of the development of the agency system, which enabled companies to spread beyond their immediate localities and thus obtain the benefit of a broader distribution of risks.

The third period beginning with the close of the Civil War has been described as the period of cooperations. Cooperation was essential because competition had made rates dangerously low and conditions were chaotic. In 1866 the companies of the country organized the National Board of Fire Underwriters, which for the first ten years exerted a stabilizing influence on rates and on commissions. Mill and factory mutuals

organized primarily on the basis of fire prevention work as distinguished from indemnity, stimulated the stock companies toward cooperative action in the reduction of the nation's fire waste. When the National Board's cessation of its rate making activities led to renewed demoralization, local associations undertook this function. Still later cooperative organizations were formed for inspection and for the adjustment of losses. In many states these early cooperative efforts were at first strenuously opposed and limited by anticompact and antitrust legislation. But in recent years, particularly within the last decade, the advantage to the public of cooperative action by the fire insurance business for legitimate purposes has been recognized more and more clearly by legislative bodies.

Since 1868, when the United States Supreme Court rendered its decision in Paul v. Virginia, the several states and territories have assumed full supervisory powers over all alien, foreign and domestic concerns transacting insurance within their borders. The comprehensive New York insurance law is the most important, since almost all companies transact business in that state. Few business enterprises are regulated so thoroughly by statute as are all forms of the insurance business. In fact, the legislation is so voluminous in most leading states as to require publication in a separate insurance code. Briefly summarized, these statutes regulate the following practises: incorporation, organization and operation of companies; investment of capital, surplus and other funds; classes of insurance which the companies may write and the financial requirements governing each class; taxation of underwriters and the procedure of enforcing the same; reinsurance; licensing and regulation of agents and brokers; types of policy provisions and the enforcement of standard policy provisions; prohibition of misrepresentation, fraud and other unfair practises; and the imposition of penalties for the causing of fires. Enforcement of the statutes is entrusted in nearly all cases to the insurance commissioner of the state, who is usually appointed by the governor. He is empowered to revoke or suspend any company's license because of failure to comply with any law or because assets appear to him insufficient. All outside companies must have his permission to transact business within the state. In many states he may revise discriminating or excessive rates or require companies to belong to rating bureaus, which he supervises.

Certain legal and technical aspects of the fire

insurance business require some elaboration, Consideration might first be given to the nature of the insurance contract. No person may sign a fire insurance contract who does not have an insurable interest which justifies the insurance. The courts have interpreted this pecuniary interest broadly, to include every reasonable relation or liability with respect to property. Although the laws of the states vary, there is general agreement that an insurable interest exists in the case of custodians of property (warehouse and commission men, common carriers, assignces in bankruptcy, agents, administrators of estates, etc.), possessors of contractual rights (consignees, patentees, contractors paid on completion of work, etc.) and creditors and pledgees of all kinds as well as actual owners of property.

Although relating to the property insured the fire insurance contract is a personal contract insuring the owner of the property or the possessor of an insurable interest therein. The character of the owner is quite as vital a factor for the insurer to know when assuming the risk as is the character of the property. Policy contracts therefore may not be transferred automatically between owners following an exchange of ownership of the properties insured. Instead, the consent of the insurer is necessary to a change in the title of ownership or the original contract is invalidated.

The contract is one of indemnity. It insures only, as the standard fire insurance policy of New York specifies, "to the extent of the actual value . . . of the property at the time of the loss or damage . . . against all direct loss and damage by fire . . . to an amount not exceeding \$ " It is therefore expressly declared that the face of the policy shall not be the measure of the indemnity obtainable in the event of a total loss. Instead, only the actual loss suffered is paid; the insured is not entitled to profit from a fire at the expense of the insurer. Moreover, under the legal "doctrine of proximate cause" the fire insurer is liable only, unless otherwise expressed in the contract, for loss which is directly caused by fire.

Many states have adopted so-called "valued policy laws" designed to provide for the payment of the full face value of the policy in the event of the total loss of the insured property. In some instances it may be desirable and even necessary, especially with respect to articles difficult to value, such as art objects and the like, to have an understanding between insured and insurer as to the amount to be paid in the event

of total loss. In that case the policy is known as a "valued policy." But in general the compulsory application by law of the valued policy idea in fire insurance is inconsistent with the principle of indemnity. Its introduction was followed by increased fire losses. To avoid moral hazard such a practise presumes that the insurer has the privilege of appraising accurately all risks in advance. But this is impractical because values are constantly fluctuating and detailed appraisals are expensive. Moreover, only a few properties, relatively speaking, are ever visited by fire. It is therefore much cheaper for the community as a whole to have the owners themselves estimate the value of their properties at the time insurance is effected and then have an adjustment made of the actual loss suffered in the comparatively few fires occurring in the course of a year.

According to the standard fire policy the insurer is liable only for the actual cash value of the property lost or damaged as "ascertained with proper deductions for depreciation." In no case, however, may "the loss exceed what it would cost to repair or replace the same with material of like kind and quality within a reasonable time after such loss or damage," and so on. The insurer has therefore three options of settlement: payment in cash, restoration through repairs or replacement. In event of disagreement the dispute is settled in accordance with the appraisal clause of the contract. Both the insured and the insurer select an appraiser and the two appraisers select a disinterested umpire. Should the appraisers be unable to agree, their differences only are submitted to the umpire for decision.

Under the important practise of coinsurance, known in England as average, "the insured has any loss paid only in the proportion that the amount of insurance taken bears to the amount of insurance that the company requires him to carry." Thus if a \$100,000 property is insured for only \$40,000 when the required amount of insurance is 80 percent of the value, or \$80,000, a \$10,000 loss would be paid only in the proportion that \$40,000 bears to \$80,000, or to the extent of only one half, i.e. \$5000. The percentage of required insurance represents that portion of the property which is regarded as destructible and will therefore vary in accordance with the type of property. The reason for the practise is clear. By far the greatest bulk of losses results from partial fires, and in large cities probably half of the fire waste consists of losses which amount to less than 10 percent of the value of the

property involved in the fire. It would be highly unjust to those who insure adequately to permit owners to take insurance in small amounts at the same rate as is charged for the larger amounts and to receive payment in full for their small losses. Where it is insisted that all losses be paid in full irrespective of the amount of insurance carried, the premiums should be increased as the insurance decreases. This plan is followed in certain jurisdictions, especially where laws against coinsurance exist, and is known as the graded rate system.

Since fire premiums constitute a material factor in the cost of operation of a property, it is vital that there should be equity in the ascertainment and distribution of risk as between different communities, different industries and different owners within the same industry. Such equity requires that there should be "merit rating" based upon an analysis of the good and bad features of the risk insured. Proper recognition must be given to the fire prevention facilities of the city, the quality of construction of the risk to be rated, the presence or absence of fire fighting facilities, the nature of the occupancy, the character of the exposure hazard and similar factors

Prior to 1900, when it was common to make rates on mercantile risks on the basis of "judgment rating," the premium was the result of the individual opinion of some rater. But as properties became more complicated in their construction and numerous appliances were installed for heating, lighting, ventilation, transportation, power and other purposes, this method became increasingly unsatisfactory and was superseded by "schedule rating." Alfred Dean's system of analytic rating is used extensively in the middle west; the Universal Mercantile Schedule, in the east. Simple types of property-schools, churches, residences—are usually given a class rating; but mercantile risks are rated on the basis of a comprehensive schedule which is applied by a central bureau of the underwriters' association having charge of the particular territory, to which practically all the companies are subscribing members. The schedule represents a composite judgment system of rating and eliminates the shortcomings of individual rating. By showing on paper how the rate was derived it enables the insured to know his defects and to eliminate them in the interest of a reduction in his premium. But even combined judgment is not so accurate as figures of actual fire losses.

Fire insurance premiums are collected in ad-

vance, usually on one, two or five-year policy periods, but they are "earned" only as time elapses. The insurer is therefore held accountable as a custodian of the uncarned portion of the premium, or the reserve, as this uncarned fund is commonly called. State statutes require the maintenance of such a fund as a necessary condition for financial solvency. Nearly everywhere the law requires that insurance companies shall maintain a reserve equal to "fifty percentum of the premiums written in their policies upon all unexpired risks that have one year, or less, to run, and a pro rata of all premiums on risks having more than one year to run."

It is common practise for underwriters to transfer a portion of the liability assumed under a policy to some other underwriter, who is then known as the "reinsurer." Many plans of reinsurance exist, such as reinsurance under agreements covering specific risks, "reinsurance clearing houses," "share" or "participation arrangements," "excess reinsurance agreements" and the like. But whatever the plan, the fundamental reason is the avoidance of a loss out of line with the writing capacity of the insurer. The practise gives underwriters the greater stability resulting from a wide spread of business. It also enables them to accept large policies promptly, since they know that the risk is automatically distributed over numerous other underwriters who are parties to the agreement.

Many insurance companies write forms of insurance similar to or closely related to fire insurance. Thus many, especially farm and state mutuals, frequently combine tornado, frost, hail and other storm insurance with the fire coverage. Sprinkler leakage insurance is also closely connected with the fire hazard, although this type of coverage is usually classified as one of the casualty forms. Stock fire insurance companies also furnish riot and civil commotion and earthquake insurance in addition to their fire insurance policies. Many also write marine insurance and automobile fire and liability insurance.

Most common of the related forms of risk, however, is the business interruption hazard. The fire insurance contract protects only against the loss of physical property. Yet in many instances a comparatively small fire seriously interrupts business and through such interruption causes serious indirect time losses, such as loss of net profit and loss resulting from unavoidable fixed charges and overhead. Such losses are assumed by underwriters through use and occupancy insurance, commission insurance, rent in-

surance and other analogous forms of coverage.

The American public is now paying in excess of \$1,000,000,000 in premiums to fire insurance companies protecting over \$100,000,000,000 of property. This protection is assumed by domestic stock companies, foreign companies, local, state and factory mutuals, reciprocal or interinsurer organizations and Lloyd's associations in the order of importance named. In addition a large amount of insurance is sent directly by cable to alien underwriters not licensed to do business directly within the United States. Note should also be taken of the various municipal and other public funds for the insurance of public property and the ever growing list of selfinsurance funds conducted by large corporations and other owners of widely distributed properties.

Stock companies transact probably about 75 percent of the nation's fire insurance, and on them property owners in the larger cities are primarily dependent for adequate protection. Local and state mutuals which write about \$10,000,000,000 of fire insurance, or roughly 10 percent of the total, are strongest in the agricultural districts and the smaller cities. Factory mutuals have outstanding between \$9,000,000,000 and \$10,000,000,000 of insurance on factory properties, or about another 10 percent. The balance of fire insurance written within the country is assumed by interinsurer organizations and Lloyd's associations.

The ratio of losses paid to premiums received by companies as reported for all states by the Weekly Underwriter averaged only 51.8 percent from 1900 to 1923. The ratio for all companies reporting to the National Board of Fire Underwriters for fire and lightning protection declined to 46.5 percent in 1929 and in 1930 jumped to 53.6 percent. At the same time the average rate charged for \$100 protection has decreased from \$1.0118 in 1919 to \$.9132 in 1926 and to \$.7691 in 1930 for fire and lightning protection. This declining rate probably indicates increased competition and more fireproof construction rather than excessive profits.

Although municipal fund insurance has been fairly satisfactory, comparatively few cities have undertaken the plan. A survey indicates that only about 10 percent of American municipalities have insured public properties through the medium of a public fund organized for the special purpose. The overwhelming majority of cities rely upon private companies. Insurance by larger cities of their public school property has

resulted in considerable saving. Large losses do occur occasionally, and it is difficult to rely upon a ten or twenty-year loss experience which may be nullified by a single fire. By 1927 six states had established emergency reserve appropriation funds; five, self-insurance funds that reinsure with old line companies. But in two others, Michigan and Minnesota, these funds had become exhausted by the failure of the legislatures to appropriate premiums each year. Nine states, including New York, do not insure their property at all. Even where public insurance funds exist the best opinion seems to hold that they should cover small properties only and that large or hazardous risks should be placed or reinsured with private companies.

Prior to the organization of factory mutuals the function of fire insurance was regarded primarily as risk bearing, whereas today the emphasis is increasingly upon risk prevention. Underwriting profit may be even larger with small premiums, where losses are kept down, than with higher premiums when losses have a tendency to be large and to deviate widely from the expected average. More and more therefore a larger part of the premium income has been devoted to the elimination of fires. The National Board of Fire Underwriters, representing the stock companies, has been responsible for the preparation of a fire prevention manual and the publication of scores of handbooks dealing with fire preventive appliances, fire retarding materials and types of construction. It has expended considerable effort on public education; it has carried through several hundred municipal surveys for the guidance of those in strategic positions to improve conditions, and it undertakes the inspection and supervision of the installation and maintenance of electrical, sprinkler and other types of equipment. The Underwriters' Laboratories, a subsidiary of the National Board of Fire Underwriters, tests appliances and materials submitted to it for disinterested investigation and lists and labels those found to be satisfactory. Every effort is also made to detect and punish incendiarism. To this end the National Board has created a Special Committee on Incendiarism and Arson, which cooperates with the various committees of local underwriters' associations. This service is supported by company contributions, and arson investigators are employed to cooperate with local officials in the detection and conviction of those who bring about fires for the collection of insurance.

Recent developments indicate further prog-

ress in various directions. The volume of fire insurance written is likely to increase although less rapidly than in the past decade, when it increased about 100 percent. Emphasis upon fire prevention will also increase. There is reason to believe that before long conflagrations of importance will be excluded from the realm of the expected. Development is likely to be great in the direction of a properly educated field force able to counsel the buyers of insurance. Companies are rapidly installing educational courses and even educational departments designed to raise the educational level of their vast selling forces.

It is also hoped that greater uniformity of legislation, so long advocated by the National Convention of Insurance Commissioners, will be gradually secured. This is most needed with respect to the adoption of uniform financial reports, policy provisions and regulations, the permission of all forms of cooperation along legitimate lines and the scientific supervision of rates, and in the direction of lower and more ethical taxation. In some states fire insurance companies are taxed to support the fire marshall and to maintain fire departments. Only a fraction of the various fees and taxes paid by them goes to support state insurance departments. Another possible development is that the states will follow congressional legislation for the District of Columbia in abolishing the distinction between casualty insurance and fire and marine insurance.

S. S. HUEBNER

EUROPEAN. European fire insurance is not a uniform institution. It is even impossible to make a systematic survey because of the lack of statistical data and because of inadequate material regarding such vital aspects as legislation, content of insurance policies and rates. In general therefore this article is limited to certain of the more important European countries: to England as the archetype of private insurance enterprise, to Germany and Switzerland as representatives of a mixed system where public and private concerns coexist and to Soviet Russia as a country with a state insurance monopoly. If German insurance receives what may seem undue emphasis, it is because her fire insurance literature is most extensive and because in 1930 she adopted a new uniform general form of insurance policy.

The original unit of organization, of fire insurance as of so many other institutions, was the family. In the Middle Ages the guilds and the

communities were the bearers of the insurance idea. Even in more modern times the guilds continued to perform this function, especially in the northern countries, where the climate stimulated the demand for insurance by forcing people to build solid houses, i.e. to invest more capital in dwellings than is necessary in warmer zones.

Modern fire insurance practises, however, are an outcome of the great London fire of 1666. In England private and mutual insurance enterprises were soon formed, at first, like the old guilds, chiefly local in scope; early in the eighteenth century joint stock companies, able to conduct a wider business, were organized. German insurance, on the other hand, followed a different course. Municipality and state, fearful of conflagrations, prescribed compulsory insurance through public insurance offices. In 1676 the trading town of Hamburg established the first public insurance office by uniting forty-six small Kassen. Gradually the other German self-governing units followed this example. The compulsory feature of German insurance can be traced back to the desire of the local treasuries, encouraged by the cameralistic economists (e.g. Georg Obrecht's scheme, 1606), to protect themselves against loss by fire, especially loss to the property of wealthy burghers. The public fire insurance societies were also regarded from the first as useful institutions for the extension of mortgage credit. The insurance of goods did not develop on the continent until long after real estate insurance had become common. In Germany it had no great growth until the end of the eighteenth century.

With the rise of individualistic principles the idea of profit invaded the field of fire insurance. In many European countries the importation from England of the joint stock insurance company led to the organization of similar home companies. The first stock fire insurance company in Germany was organized in Berlin in 1812. In France too modern fire insurance is a postrevolutionary development; none of the earlier enterprises survived the upheaval. For most European countries the latter half of the nineteenth century was not unnaturally the period of greatest development. At present the joint stock companies dominate the field. By their inherent elasticity, enterprise and openness to new ideas they have generally forced other forms of enterprise into the background. Public fire offices have survived in the countries where they have been organized, but their operations are limited as to region and also at times as to the

type of business they may handle; while the private companies tend to widen their activities, often spreading beyond national boundaries.

A glance at the trend of the last fifty years reveals, in addition to the growth in the number of private insurance companies, a steady increase in the total value of the insurance underwritten and in premium receipts. At the same time there has been a general decrease in the premium rate, due for the most part to the increasingly successful fighting of fires and to the spread of fireproof building. The classification of risks and the establishing of rates have become more and more precise and elaborate. The provisions of the insurance policy have in many countries been revised in favor of the insured. These advances, however, have been counterbalanced to a certain extent by the marked post-war increase in the cost of administration, caused in part by the increase of the tax burden. The cost of administration of five large English stock companies, expressed as a percentage of the premium receipts, rose from 39 percent in 1920 to 42 percent in 1928; Swiss company costs rose from 35.5 percent in 1910 to 39.4 percent in 1926; German from 27 percent in 1910 to 53 percent in 1926, but declined to 48 percent in 1928.

The most characteristic development of the last two decades, especially in Germany, has been the attempt to increase profits by the concentration of insurance capital; that is, by the pooling in one form or another of private undertakings. The increasing formation of composite companies (*Spartenkombinationen*) represents a logical attempt to combine fire insurance with other insurance lines. The company benefits by being able to balance the carnings of the various lines and by using the same agents to solicit them. Europe does not follow the United States in forbidding the combination of fire and casualty insurance, although some countries prohibit the combination of fire and life insurance.

In spite of increasing concentration fire insurance protection by both domestic and foreign companies is still in excess of requirements in most European countries. Competition has forced down premiums to a point that threatens the profitableness of the business. In consequence associations of fire insurance underwriters, which aim more or less consistently to guard the interests of the insurance institutions, have assumed greater importance in the last ten years. These associations, often actual cartels, have been organized by the public offices as well as by the private companies. One of their activities

has been the conclusion of agreements covering the provisions of the insurance contract and the amount of the premium, which may be binding or are sometimes merely officially endorsed standards.

The external organization of the private fire insurance business in Europe resembles the American too closely to call for description here. There is need, however, for a more detailed examination of the way in which government fire insurance is conducted by quasi-public institutions. At present public fire insurance offices exist in Germany, Austria, Switzerland, Denmark, Norway, France, Poland and Lithuania. Soviet Russia is the only European country in which private insurance companies do not operate.

In Germany there are, in addition to some seventy private companies, forty-one regional public fire insurance offices. These offices are as a rule public corporations operating as mutual societies and directed by officials of the administrative area served by the office. Their reserve funds are in certain places guaranteed by the local administration. Some cover a whole state, as Bavaria and Saxony; some only single provinces or districts, as parts of Prussia; or individual cities, as Berlin. Compulsory insurance of buildings through public offices still exists in certain places (e.g. Berlin and Hamburg); elsewhere the public offices compete with the private companies in this field. The majority of the public companies, however, limit their activities to the insuring of simple risks, like dwelling houses, farm buildings and small business buildings. A few public companies also handle a considerable range of industrial and larger commercial risks. Only about half insure goods as well as buildings in appreciable amounts. In 1927 the net premiums of the public institutions amounted to RM 178,000,000 and losses to RM 104,000,000, as compared with net premiums of the private companies amounting to RM 154,000,000 and losses of RM 62,000,000.

In Switzerland, where public insurance has long been organized by cantons, the underwriting of chattel insurance is particularly interesting because of the diverse forms of organization, ranging from complete state monopoly through mixed state and private insurance to control by private companies. The fact that four French departments maintain public fire insurance offices shows that government insurance is not peculiar to Germanic countries. Organization of new public offices is, however, no longer possible under French law.

A very important form of fire insurance first devised in 1880 is forest fire insurance. Formerly the fire insurance companies almost without exception refused to insure woods against loss by fire; although various German groups have continually sought to introduce this form, it is as yet in an early stage of development, and of the damages arising from forest fires in Germany probably less than 8 percent is covered by insurance.

An inclusive state fire insurance monopoly has been in operation in Soviet Russia since 1920. Insurance of all buildings, both city houses and farm property, is compulsory. In 1930 the compulsory provision was extended to include the protection of public, communal and cooperative institutions against all natural risks, including the insurance of their movables to their full reproduction value without allowance for depreciation. This is undoubtedly the most comprehensive insurance of property values ever attempted. Voluntary insurance can be also placed with Gosstrach, the public central insurance office. It is worthy of note that Gosstrach has concluded reinsurance treaties with foreign private companies.

A comparison of the premium rates in those countries where public and private companies operate side by side shows that the public offices usually ask a lower rate, especially when a compulsory insurance provision allows them to dispense with advertising. But even where the private companies demand higher premiums these companies are none the less often the more popular. The least attractive of all types are the small local or limited membership mutual societies.

In Germany neither mutual insurance nor self-insurance has been able to make much headway against the stock companies. In France, however, the big mutual companies handle about a quarter of the insurance business. In addition an attempt has been made to encourage agricultural cooperatives by subvention. Italy also grants special favors to the mutuals that are part of the cooperative movement. An interesting experiment by Belgian agricultural unions was the organization of the Syndicat Agricole to be their agent in dealing with the stock companies.

The World War and its consequences have led to several interesting developments. The severe air warfare caused the extension, particularly in Germany, of fire insurance policies to cover damage resulting from bombings. In England a government insurance office was organ-

ized to cover air risks, for which some fifty private companies acted as agents. The central European countries attempted to counteract the unforeseen and serious underinsurance resulting from inflation by offering policies with sliding scale values based on index numbers or on the dollar. A further result of the economic stress was the introduction of reproduction value policies (replacement insurance) for detached buildings. This type of policy is less common in England than in Germany, where since 1924 it has applied both to dwellings and to industrial plants with rebuilding as a prerequisite for indemnification. Switzerland and Czechoslovakia have opposed the introduction of replacement insurance, fearing an increase in fires. The results of the experiment in England and Germany are still uncertain, as few such policies have been issued.

The extension of fire insurance to include profit insurance, use and occupancy insurance and the like, so widespread in America, is common in Europe also, especially in England; most German companies, however, refuse this business. The comprehensive policy is growing in favor in England and Holland for both real and personal property. A single contract insures not only the fire hazard but also risks of forcible entry, burglary, liability and so on. In Germany the comprehensive policy known as the *Veredelungspolice* protects against fire and other damage imported raw materials which are to be reexported as finished products.

State regulation of private companies, especially in Germany, Austria, Switzerland and the Scandinavian countries, is similar in principle to the American. Provision is made for adequate premium reserves, investments are regulated and foreign companies are usually required to make a large deposit. Only France attempts to regulate rates. A significant provision of the code of certain German states is the enforced pooling by the operating companies of extraordinary risks which otherwise might not be underwritten. With the exception of the French code legislation governing the insurance contract protects the insured in important particulars. In all other countries the rights of the policyholder are confined to the provisions of the policy as drawn by the companies, often too drastic in their requirements. English fire insurance companies are merely required to deposit £20,000 and to make adequate annual financial reports. The criminal laws of certain countries treat fraudulent action with particularly heavy penalties. In France,

where the individual is held liable for damages to others caused by fire on his premises unless he can prove his innocence, the fire loss is unusually low.

ALFRED MANES

See: Insurance; Casualty Insurance; Marine Insurance; Agricultural Insurance; Fire Protection; Building Regulations.

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FIRE PROTECTION. The need for protection against the hazard of fire has been forcibly impressed upon mankind by a long experience of destruction and loss. A list of places that have suffered disastrous fires would include most of the principal cities of the world. The burning of Rome in 64 A.D., the great fire of London in 1666, the Chicago fire of 1871, the San Francisco earthquake and fire of 1906 and the Tokyo earthquake and fire of 1923 are instances of the terrible damage that can be worked by fire. Less completely destructive but serious fires have

occurred in most of the cities of Europe and the Orient. More recently settled countries, such as the United States and Canada, have repeated the fire experience of the European countries. The rude huts which housed the first settlers at Jamestown, Virginia, burned within one year; the statehouse burned down four times before the end of 1698 and the church twice. Certain of the American colonies, like Pennsylvania, took fire hazards into account when planning their towns, an effort which has apparently been reflected in their fire experience. As the pioneer line moved westward, however, urban centers were often planned with less care and many cities went through disastrous fires before establishing effective regulations governing building construction and fire protection. But as such regulations cannot greatly modify existing construction, many cities still include potential conflagration areas. Disastrous fires in the United States in the last hundred years have caused losses of property and life possibly exceeding those of any similar period in the world's history. The Boston fire of 1872 and that in Baltimore in 1904 are charged with property losses of \$75,000,000 and \$50,000,000 respectively. The property loss resulting from forest fires, many of which have destroyed communities in their paths, has at times equaled that from some of the more severe city fires. More recently burning oil wells and oil storage tanks in city areas and fires involving burning oil on harbor waters have caused heavy losses.

In 1930 the fire losses in Great Britain and Ireland as reported by the British National Fire Brigades Association amounted to \$51,125,428, or \$1.27 per capita. For Canada the figures as collected by the Dominion Fire Prevention Association were \$46,100,875, or \$4.70 per capita. For the United States the loss in 1930 may be given as \$499,739,172, or \$4.07 per capita, on the basis of records of the Actuarial Bureau of the National Board of Fire Underwriters with 25 percent added for uninsured and unreported losses. Fire losses for these countries have remained relatively stable for the past decade, with greater variations from year to year in Great Britain and Ireland than in the other two countries. A steady decrease in per capita loss in the United States from \$4.90 in 1924 to \$3.81 in 1929 is perhaps significant considering that the value of property subject to fire increased during the period. The lower per capita loss for the United Kingdom may be ascribed in part to the fact that per capita wealth is less than in the

United States and Canada. Differences in building construction as well as in fuels and lighting and the habits of the people may also be important. The isolated American farm continues to be at the mercy of an accidental fire and the thatch roofed villages of Europe suffer heavy losses.

The figures for property loss do not represent the total cost of fire to the community. For the United States the life loss as based on the statistics gathered by the census bureau now approximates between 6000 and 8000 lives per year with as many or more serious injuries. About 25 percent of the deaths by fire occur in burning buildings; the rest are due to such causes as burning clothing, forest fires and the like. The cost of fire protection and the cost of insurance must also be included in the fire waste total.

Until comparatively recent times the only relief given to victims of fire was contributed by other individuals or communities. The business of fire insurance, which originated soon after the London fire of 1666, has only recently attained large enough proportions to compensate for the losses sustained in general city conflagrations. After the Chicago fire of 1871 many of the insurance companies failed. The insurance losses incurred in the Baltimore and San Francisco fires were more fully paid. While the funds thus obtained are important in rebuilding burned cities, other forms of public aid are generally necessary for both relief and reconstruction.

The general factors contributing to the fire hazard can be classified as climatic, racial and material. Prevailing temperature, humidity and winds often determine whether a fire can attain dangerous proportions; climate also determines the extent to which artificial heating of buildings is necessary, thus influencing the portions of the total fire loss attributable to this cause; fire losses are heavy in earthquake and volcanic zones. Various racial traits and customs may be conducive to the origin of fire: for example, the worship of household gods by means of continuously maintained fires constituted an element of fire hazard. In congested communities the material, design and spacing of buildings are probably the most important factors. Modern fire zoning has helped measurably in decreasing the hazard of general conflagrations.

Fire protection may take the form of elimination of the causes of fire, reduction of fire hazards, prevention of the spread of fire and provision of means for its extinction. In modern times reduction of fire hazards through restric-

tions on construction and less frequently through restriction of extra hazardous occupancies in congested urban areas has become increasingly widespread. Heights and areas of buildings have been limited and certain types of materials have been proscribed within given areas in most modern municipalities. Such restrictions on construction have their justification in the different degrees of hazard involved when buildings of the various types of construction burn or are exposed to fire. The frame building with combustible frame and walls is most subject to destruction by fire. The masonry walled, wood joisted building is protected in part against exterior fire hazards by the wall construction. Openings in the wall do not wholly destroy the efficacy of this protection, for the wall provides a barrier from behind which fire attempting to enter at the openings can be fought; protections in the form of metal frame windows with wire glass, metal doors and shutters can also be provided. A severe fire, however, involves the collapse of floors and roof construction and generally the partial collapse of walls, after which the building burns as a unit with a large unrestrained volume of flame, hot gases and possible flying brands. The conflagration hazard is present with this type of building, particularly if it shelters large amounts of combustible materials. In recent years there have been developed what are termed fire resistive, or fireproof, buildings that can withstand a complete burning out of combustible contents and trim without the collapse of major structural members. The fire volume in such buildings is broken up by the floor, roof and wall constructions, and the exit of flame and hot gases can take place only through the wall openings. In addition to general fireproof construction special safeguards and regulations have been devised to protect explosives and highly inflammable materials, such as celluloid films. In the highly developed districts of many American cities fire resistive construction predominates to such an extent and facilities for the extinction of fires are so readily available that the possibility of general conflagration is remote.

Statistics on the fire loss in the United States indicate that about 15 percent is due to fires communicated from other burning buildings. Most of these communicated fires involve only one or a few structures. The loss from general conflagrations does not constitute more than a small percentage of the ordinary yearly loss. A somewhat greater loss, in the neighborhood of 25 percent of the total, is caused by heating,

cooking, lighting and power supply. The careless disposition of matches, cigarettes and other smoking materials is charged with some 10 percent of the total, spontaneous combustion with 4 percent, sparks on combustible roofs with 5 percent, petroleum and its products and lightning with approximately 3 percent each. Incendiarism is charged in the fire records with less than 1 percent of the total loss, but this refers only to cases of proved arson, conclusive evidence on which is generally difficult to obtain.

A study of the predominating causes of fire indicates that at least one half of the property loss is from fires which might be prevented by the application of a reasonable degree of care and knowledge. It is difficult to draw the line between lack of knowledge and lack of care. Such an act as the careless throwing of a lighted match may have to be repeated a great number of times before it results in a fire, but it is the function of fire prevention to bring the individual face to face with the experience of the community as a whole so that he may realize that it is the one case out of a hundred or thousand or more that brings disaster. The regularity with which approximately the same percentage of the aggregate loss from year to year is caused by similar acts is striking.

Individual liability for fires has been advocated in the United States as being conducive to increased caution. During the Middle Ages in England inquests were held on fires which had resulted in loss of life or property, but apparently they were conducted in a manner resulting in oppression as they were one of the grievances from which Magna Carta asked relief. By an act passed during the reign of Queen Anne it was provided that no action should be maintained against any person in whose house a fire had accidentally begun. Attempts to revive personal liability laws in both the United Kingdom and the United States have met with opposition, although arson is punishable by common law. The laws in France and some other European countries contain provisions originating in the Code Napoléon holding the property owner or tenant responsible for fire damage to adjoining property. While these undoubtedly result in reduced fire losses, they impose both a large burden of responsibility and the cost of carrying adequate insurance. Personal liability laws in effect in the United States apply only in case of violation of local fire prevention regulations.

Organization and equipment for the extinction of fires have been in existence at least since

the time of ancient Egypt. The plans of organization have involved compulsory, paid and volunteer service and combinations of the three. Compulsory service is at present resorted to only in case of forest fires and conflagrations. In the United States the larger cities and communities have paid fire departments, while villages, townships and the smaller cities have volunteer or a combination of volunteer and paid forces. Volunteer firemen are generally compensated for time spent at fires and drills and some communities provide disability and retirement benefits. Good sized communities are dependent mainly on volunteer forces less often in the United States than in Europe. In Paris and Berlin the fire fighting force is directed by the police department.

Since the middle of the last century the function of fire extinction has everywhere been taken over by municipalities. In the United States, however, fire insurance companies still maintain salvage corps in larger cities to reduce damage from fire and fire extinction, although some cities have also assumed this function and added rescue and ambulance units. The adoption of mechanical fire fighting machinery has involved the establishment of highly trained bodies of paid firemen. New York has established a firemen's college. Wages have risen and shifts have been reduced from twenty-four hours to twelve and in some places to eight. In view of the increase in fire resistive construction in the more highly developed districts of modern cities, the increase in speed and effectiveness of fire fighting equipment, improvements in water supply, standardization of hose couplings and improvement in roads, which makes aid from neighboring communities more readily obtainable, it is pertinent to take note of the high cost of the fire service in many communities and to ask whether reduction in the number of fire stations and in the general cost of public protection cannot be made.

Equipment for fire fighting has evolved from the leather bucket and hand operated squirts or pumping engines used until nearly the middle of the last century to the motor propelled engine capable of delivering 300 to 1500 gallons per minute under pressures up to 250 pounds per square inch. High pressure water mains, elevated hose towers, mechanically operated ladders, gas masks, asbestos suits and special illumination have increased the effectiveness of the fireman's work under difficult conditions. The fire ship has facilitated the fighting of marine and water front fires. Public fire alarm systems

with electrically supervised connections giving coded signals from operation of outside boxes are provided in most cities, although some communities of considerable size depend on the public telephone for this purpose. Where both are available many more alarms are received by telephone than from the public boxes and the percentage of false alarms is smaller.

Equipment for private protection is usually present only in mercantile, manufacturing and public establishments. Hand fire extinguishers, standpipe and hose and automatic sprinklers are the most common devices. Manual or heat actuated fire alarm systems are also provided in some establishments to assist in speedy detection and extinction. The majority of large establishments and institutions hold fire drills to lessen the possibilities of panic in case of fire. Public halls and theaters, after several disastrous fires, have been subjected to special regulations regarding fire exits and preventive devices.

Education, standardization and research in the field of fire protection are conducted in this country by the National Fire Protection Association and several state associations. Many states have appointed fire marshalls to inspect local fire hazards and guard against lax enforcement. Excellent work is done by the insurance companies; the stock companies are represented mainly by the National Board of Fire Underwriters and the mutual companies by the Associated Factory Mutual Fire Insurance Companies and the National Association of Mutual Insurance Companies. Fire tests of materials, building constructions and devices and fire protection equipment are made mainly for purposes of insurance ratings by the Underwriters' Laboratories and the Factory Mutual Laboratories. Similar tests are made by Columbia University for the city of New York as well as for the public. The Bureau of Standards of the United States Department of Commerce has conducted researches in the general field since 1914. The Federal Fire Council was organized in 1930 to function in an informatory and advisory capacity on matters pertaining to fire prevention and protection on government properties. Abroad, the British Fire Prevention Committee was active in testing and educational work from 1898 to 1924, when its work was taken over by the National Fire Brigades' Association. National and regional fire prevention associations are functioning in many countries and some experimental work on fire resistant building details has been conducted in France, Germany and Sweden. In general

researches on fire resistance are less fully developed than those pertaining to ordinary service conditions of materials and equipment.

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See: Fire Insurance; Building Regulations; Zoning; Public Employment; Disasters and Disaster Relief.

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FISCAL SCIENCE. The discipline which deals with the public household, that is, with the revenues and expenditures of the state and the relations of the individual to the public treasury, is in every language but English called the science of finance. This is to be explained by the fact that the term finance, although originally applied to money concerns only (from finare, to put an end to a matter, especially by the payment of money), acquired at a very early period on the European continent a public connotation. In the sixteenth and seventeenth centuries in France the financier had come to mean a government expert in public revenues and expenditures. Consequently, when the science first developed, as it did on the continent, it was called the science of finance.

Finance, however, never quite lost its original wider connotation. The French of the eighteenth century as of today speak of haute finance in referring to the activities of private bankers and financiers. In England this more general scope of the term remained the prevalent one. Even at the present time every treatise on economics in England has its sections dealing with finance in the sense of monetary and banking topics. When therefore at the end of the nineteenth century the subject in its more restricted and special sense was erected into an independent science, the question of a descriptive title arose. The term science of finance could not well be chosen because the field had already been preempted by books like Patterson's Science of Finance (1868), which dealt exclusively with monetary topics. The attempt of Thorstein Veblen to use "science of finance" in his translation of G. Cohn's Finanzwissenschaft (1895) and of Henry C. Adams, who had studied in Germany, to publish at the turn of the century The Science of Finance (1898) in the European sense met with scant favor. Slowly it became customary, both in the United States and in England, to speak of "public finance" in contrast to the ordinary monetary and banking topics. The science has accordingly almost everywhere in the English speaking world become known as the science of public finance.

Recently the term fiscal science has been suggested as a more appropriate name than the science of finance or the science of public finance. It is derived from the Latin fiscus (originally the rope basket into which the public moneys were put), which the Romans applied to the treasury and which is used on the continent in the same sense. In English the term has become so ingrained that fiscal matters are never in danger of being confused with ordinary financial or monetary affairs. Inasmuch as the word fiscal has an exclusive public connotation, it is unnecessary to use the circumlocution of public finance. The appropriateness of the term seems to be beyond dispute. It does not carry the misleading connotation of the older term science of finance and it is less awkward than the science of public finance. It will also be far more convenient to speak of fiscal theories rather than, as at present, of theories of public finance or of the still more cumbersome theories of the science of finance (finanzwissenschaftliche Theorien). Because of its appropriateness, simplicity and terseness the term fiscal science would seem to deserve acceptance as the name of the discipline of the public household.

EDWIN R. A. SELIGMAN

See: Public Finance; Financial Administration.

FISHERIES. Fishing was one of man's carliest sources of food supply and it is still one of his most important means of livelihood. Primitive man probably caught fish first with his hand or with a spear; later with a baited line, from which he gradually evolved a rod and line; and finally with a net or fish trap. In the hands of the great fishing peoples of historic times—Phoenicians, Greeks, Norsemen, Basques, Portuguese, Dutch, British, Americans, Japanese—such devices have been slowly transformed into the more efficient methods of the present day. Among the important modern devices are the long line with its hundreds of dangling hooks; the gill net, resembling a huge submerged tennis net, which

entangles the fish in its meshes; numerous types of fish traps; beach seines and purse seines, which are closed about their victims; and the otter trawl, a great flattened bag of netting which is dragged along the bottom like a giant open mouthed fish. Fishing boats too have evolved through countless variations from the early dugout to the dory, schooner and steam trawler. Technical progress and mechanical improvements, however, have often been retarded by the proverbial conservatism of fishermen; and the slowly growing mechanization of the fisheries has been achieved only in the face of steady opposition and bitter resentment. In recent years much of this resentment has been focused upon the heavy, voracious nets of the steam trawler, which nevertheless is steadily displacing the sailing vessel, especially on the more distant grounds.

Four major methods of preserving fish have been in use since primitive times—freezing, drying, smoking and salting. A fifth, canning, was developed during the nineteenth century. Pickling, although not uncommon, has never been as popular as the others. At the present time canning and freezing (together with cold storage) are the favored methods of preservation in the United States; smoking and pickling are practised most by the nations of northern Europe; drying is employed mainly in the Orient; salting is practically universal.

The requirements of modern marketing have supplemented or modified these traditional processes in various ways. With the aid of ice for packing, fresh fish are shipped "in the round" (just as they come from the water) or dressed. Freezing, however accomplished, must be followed by glazing, which coats the fish completely in a thin film of ice, before the product can be safely trusted to cold storage. Filleting is also increasing in favor. This process, which markets only two choice pieces of meat, virtually free of bones and skin, from each fish, has the added advantage of permitting the concentration of the inedible parts for manufacture into by-products. Fish foods which can be sold in package form are being developed in increasing number, but perhaps the most promising method is that of dehydration. By this process, which involves destruction of the enzymes and removal of the water content of fish meat through pressure, vacuum or warm air currents, there is obtained a highly concentrated food product which may be stored indefinitely. The dried fish of the Orient and the salt fish of the Occident have long been counted among the few staples in the limited dietary of the masses, and the development of new methods of preservation has but extended the range of use of fish as a food.

The Black Sea and the Bosporus supplied the Phoenicians and Greeks with their salt fish, in particular, tunny. In the later Greek and the Roman periods the coasts of Sicily and Spain became important fisheries, while Egypt and the rivers of northern Europe sent quantities of fresh fish to the Roman cities. The Carthaginians frequented the seas beyond the Pillars of Hercules, hunting whales and seals as well as tunny.

The prosperity of the Hanseatic League was based largely upon the herring catch, and the subsequent transfer of power from the Hanse towns to Holland has been attributed to the migration of the herring from the Baltic to the North Sea. The wealth of early New England depended upon the "sacred codfish" of the Grand Banks. The present economic structure of Great Britain, Norway and Japan, to say nothing of smaller countries, would be seriously disrupted by the loss of their fisheries; and the peoples of many a stretch of coast line, Labrador, Iceland, Brittany, would be rendered economically helpless without their dominant source of income.

Fishing boats of all nations still gather at the deep sea fisheries to garner from each its particular harvest. Coastal waters too have their own specialties. Alaska concentrates upon salmon and upon the government controlled seal herd of the Pribilof Islands. The Columbia River has become a synonym for salmon. Southern California is devoted to tuna, abalone and sardines; with respect to the last it challenges the traditional supremacy of France. Chesapeake Bay contributes oysters and crabs; the Gulf of Mexico, shrimps; Florida, turtles and sponges; and the Middle Atlantic states, menhaden. New England, less specialized, is still loyal to cod, mackerel, halibut, lobsters and clams. The Newfoundland bankers are commercially interested in only a small number of the varieties of fish life available. Norway has virtually a monopoly in the field of antarctic whaling. The North Sea yields unbelievable quantities of herring. Caviar properly belongs to Russia, seaweed to Japan and coral to Japan and Italy. Japan, however, with a per capita fish consumption which is many times that of meat requires an annual catch which is as rich in variety as it is enormous in quantity.

At the present time the value of the world's annual harvest of fishery products is in round numbers about one billion dollars. The list includes a fascinating variety of items—pearls, buttons, ambergris, coral, tortoise shell, foods, condiments, medicinals, chemicals, jellies, glues, waxes, oils, fats, cements, stock foods, fertilizers, leather, furs, lime poultry grit, sponges, seaweed and whalebone. In weight and variety of annual catch the United States leads with the stupendous total of more than three billion pounds made up of more than one hundred species. The United Kingdom captures annually more than two billion pounds, two thirds of which are contributed by the herring, haddock and cod fisheries. Japan lands five hundred million pounds of herring and a like amount of sardines each year in addition to scores of other commercially valuable fishes. Norway, concentrating mainly on herring and cod, produces more than a billion pounds per annum; and Canada markets about seven hundred million pounds annually, chiefly salmon, cod, lobsters, halibut and herring. In the value of their catches Great Britain, Japan, the United States and France are easily in the lead, with annual totals approximating \$100,-000,000 in each case. These sums, plus the less striking contributions of Spain, Canada, Norway, Portugal and Russia, comprise from two thirds to three fourths of the world total.

The industry has within the past generation enlisted science to further its progress. The discoveries of oceanography, biology and pisciculture have begun to replace or at least to challenge the traditions, prejudices and untrained, half true observations which dominated many of the fisheries. Many pioneering investigations into the conditions of fish life have been organized by the United States Bureau of Fisheries at the Woods Hole experimental station and elsewhere and by similar governmental agencies in other countries. The northwest countries of Europe cooperated in founding the International Council for the Exploration of the Sea.

The plentifulness or scarcity of fish depends in large part upon the nature of their food supply. While many fishes feed upon smaller fishes, the primary source of fish food is to be found in plankton—a collective term for the myriad masses of minute marine growths, both vegetable and animal, which float in the shallower waters of the ocean. Plankton, in turn, is plentiful or scarce as the result of a combination of factors including temperature, salinity, density, depth and currents, which are themselves

most profoundly influenced, perhaps, by the ever growing and changing deposits made by rivers upon the submerged continental plateaus. These shallow waters with their teeming animal and vegetable life account for the Newfoundland Banks, the North Sea, the Baltic, Iceland, Alaska and the other famous fishing grounds of the north Atlantic and Pacific.

Plankton would seem to offer one explanation for fish migrations and fish years. When the supply changes or diminishes either with a regular seasonal rhythm or at irregular, unpredictable intervals the fish migrate to more congenial feeding grounds. And when fortune happens to provide an unusually plentiful harvest of plankton just at the time when the young fish are most dependent upon it, a prosperous fish year may be predicted. Such forecasting of fish years has been greatly facilitated by the discovery that fish scales register each year's growth by a circular ring, and consequently fish ages can be read with considerable accuracy.

Another cause of migrations, spawning, is of particular importance because of its intimate connection with the actual or possible exhaustion of certain beds and banks. Forces inimical to fish life, especially in rivers, lakes and coastal waters, are accumulating in many regions, largely because of the growth of industrialism, as in the case of pollution from the waste products of cities, factories and steamships, or the building of dams, which prevent fish like salmon from migrating to their spawning grounds in the upper reaches of rivers. In the deep sea fisheries, including whaling and sealing, the great menace is overfishing. In recent years vigorous conservation measures have been undertaken by many countries in an effort to protect or to restock depleted grounds. Legislation and treaties have provided for closed seasons or have prohibited fishing entirely in certain waters or have forbidden the catching of fish below a specified size, often by outlawing undesirable types of fishing gear. Fish hatcheries have been entrusted with the task of periodic restocking of designated waters with young fry. In some instances, notably those of many Chesapeake Bay oyster beds, methods have been adopted which virtually constitute a process of sowing and reaping.

The deep sea fisheries, as distinguished from river, lake and coastwise fishing, have played a role of great significance in international commercial, political and scientific development. Geography owes much to the fisheries. In their

constant search for more prolific waters fishermen have been responsible for many feats of discovery and exploration. Mediaeval Norsemen may well have resorted to the Newfoundland Banks; and the names of many South Sea islands still bear witness to the far flung voyages of the American whalemen. Sea power too has leaned heavily upon fishermen for support. Fishing fleets have always contributed strategic man power to merchant and naval vessels in times of emergency and have often been transformed into auxiliary navies.

Because the fisheries happily combined the three virtues of promoting trade, affording employment for labor and capital and providing a nursery for seamen they have seldom lacked warm advocates amongst those responsible for national policies. Queen Elizabeth added a second fast day to the week for the express purpose of stimulating the industry. Mercantilism looked with favor upon fisheries and provided numerous bounties on catches, exports and tonnage. For some centuries many branches of the industry, notably in Holland and in England, were carried on under conditions of quasi-monopoly, with the necessary corollaries of a government brand and regulation or prohibition of import; and not until the latter half of the nineteenth century did this system finally give way to laissez faire. But even today all countries engaged in fishing support government departments devoted to furthering the interests of the industry by regulation of fishing in territorial waters and by commercial services as well as by scientific research and collection of statistics.

The organization of the fishing industry has varied greatly in different times, but its nature has resulted in certain characteristic forms of operation. Fishing communities the world over exhibit marked similarities. With but few exceptions they have acquired a reputation for stubborn conservatism and provincialism, religious devotion and superstition, as well as for independence, courage, self-sacrifice and endurance. Grimsby, Aberdeen, Gloucester, Boulogne, Vigo, Ijmuiden, Bergen and the other great fishing ports of the world have been known as well for the poverty of their fishermen. In all countries and times low average earnings have resulted from the loss of boats and of gear and from the economic risks inherent in the vagaries of catches and of prices.

This uncertainty as to the outcome of the catch has been partly responsible for the development among fishermen of the characteristic

share system of wage payment. Subject to endless variety of detail and running the whole gamut from simple partnership to a complicated scheme of guaranteed wages, percentages of the net or gross catch and bonuses minus advances and deductions, the share system has been practically universal. It reached its greatest degree of elaboration, perhaps, in the "lay" of the American whaling industry, when a "green hand" often shipped for a share of one twohundredth of the net proceeds of the voyage. Since a voyage commonly extended over a period of two to four years and since no wages were paid during this time, it was necessary to make numerous advances both in cash and in kind. These advances, in addition to interest charges and other deductions, drew so heavily upon the man's share, calculated at the end of the voyage, that he was not infrequently left with a purely nominal or even a negative balance.

With the advent of the steam trawler and its accompanying equipment and heavy capital outlay, however, the ocean fisheries are falling more and more into the hands of larger owners who pay definite wages, often adding a percentage for the master and incentive bonuses for the crew rather than shares. Trade unionism too is gaining headway, sometimes at the expense of the credit, cooperative and philanthropic societies, which were more appropriate, perhaps, to the small scale industry that is gradually passing away. But in the coastal, lake and river fisheries with their less expensive boats and gear the share system still continues.

Increasing concentration of ownership and enlarged scale of operations are also accompanied by changes in the commercial organization of the industry. Throughout the nineteenth century it was common for the small share owners to sell their catches (at auction, by sample, or on board) to merchants who in turn delivered them to the retailers. Subject to the modifications of growing mechanization and integration and in spite of countless variations in detail this triple organization of fisherman, merchant and retailer still prevails. But it is gradually yielding to competitive pressure from large firms which seek to bring under one management everything from the ownership and operation of their own fleet of vessels to the final sales in their own retail shops or at least through their chosen agents.

The interest of national governments in the protection of their fishing industries has often endangered international peace. Fishing rights

played a prominent part in the prolonged seventeenth century struggle between Holland and England; the two rivals came to blows repeatedly over the North Sea herring catch and the Spitsbergen whaling grounds. When Grotius propounded and Holland championed the doctrine of mare liberum, England under James I and Charles I replied with the concept of mare clausum. The question was finally settled so far as fishermen were concerned by the general (although not universal) acceptance of three nautical miles from low water mark as the limit of territorial jurisdiction.

Since the Napoleonic wars fisheries have led the way in the adoption of international conventions and arbitration to replace force in the settlement of controversies. Rival claims as to fishing rights on the Newfoundland Banks and as to the corollary right of entry to foreign harbors for shelter, repairs and the curing of catch have been settled by the French-British convention of 1904 and the North Atlantic Coast Fisheries Arbitration at The Hague in 1910. The latter award closed questions which had been irritants in the field of British-American relations since 1873. The status of Japan's valuable rights in Siberian waters is still the subject of dispute.

The pioneering North Sea Fisheries Convention of 1882 established a system of international police regulation which ended lawlessness on that important ground. The British-Danish Convention of 1901 covering the rich Iceland and Faroe Islands fisheries extended international police regulation and at the same time applied the principle of territorial waters so as to limit Danish jurisdiction and conservation measures to the three-mile zone.

Preservation of the Pribilof Islands seal herd was at the root of the famous Bering Sea controversy. Although the arbitration award of 1893 denied the right of the United States to enforce observance by Canadian boats of protective regulations except within the three-mile limit, Britain subsequently agreed to respect them. Japan, however, did not. It was only when extinction threatened the whole herd that Japan and Russia joined Britain and the United States in signing the protective convention of 1911. The United States-Canadian North Pacific Halibut conventions of 1923 and 1930 were a mutual attempt to preserve fish life by the establishment of a closed season.

These steps although encouraging are still inadequate. Improvements in the mechanics of

fishery craft and equipment, by hastening exhaustion of traditional fisheries and so spurring the search for new grounds, continue to increase the need for cooperative international action to preserve and regulate the fisheries of the world.

Elmo P. Hohman

See: Food Supply; Food Industries; Refrigeration; Mercantilism; Acts of Trade, British; Maritime Law; International Waterways; Seamen.

Consult: The Fisheries and Fishing Industries of the United States, ed. by G. B. Goode, 7 vols. (Washington 1884-87); Howell, G. C. L., Ocean Research and the Great Fisheries (Oxford 1921); Jenkins, J. T., A Textbook of Oceanography (London 1921); Tressler, D. K., Marine Products of Commerce (New York 1923); Kellogg, J. L., Shell-fish Industries (New York 1910); Great Britain, Imperial Economic Committee, Report on Marketing . . . of Foodstuffs, 17 vols. (London 1925-30) 5th Report, "Fish"; Bourgain, J., Essai sur les conditions du travail dans la pêche maritime (Paris 1908); Jenkins, J. T., Fishes of the British Isles (London 1925); Hérubel, M. A., Pêches maritimes d'autrefois et d'aujourd'hui (Paris 1911), tr. by B. Miall as Sea Fisheries, Their Treasures and Toilers (London 1912); United States, Bureau of Fisheries, "Fur-Seal Industry of Pribilof Islands, Alaska" by H. O'Malley, Economic Circular, no. 71 (1930); Calderwood, W. L., Salmon and Sea Trout (London 1930); Jenkins, J. T., The Herring and the Herring Fuheries (London 1927), and A History of the Whale Fisheries (London 1921); Hohman, E. P., The American Whalemen (New York 1928); Melville, H., Moby Dick (NewYork 1851); Elder, J. R., Royal Fishery Companies of the Seventeenth Century (Glasgow 1912); Radcliffe, W., Fishing from the Earliest Times (2nd ed. London 1926); Delegation to United States from Far Eastern Republic, Fisheries of the Far Eastern Republic (Washington 1922); Dabry de Thiersant, P., La pisciculture et la pêche en Chine (Paris 1872); Anson, P. F., Fishing Boats and Fisherfolk on the East Coast of Scotland (London 1930); Fulton, T. W., The Sovereignty of the Sea (Edinburgh 1911); Moore, S. A. and H. S., History and Law of Fisheries (London 1903); Coulson, II. J. W., The Law Relating to Waters, Sea, Tidal, and Inland (4th ed. London 1924); Root, Elihu, Argument before the North Atlantic Coast Fisheries Arbitration Tribunal at The Hague 1910 (Washington 1912); United States, Bureau of Fisheries, "Report of International Fisheries Commission Appointed under Northern Pacific Halibut Treaty" by J. P. Babcock, Document, no. 1073 (1930).

FISK, JAMES, JR. (1835-72), American financier. In the expanding American financial world of the 1860's Fisk was a genial, rotund, spectacular playboy devoid of affected dignity or moral scruples. During the Civil War he perfected a system for running cotton through the military lines. This did not prevent him, however, from subsequently becoming the comic opera colonel and financial angel of a regiment with a war record. Learning of the willingness

of certain parties to purchase a steamship line he commended himself to Daniel Drew, the would be vendor, by negotiating the transaction. Participation in the latter's bear operations in Erie quickly made him wealthy. Settlement of the Vanderbilt-Drew battle over the railroad in 1868 left Fisk and his permanent confederate, Jay Gould, in control. They were now employing the Drew technique effectively against its originator. Direction of the Erie was useful in other ways. The company took offices in Fisk's Grand Opera House in New York at a handsome rental. It refused railway facilities to competitors of a quarry in which he was interested. Its security issues during this period cannot be matched against betterments of the road. Association with Tammany assured Fisk the cooperation of the judiciary in his manipulations. In 1869 an effort to enlist the support of federal officials in cornering the gold market proved ineffective and the speculation collapsed. Fisk contributed nothing to the development of the American railway plant or system. An attempt to control the Albany and Susquehanna and thus to compete for New England traffic, carried out by a species of physical warfare among other means, was unsuccessful. Could his ready resource and commercial inventiveness conceivably have been disciplined, he might have done something of lasting value.

THOR HULTGREN

Consult: Stafford, M. P., The Life of James Fisk, Jr. (p. p. New York 1872); Mott, E. II., Between the Ocean and the Lakes (New York 1901); Adams, C. F. and Henry, Chapters of Erie (Boston 1871) ch. i.

FISKE, JOHN (1842-1901), American philosopher and historian. Edmund Fiske Green, who after 1860 was known by his adopted name of John Fiske, was connected during most of his lifetime with Harvard University. He graduated from the college in 1863, from the law school in 1865 and from 1869 until his death served as lecturer, assistant librarian and overseer. During his earlier years Fiske's chief interest was in philosophy. His first work was a widely read critical analysis, in philosophical and historical terms, of Buckle's contributions toward a reinterpretation of history. Fiske was deeply influenced by the writings of Comte, Darwin and Spencer, and together with Edward Youmans, whose biography he wrote, devoted his best efforts to publicizing Spencerian evolutionism in America. His capacity for striking presentation both on paper and on the platform

and still more his skill in reconciling scientific hypothesis with the essentials of established religious faith brought him international recognition. His numerous philosophical writings came to be strongly marked by an irrepressible optimism, which rejoiced in the assurance of well regulated, purposeful unfoldings of evolutionary processes. This teleological tendency is evidenced most clearly in a series of lectures delivered in London (American Political Ideas Viewed from the Standpoint of Universal History, New York 1885), in which he skilfully deploys his broad knowledge of the past in defense of the thesis that Anglo-American institutions and civilization represent the ultimate goal foreseen since the beginning by an all wise Providence.

From 1879 to his death Fiske's chief work was in American history. His first study, The Critical Period of American History, 1783–1780 (Boston 1888, 4th ed. 1880), gave a new emphasis to the years between the revolution and the adoption of the constitution. His studies led him backward and he gave great attention to the period of discovery (Discovery of America, 2 vols., Boston 1892) and to the formative first settlements, as in The Beginnings of New England (Boston 1889, new ed. 1930), Old Virginia and Her Neighbors (2 vols., Boston 1897) and The Dutch and Quaker Colonies in America (2 vols., Boston 1899). Although he was frequently concerned with formulating laws of history and establishing criteria for a science of history, his researches were those of a literary man rather than of a scientist. He lived, however, among a group of men who were laying the foundation for the present knowledge of American history.

Fiske's chief contributions were as a popular writer and lecturer. His wide culture, his lucidity of mind and literary style and his unique personality made him perhaps the chief American intermediary between the closet scholars and the intelligent public. While his popularity was in part due to his talent for the picturesque, he held his audience because among the philosophers and scientists of the day he most strongly represented the prevalent American ideal. He may be placed by considering that from the study of evolution he ran in exactly the opposite direction from his Harvard associate Henry Adams.

CARL RUSSELL FISH

Other important works: "Fallacies of Buckle's Theory of Civilization" in National Quarterly Review, vol. iv (1861) 30-63; Outlines of Cosmic Philosophy with Criticisms on the Positive Philosophy, 4 vols. (Boston 1874);

Darwinism and Other Essays (New York 1879, rev. ed. Boston 1907); A Century of Science (Boston 1899); Through Nature to God (Boston 1899); Civil Government in the United States (Boston 1890, new ed. 1904); The American Revolution, 2 vols. (New York 1891); The Mississippi Valley in the Civil War (Boston 1900); New France and New England (Boston 1902).

Consult: Life and Letters, ed. by J. S. Clark (Boston 1917); Riley, Woodbridge, "La philosophie française en Amérique" in Revue philosophique, vol. lxxxvii (1919) 369-423; Sanders, J. B., in Mississippi Valley Historical Review, vol. xvii (1930-31) 264-77; Beer, G. L., in Critic, vol. xxxix (1901) 118-27; Hart, A. B., "Historical Service of John Fiske" in International Monthly, vol. iv (1901) 558-69; Schouler, James, in Massachusetts Historical Society, Proceedings, 2nd ser., vol. xv (1901-02) 193-200.

FISON, LORIMER (1832–1907), Australian anthropologist. Fison, born in Barningham, Suffolk, England, migrated to Australia in 1855. From 1863 to 1884 he served as a missionary in Fiji. His interest in anthropology was awakened by a circular letter which he received in 1869 from Lewis Henry Morgan soliciting information on kinship systems. With the collaboration of A. W. Howitt, whom he interested in the project, he published a pioneer work on Australian social organization, Kamilaroi and Kurnai (Melbourne 1880), to which Morgan wrote an introduction.

In the acrimonious controversy that was raging between McLennan and Morgan as to the meaning of kinship terms Fison supported the latter against McLennan's mistaken judgment that the terms were merely terms of address. He substantiated Morgan's view that exogamy was a rule of the gens against McLennan's theory that it was caused by female infanticide, which caused a scarcity of women, and Lubbock's theory of marriage by capture. Although he endorsed Morgan's hypothesis of the origin of the gens as a reformatory movement to prevent the intermarriage of kin, a view which elicited derisive criticisms from McLennan, Lubbock and Lang, he refused in spite of Morgan's urging to contend positively that promiscuity originally existed. He vigorously criticized the degradation theory, which held that the cultures of primitive men represented lapses from civilization, a theory which was being used by theologians in their attempt to discredit the concepts of the evolutionary ethnologists.

BERNHARD J. STERN

Consult: Stern, Bernhard J., "Selections from the Letters of Lorimer Fison and A. W. Howitt to Lewis Henry Morgan" in American Anthropologist, n.s., vol. xxxii (1930) 257-79, 419-53, and Lewis Henry

Morgan, Social Evolutionist (Chicago 1931); Frazer, J. G., "Howitt and Fison" in Folk-lore, vol. xx (1909) 144-80.

FITTING, HEINRICH HERMANN (1831-1918), German jurist. Fitting passed almost the whole of his academic career at Halle. His first endeavors were gemeinrechtlich, particularly upon questions of joint obligations. His dogmatic-historical studies began with his dissertation and ended with his Das Castrense peculium in seiner geschichtlichen Entwickelung und heutigen gemeinrechtlichen Geltung (Halle 1871). With the appearance of the German Code of Civil Procedure in 1877 he partially left historical fields and until 1890 devoted his best efforts to procedural studies. Notable results of these are Der Reichs-Civilprozess (Berlin 1878, 13th ed. 1907) and Das Reichs-Konkursrecht und das Konkursverfahren (Berlin 1881, 3rd ed. 1904). Fitting's fame, however, rests upon his research into the legal history of the early mediaeval period. Throughout the sixties he prepared himself for this work by a thorough mastery of the secondary literature. As late as 1866 he still was a follower of Savigny in denying any connecting link between Justinian and the glossators of the twelfth century, but Stintzing's continuity theory, the view that during this period legal science flourished and that a direct line of legal scholarship might be traced back from Irnerius to Justinian, later found in him an eager adherent. During the seventies and eighties he searched for direct references to legal science in this period and published his most important results, perhaps, in Juristische Schriften des früheren Mittelalters (Halle 1876) and Die Anfänge der Rechtsschule zu Bologna (Berlin 1888). Fitting's later efforts were attempts to show the extent of the glossators' utilization of earlier material. In editing the Summa codicis des Irnerius (Berlin 1894) and Questiones de iuris subtilitatibus des Irnerius (Berlin 1894) he thought he had established the continuity theory. In reality here, as in his conjectured pre-Bolognese sources, he had found only the typical popularizing works of the glossators. Mommsen, Conrat, Flach and Bremer early pointed out errors in Fitting's studies; Fitting did little for the continuity theory. Nevertheless, his mastery of the secondary literature and comprehensive knowledge of the sources make his works storehouses of information. Moreover, as Juncker says, he undoubtedly quickened interest in the legal history of

the early Middle Ages, and his errors were at least fruitful.

A. ARTHUR SCHILLER

Works: A list of Fitting's works to 1907 are to be found in Mélanges Fitting, 2 vols. (Paris 1907-08) vol. i, p. xvii-xx.

Consult: Juncker, J., in Deutsches biographisches Jahrbuch, vol. iv (Berlin 1929) p. 298-303.

FITZHERBERT, JOHN (died 1531), English agriculturist. Fitzherbert is now considered to be the father of English agricultural literature and the author of two books, both published in 1523, The Boke of Husbondry and The Boke of Surveyeng and Improuvemetes. The first is a practical treatise on English farming, the second an exposition of the law of manors. The two works are the first books written and printed in English on English agriculture. Neither work reveals the name of the author, but the writer of the second definitely claims the authorship of the first. In his edition of the Husbondry (London 1534) Berthelet says that it was "compyled . . . by Mayster Fitzherbarde . . . after he had exercysed husbandry with greate experience XL years." Until the present century the authorship was claimed for a famous lawyer, Sir Anthony Fitzherbert (1470-1538), author of La graunde abridgement (London 1514) and of five other legal treatises. He and John were respectively the youngest and eldest sons of Ralph Fitzherbert of Norbury, Derbyshire. John Fitzherbert had for four years studied at the Inns of Court before he returned to Derbyshire to manage the estate which he inherited on his father's death in 1483. He thus possessed the legal knowledge necessary for the Boke of Surveyeng and by 1523 had gained exactly his forty years' experience of practical farming. Berthelet, moreover, implies that in 1534 the author was dead. This was true of John but not of Anthony, who lived until 1538. It seems more reasonable to assume that John had learned enough law to write on surveying than that a busy lawyer like Anthony had gained the practical experience to write on husbandry. On these grounds the British Museum catalogue now attributes the authorship of both works to John Fitzherbert.

The two books appeared at the beginning of the period of transition from common field farming to individual occupation. Fitzherbert, in the language of the day, strongly advocates "several" as opposed to "champion" land; he advises every man to take advantage of the legal facilities for withdrawal from the common farm by ar-

rangement between landlord and tenant and to "change fields with his neighbour so that he may lay his lands together," keep more livestock and rest and enrich his impoverished cornland. The Boke of Husbondry is in the form of a Farmer's Year, beginning with January. It reveals not only the conditions and difficulties of common field farming but the ideas of a progressive agriculturist. Few improvements are suggested in methods of cultivation or its implements. But Fitzherbert gets at the root of the matter when he urges that a full bullock yard and a full sheepfold make a full stackyard. No man, he says, can thrive by corn without livestock, and he who tries to keep stock without corn is either "a buyer, a beggar, or a borrower." Although he did not foresee the extension of pasture by the break up of common arable farms he did anticipate developments which were rendered possible by the supply of new sources of winter keep for stock. Shrewd, far seeing and humorous, Fitzherbert wrote of what he knew of farming after forty years' experience. Had his golden rule been followed, the literature of which he was the parent might have been less copious.

ERNLE

Works: The best edition of The Boke of Husbondry is that by W. W. Skeat, English Dialect Society Publications, vol. xxxvii, ser. D., misc. (London 1882), who supports the claim of Sir Anthony Fitzherbert to the authorship of the work.

Consult: Fitzherbert, Reginald H. C., "The Authorship of the Book of Husbandry and the Book of Surveying" in English Historical Review, vol. xii (1897) 225-36; Gay, Edwin F., "The Authorship of the Book of Husbandry and the Book of Surveying" in Quarterly Journal of Economics, vol. xviii (1903-04) 588-93; Ernle, Lord (Prothero, R. E.), English Farming, Past and Present (4th ed. London 1927) p. 90-97; McDonald, Donald, Agricultural Writers from Sir Walter of Henley to Arthur Young, 1200-1800 (London 1908) p. 13-23.

FITZHUGH, GEORGE (1807-81), American social and political theorist. A lawyer by profession, Fitzhugh practised at the bar during the greater part of his life. For a short period he was also a judge in the local Virginia courts and during Buchanan's administration he served in the federal attorney general's department. His real importance is to be found, however, in his writings, which reveal him as probably the outstanding theorist among the surprisingly large group of southerners who in the two decades preceding the Civil War attempted to justify the existing order in the South in the light of social and political philosophy. In Sociology for the South;

or, the Failure of Free Society (Richmond 1854) and Cannibals All! or, Slaves without Masters (Richmond 1857) as well as in numerous articles in DeBow's Review and other periodicals he defended the institution and principle of slavery in such fashion as to carry the war into the enemy's country. Identifying political economy with the doctrine of laissez faire he attacked always vigorously and often extravagantly the economists and their concept of a free society built on the foundations of liberty, freedom of contract and freedom of competition. He asserted that not liberty but a strong benevolent government is the proper function of the political order. The experience of history and especially of southern history shows that only a few men succeed in independent careers. The only workable organization of society therefore is one which provides a method by which the unsuccessful will be cared for and protected in accordance with their needs rather than their capital. The manifold evils of a free society, which have aroused the increasing protests of the socialists, can be eliminated only by a return to slavery, "the oldest, the best and the most common form of socialism." As elements in a practical program for improving conditions in the South Fitzhugh advocated an extension of public education, diversification of industry and a protective tariff as stimuli to economic independence.

B. F. WRIGHT, JR.

Consult: Wright, B. F., Jr., "George Fitzhugh on the Failure of Liberty" in Southwestern Political and Social Science Quarterly, vol. vi (1925-26) 219-41.

FIVE-YEAR PLAN, RUSSIAN. See GOSPLAN.

FLACH, JACQUES (1846-1919), French historian. Flach was born in Strasbourg. There he studied law and practised; but when Alsace was separated from France after the Franco-Prussian War, he left his native land and settled in Paris, where he attended the École des Chartes and the École des Hautes Études. He taught comparative law at the Collège de France and comparative civil law in the Ecole des Sciences Politiques. He made studies of the history of the agrarian regime in Ireland from its inception until the present, the code of Hammurabi, the political and private institutions of Hungary, those of Russia and Japan and the primitive institutions of the tribes of America, Africa and Oceania. His most important work is Les origines de l'ancienne France (4 vols., Paris 1886-1917). This work is especially important for the study of the rise of the great local states of France and their share in the development of the French nationality. Flach's main thesis is that early France was not a feudal state and that the royal power was but partially a development of territorial feudalism. The relationship of the princes to the early Capetian monarchs was one not of feudal vassalage but of personal allegiance. Although this work was influential in modifying historical opinion on many important issues, its conclusions cannot be accepted without reserve. Flach's ardent French patriotism is revealed in his refutation of the thesis that attributed the regeneration of Gaul to the Germanic invasions.

CH. PFISTER

Consult: André, Paul, in Institut de France, Académie des Sciences Morales et Politiques, Séances et travaux... Compte rendu, n.s., vol. lxxxiii, pt. i (1923) 173-200; Bémont, C., in Revue Instorique, vol. cxxxiii (1920) 185-88. For a highly critical view of Flach's work see Halphen, L., "La royauté française au XIº siècle" in Revue Instorique, vol. lxxxv (1904) 271-85.

FLACIUS, MATTHIAS. See Magdeburg Centuriators.

FLAX, HEMP AND JUTE. These three fibers belong to the group of plant stalk, or bast, fibers. In contrast with cotton, which is a seed fiber, and abacá and henequen, which are leaf fibers, they are found in the skin of the plant stem. They are removed from the woody core of the stem and from the surrounding gummy pulp by retting, or submersion in water, a difficult and disagreeable process that has been instrumental in limiting their production to regions of abundant and cheap labor. Flax is used in the manufacture of linen, cloth of jute (gunny cloth) makes the bagging and the baling for the grain and cotton crops of the world, and hemp is a material for the manufacture of cordage.

Flax and hemp were probably among the first vegetable fibers to be used by man. Certainly they were the most widely distributed in prehistoric and early historic times, for they are much less exacting in their climatic demands than the other fibers. Flax is grown from the cold northern plains of Russia to the valley of the Nile, and hemp throughout the middle latitudes. The predominant position of flax and hemp continued down to the opening of the nineteenth century, when the invention of the cotton gin greatly cheapened the production of cotton; the flax served as the fiber for fine clothing and hemp,

strong and dependable, outfitted sailing vessels and entered into more ordinary cloth. Jute demands a tropical climate and until recently its use was limited to India.

Flax was used by the lake dwellers of the earliest stone age, and in the ruins of some of their habitations in Switzerland it has been found in every stage of preparation from the straw to cloth of good quality. Of the people of historic times the Egyptians were probably the first to produce a linen cloth of fine texture. There is no record of the earliest introduction of flax into Egypt, but the discoveries at Badari made in 1924-25 indicate that it was cultivated by the Badarins, whose period has been placed by Sir Flinders Petrie at between 10,000 and 13,000 B.C. and by other authorities at 5000 B.C. These people wore clothing of goat skins, but some of their garments were of linen. Linen was used by the ancient Egyptians both for clothing and for the wrappings of the dead. In the biography of Methen, who belonged in the third dynasty (2980-2900 B.C.), and perhaps the earliest biography extant, mention is made of his appointment as overseer of all flax of the king. In the description of the preparation of the flax fiber in Egypt given by Pliny the process is almost identical with that which prevails today. Flax continued to be an important crop in Egypt for many centuries and until the fourteenth century Egypt was the leading contributor of flax to world trade.

Hemp seems to have originated somewhere in western or central Asia and wild hemp is still to be found growing along the lower Ural and the Volga rivers, near the Caspian Sea and in Persia, the Altai mountains and northern and western China. At a very early period the cultivation of the plant spread eastward to China and Japan, southward to India and westward to the Mediterranean lands. As early as the twenty-seventh century B.C. hemp was cultivated in China for fiber, and garments of hemp clothed the great majority of the people. Before the introduction of cotton into Japan in the ninth century A.D. hemp was the cloth of the poorer classes. Herodotus states that hemp was cultivated in Thrace and that it was used not only for ropes but for fine cloth. Reference is also made to its use by Babylonians, Persians, Egyptians, Hebrews and Chaldeans. An early important use was for sails and ropes of ships, the word canvas being derived from the Arabic name for hemp. The Romans apparently consumed much hemp. It was used in their ships; their laws and annals were sometimes written on hempen cloth; it adorned their theaters and covered their streets and public places. It was even used for the making of table linen.

Flax growing in the British Isles probably dates back to the Roman occupation. It is thought to have been introduced into Ireland by the Norman settlers in the thirteenth century and there it became the basis of a hand industry, which did not become important, however, until the advent of the Huguenot refugees in 1685 with the spinning wheel and other improvements in manufacture making possible a product much superior to the earlier coarse and narrow cloth. Hemp was also grown in the British Isles, especially in the lowlands of the east coast of England, in Lincolnshire, Suffolk and Holderness and in Ireland. It was used in the ropewalks of the coastal cities, in which were made the rope and rigging for British naval and merchant vessels and for the fishing industry. The cultivation of hemp in the British Isles has disappeared.

The British government early began to encourage the growing of flax. In 1532 an act of Parliament compelled all persons holding tillage land to sow at least one rood (a quarter of an acre) with flax for every sixty acres occupied. Thirty years later a penalty of £5 was imposed on persons not growing at least one acre of flax for every sixty acres of land cultivated. In 1691 the tithe on flax was reduced to four shillings per acre and in 1712 a bounty of one penny per ell (a length of about fourty-five inches) was given on all exported sailcloth of British manufacture. These measures were intended more for the encouragement of manufacturing industries in the British Isles and for insuring necessary supplies for British ships than they were for any expansion of agriculture, since bounties were also paid on the importation of flax and hemp from the colonies. During the mercantilist period of the middle eighteenth century there was considerable agitation for the encouragement of the production of flax and hemp, among other raw materials, in the British colonies.

Both flax and hemp were of some importance in the American colonies. They were planted in the Plymouth colony and in Virginia and practically every farm had a field devoted to their cultivation. The fiber was retted, scutched, hackled and spun by the members of the farmer's household. By 1630 considerable quantities of flax were raised in Massachusetts. As early as 1662 a law was enacted in Virginia calling upon each poll district to raise annually and manufacture six pounds of linen thread. Before sheep had

been introduced in any number into the colonies and before the cultivation of cotton had become important, flax and hemp fibers were used by the settlers for their clothing. A French treatise written in the middle of the eighteenth century described hemp as the most important of all the products of the new settlements save bread corn, since it provided one half of the clothing for the winter season and practically all of it for the summer. Hemp was used for the rigging of ships. It was important in the New England fishing industry and the famous clipper ships of the first half of the nineteenth century were outfitted with ropes, cables, shrouds and sails of hemp fiber. The wagons that crossed the western plains before 1860 carried covers of hemp cloth. For a time hemp was cultivated in the blue grass region of Kentucky to supply the boat building industry of the Ohio River. But the two fibers were not suited to a region of scanty population and abundant resources. Their preparation was too exacting. As long as each farm and each small district was forced to be self-sufficient, the cultivation of hemp and flax could continue, but with the opening up of trade it was impossible to compete with lands of denser population and cheaper labor. Imported hemp and flax products and cotton fiber supplanted the locally produced supplies and the land was turned to other crops that were more profitable and more pleasant to cultivate. Only a small amount of hemp, retted by the dew process, is now produced in Kentucky, Illinois and Wisconsin. Between 3,000,-000 and 4,000,000 acres of land in the United States are in flax, but the plant is cultivated not for the fiber but for the seed. Indeed, at the present time a far greater quantity of flax is planted for seed than for fiber. In 1924 the world acreage of flax was about 19,000,000 acres, of which 1,000,000 acres were harvested for fiber. The largest producers of flaxseed, or linseed, oil are Argentina, Russia and the United States (see PAINTS AND VARNISHES).

The efforts to encourage the production of flax in the British Isles and in the colonies continued into the nineteenth century. In 1806 a bounty was offered for the importation of the fiber from the British possessions and every effort was made to increase the output of the fiber at home. In 1851 a very strong movement was under way to encourage an expansion of flax cultivation in Ireland. It was supported by the press, the Royal Agricultural Society of England and the Board of Trade, but the factors unfavorable to cultivation proved too strong. Although

agriculture was in a serious position and although it was probably true that a slightly greater return might be obtained from flax than from wheat, the difference was not sufficient to compensate for the exacting labor that was demanded in preparing the fiber for market. The straw had first to be submerged in water to free the fiber from the gummy pulp that held it together and the fermenting putrid bundles had to be spread upon the ground to dry before breaking and separating out the woody core. In addition, the flax plant is exacting in its care, is somewhat sensitive to climatic conditions and in Ireland is an uncertain crop because of the excessive rainfall. With the final abolition of the corn laws in 1856 the attempts to stimulate artificially the cultivation of agricultural products in the British Isles came to an end.

Following the Treaty of Paris of the same year and the conclusion of peace with Russia large quantities of cheap Russian fiber came into the British market. Since that time Ireland has never been able to meet the competition of Russia, for the Russian flax can be delivered in Ireland more cheaply than the Irish farmer can produce it. There was a brief revival of the industry between 1860 and 1870, a result mainly of the shortage of cotton during the American Civil War. In 1870 the area in flax had increased to 24,000 acres, but bad seasons about 1875 and the high prices of wheat caused many farmers to turn from the cultivation of flax. There has been some recovery in recent years and between 1909 and 1914 the area averaged 53,000 acres, but in 1930 it had declined to about 32,000 acres, an area of no importance in comparison with the more than 4,000,000 acres in flax in Russia.

Russia now occupies the dominant position in flax production, contributing some 60 percent of the world's total. An additional 18 percent comes from former Russian territory now included in Poland and the new states of the Baltic. This region of the northwestern part of the European plain has the advantage of very cheap labor, since the population is dense in relation to the agricultural possibilities, which are limited by a glacial topography, poor drainage and a sandy soil. In this region the straw is retted without submersion by spreading it out thinly on the ground, the so-called dew process. The resulting fiber is not of the best quality but when mixed with better grades it makes a satisfactory cloth. Along the river Lys in Belgium, especially at Courtrai, a flax fiber famous for its quality is produced. The waters of the river possess some

property that gives to the flax a remarkable fineness and a spinning quality that is unequaled. Japan is the only country outside of Europe that is important in the cultivation of flax for fiber.

TABLE I WORLD FLAX FIBER PRODUCTION (In 1000 quintals)

Country	Annual Average 1909-13	Annual Average 1925-29
Belgium	2351	263
France	184**	237
Ireland*	97	72
Latvia	302††	221
Lithuania†	24111	364
Poland	42011	560
U. S. S. R.	513011	3495***
Japan	23	30
Total Europe (including	g Asiatic	
Russia)	7336	5726
Total Asia	25	37
Total Africa	38	11
World total	7410	5755

- * Combined figures for northern Ireland and Irish Free State; in 1929 the former produced 70,249 quintals, the latter 12,000
- quintals.
 † Flax and hemp, of which the area under hemp represented 5 to
 7 percent during the period 1926 to 1929. 7 percent during the property of 1011-13.
 ** Figures for territory included within former boundaries.
- †† Not inclusive of the whole country. ‡‡ Figures for the territory included within the present bound-
- *** Figures for years 1925 to 1929 have been revised and refer only to individual peasant holdings. In 1929 production fouch holdings was 4,145,000 quintals as compared with 127,000 quintals from collective holdings and 5000 quintals from state

Source: Adapted from International Institute of Agriculture, International Yearbook of Agricultural Statistics, 1928-29, 1929-

The manufacture of linen as a hand industry was important in Ireland from the middle of the seventeenth century. In 1720, 240,000 yards of linen cloth were exported; in 1800, 25,000,000 yards; and in 1821, 44,000,000 yards, all spun and woven by hand. About the same time that the revolutionary inventions were taking place in the cotton industry, similar developments were occurring in the manufacture of linen. In 1787 flax spinning machinery was invented by John Kendrew and Thomas Porthouse at Darlington, England, and spinning frames driven first by water power and later by steam power were adopted in England and Scotland. These early mills were operated on a dry spinning principle suitable only for the coarser yarns. In 1828, three years after the perfection of the wet spinning process for superior yarns, the first power spinning mill was erected in Ireland at Belfast. The weaving continued to be done on hand looms until 1850, when eighty-eight power looms began operation. They displaced the hand looms slowly and even at the present time many

of the hand looms are in use. In 1841 Ireland had 250,000 flax spindles. The number has now increased to approximately 1,000,000. Linen is manufactured also in France, Belgium, Germany, Czechoslovakia, Russia and Japan, but Belfast is the center both for quantity and quality. The British Isles now have about one third of the world's flax spindles and most of them are located in northern Ireland. About two thirds of the Irish output of linen is exported.

Undoubtedly the greatest blow to the flax and linen industry occurred in 1793 with the invention of Eli Whitney's cotton gin. The new machine greatly reduced the cost of separating the cotton seed from the fiber. Flax and hemp, previously the vegetable fibers of major importance, were quickly supplanted by the cheaper cotton, which became the staple clothing material of the world. An invention that would replace with a machine process the present costly and unpleasant hand retting of flax would bring about a revolution in the linen industry as far reaching and complete as that produced in cotton manufacture by the cotton gin.

Many disagreeable features are found in the manufacturing processes as well as in the retting of the flax. In the mill the roughing, hackling and sorting of the flax preparatory to spinning give off a fine dust which has an injurious effect upon the lungs of the workers. At one time British recruiting officers were forbidden to enlist for the army men who had worked in flax mills. Flax because of the smooth, straight and inclastic character of the fiber cannot be spun on mules, and ring frames have been discarded because of the dirt and water. The flyer system is used, and for fine yarns the fiber is passed through troughs of heated water just before it reaches the spindles. In the spinning room of a flax mill the air is very humid and water is thrown from the spindles upon the floor and upon the workers. In the British Isles and in France and Belgium and some other linen manufacturing countries stringent laws have been enacted for dust removal and for protecting the workers from water.

Hemp as a fiber for the weaving of cloth was supplanted by cotton soon after the invention of the gin, not only because the cotton can be prepared more easily and more cheaply but also because it can be spun more easily and with less waste and produces a smoother and more uniform varn. For a time hemp was important in the making of rope and cordage, but it is now being replaced in marine uses by abacá, or

Manila hemp, and in uses such as binder twine, where great strength is not essential, by sisal hemp and henequen. Abacá has the advantage of being lighter than the real hemp. It will float in water and it is resistant to injury from salt water without being tarred. Hemp fiber is still used in the twines with which the ends of the larger ropes are bound. A small amount is made into cloth in China, Korea and India. Some is raised in Japan for local use in fish nets and mosquito netting. The important world producers of the fiber are Russia and Italy, the two countries contributing 75 percent of the world output. The hemp fiber is used in the United States mainly for the manufacture of twine for a number of specialized purposes where strength is necessary.

TABLE II
WORLD HEMP FIBER PRODUCTION
(In 1000 quintals)

COUNTRY	ANNUAL AVERAGE 1909-13	Annual Average 1925–29
France	133	48
Hungary	110*†	85
Italy	835	1002
Jugoslavia	74‡	288
Poland	205*	193
Rumania	20**	167
Spain	112††	72
U. S. S. R.	3290*	3299
Japan	94	87
Korea	75	208
Total Europe (including Asiati	С	
Russia)	5322	5252
Total Asia	169	295
World total	5496	5573

^{*} Figures for territory included within present boundaries.

Abacá, sisal, henequen, ixtle, New Zealand hemp, are all fibers found in the leaves of plants and must be removed by stripping and scraping or decortication. With the exception of some recent attempts to introduce machinery in the preparation of the abacá in the Philippine Islands all of these fibers are prepared by hand. The world's supply of abacá comes from the Philippine Islands, although a small quantity is also produced in Java. Henequen is the product of the dry limestone peninsula of Yucatan and New Zealand hemp is grown in New Zealand, the Azores, St. Helena and Scotland. Sisal comes from Java, East Africa and the Bahamas, and ixtle from the central basins of Mexico. China

grass, or ramie, is a most important textile plant of China. It produces one of the strongest and finest fibers known. The fiber is prepared in China almost entirely by hand. A machine or chemical process of preparation would undoubtedly make China grass one of the leading textile fibers of the world.

Jute, first brought to Europe and North America from India about a century ago, is now used more than all other vegetable fibers combined, excluding cotton. It is the cheapest, the weakest, the most perishable, the least lustrous and the most easily spun of any of the bast fibers. It has replaced hemp in many temporary uses, such as covering for cotton bales and bags for grain, coffee and sugar, and its great use has come with the expansion of world trade in those products.

Some jute is grown in Indo-China, Japan, Formosa, Siam and southern China, but about 99 percent of the world's jute crop is grown in India—in Bengal, Assam and Cooch Behar and a variety of jute known as bimlipatam in Madras. The average world production of jute fiber for the years from 1909 to 1913 was 15,316,000 quintals, of which 15,280,624 quintals were raised in British India; for the year 1929 the world total was 17,680,000 quintals and the production of India 17,630,233 quintals. Efforts have been made to grow jute in southern United States, Egypt and other parts of Africa, but the yields have been stunted and the cost of extracting the fiber is prohibitive. The peculiar alluvial soil and warm climate from upper Orissa through eastern and northern Bengal seem to provide the best conditions for raising jute, and the dense population of this area provides the labor necessary for the preparation of the fiber for manufacture. No mechanical device has been perfected for releasing the fiber from the gummy part of the husk after it has been steeped, or retted, in water. The Bengali ryot performs this operation by hand, working waist deep in water to accomplish it. The dried fiber is boated or carted to the nearest rural market. There it is sold to local middlemen, who dispose of it to merchants in Calcutta. The mills rarely purchase their raw jute direct from the producer. In Calcutta the jute is sorted and graded for domestic mill use and for export. Under such methods of merchandising, where the units of production and distribution are so small, the major problem of the trade is the practise of watering the jute for added weight. The natural percentage of moisture in sound jute is about 8 percent, but

¹⁰¹¹ to 1015. Former kingdom of Serbia; average 1000 to 1011. *Figures for territory included within the former boundaries.

^{†† 1015} to 1018.

Source: Adapted from International Institute of Agriculture,
International Yearbook of Agricultural Statistics, 1028-29,
1029-30.

the dishonest ryot or petty middleman can add to his wealth by watering his stock of fiber, for detection is very difficult.

Jute spinning was extensively practised in India centuries before the British occupation. It was a hand industry and a most important domestic occupation for the populous eastern districts of lower Bengal. The yarn was used for cordage and lines, bedding, garments for the poor, matting and screens.

Jute as a world fiber became important between 1835 and 1838 through the perfection of machinery for softening the fiber and various other mechanical improvements for working it up. The Dundee flax spinners were responsible for introducing the fiber to world trade and held a monopoly in jute manufacture that was broken only by the introduction of jute machinerv into India in 1855 and the growth of the large scale mill industry there. By 1894 the Indian industry was a strong competitor for world markets, and at the present time Calcutta far surpasses Dundee in quantity of output. With competition the Dundee manufacturers have turned to specialties, to dyed and bleached jute and its use in rugs, towels, upholstery and as a foundation for linoleums. Germany is also an important consumer of raw jute, rivaling the United Kingdom in quantity of imports; but the bulk of jute manufacturing is now done along the Hooghly River near Calcutta. India has over 1,000,000 jute spindles and more than 50,000 looms for hessian and sacking.

In spite of its success the Indian mill industry has suffered many setbacks, due very largely to excessively rapid growth. During the World War it operated at full capacity, but since that period it has been almost continuously under some form of voluntary agreement for production curtailment. Faulty forecasting of the jute crop by government officials has been another important cause of difficulty for the industry. In 1921 the forecast underestimated the crop about 80 percent, and in 1923 by 27 percent. This has resulted in famine prices for raw jute in the early part of the season with heavy losses to the mills when the actual crop becomes apparent.

JOHN E. ORCHARD

See: Textile Industry; Cotton; Plantation; Irish Question; Indian Question; Dress.

Consult: Der Flachs, ed. by R. O. Herzog, Technologie der Textilfasern, vol. v, pt. i (Berlin 1930); Hanf und Hartfasern, ed. by R. O. Herzog, Technologie der Textilfasern, vol. v, pt. ii (Berlin 1927); Die Jute, ed.

by R. O. Herzog, Technologie der Textilfasern, vol. v, pt. in (Berlin 1930); International Labour Office, Enquête sur la production, rapport général, 5 vols. (Paris 1923-25) vol. 11, pt. 1, p. 531-78, Gilroy, Clinton G., The History of S.lk, Cotton, Linen, Wool, and other Fibrous Substances (New York 1845); United States, Bureau of Foreign and Domestic Commerce, "International Trade in the Minor Fibers" by Leslie A. Wheeler, Trade Information Bulletin, no. 289 (1924), and "Linen, Jute and Hemp Industries in the United Kingdom" by W. A. Graham Clark, Special Agent Series, po. 74 (1913); New Zealand, Department of Agriculture, Industries and Commerce, "Fibres and Fibre-Production," Bulletin, n.s., no. xlv (Wellington 1914); Barker, Walter S., "Flax: the Fiber and Seed" in Quarterly Journal of Economics, vol. xxxi (1916-17) 500-29; Sessa, Ernesto, Della canapa e del lmo in Italia, Federazione Nazionale Fascista delle Industrie Tessili Varie, Publication no. 2 (Milan 1930); Germany, Reichsamt des Innern, "Flachsbau und Flachsindustrie in Holland, Belgien und Frankreich" by J. Frost-Bruffel, Berichte uber Landwirtschaft, no. ix (Berlin 1909); Meyer, Percy, Der lettländische Flachshandel (Riga 1924); Gill, Conrad, The Rise of the Irish Linen Industry (Oxford 1925); Cutting, Malcolm C., "American Linen of Home-Grown Flax" in Country Gentleman, vol. xcv (1930) 16-17, 138 40; Borger, Hans, Die Hanfspinnerei und Seilerwarenfabrikation in Deutschland, Wirtschafts- und Verwaltungsstudien, vol. lxxiii (Leipsic 1926); Bonsack, Friedrich, Die Versorgung der Welt mit Jute unter besonderer Berucksichtigung der Wirtschaftsgeographischen Grundlagen (Leipsic 1929); Wallace, D. R., The Romance of Jute (London 1928).

FLEETWOOD, WILLIAM (1656–1723), English divine, antiquary and publicist. Educated at Cambridge, Fleetwood entered the church and became bishop of Lly. The rise of prices engaged his attention, as it did that of other clergymen, because of the losses suffered from the compounding of tithes. In A Sermon against Clipping (London 1694) he expressed his belief that half a crown in 1248 was "equal to Twelve or Fourteen Shillings now." After more careful examination he published Chronicon preciosum (London 1707; new ed. 1745, with an appendix by another hand), in which he reviewed the history of English coinage, and collected prices of corn, meat, drink and cloth, along with wages and stipends, ranging over six centuries. His purpose was to inquire whether one possessing six pounds per annum could conscientiously accept a fellowship restricted to possessors of less than five pounds by a statute made about 1450, "upon presumption that vi l., now is not worth what v 1. was" then. He decided affirmatively, not so much because five pounds then contained 40 ounces of silver and now only $19\frac{1}{3}$, as because the prices of each of the commodities investigated had risen about sixfold, on the ground that "the value of a pound is truly a pound." This was, perhaps, the first attempt to measure variation in the purchasing power of money by the variations of prices. He averaged the prices of individual articles over twenty years in each of the two periods compared; and getting the prices of all to vary nearly alike, he escaped the problems of averaging the variations and of weighting the quantities, which trouble the makers of index numbers today. These considerations did not come up until some fifty years later.

C. M. Walsh

Consult: Biographical preface by William Powell to his edition of Fleetwood's collected works (London 1838); Gras, N. S. B., "The Rise and Development of Economic History" in Economic History Review, vol. i (1927–28) 12–34; Clapham, J. H., The Study of Economic History (Cambridge, Eng. 1929) p. 11–13.

FLEMING, SIR SANDFORD (1827–1915), Canadian engineer and publicist. Fleming, who was born in Scotland and came to Canada as a youth, played a notable part in the development of lines of communication in his adopted country. In 1852 he joined the staff and soon became chief engineer of the Northern Railway, then under construction from Toronto to Collingwood and one of the first railway lines to be built in Canada. In 1863 he was chosen by the three provincial governments of Canada, New Brunswick and Nova Scotia and by the imperial government to conduct the surveys for the line which was projected to unite the British North American colonies. He remained in charge of this work, the Intercolonial Railway, until the line was completed in 1876; in the course of construction he vigorously opposed the award of extravagant contracts to political favorites.

Fleming recognized the importance of railways in the economic and political development of Canada, and he was one of the earliest and most active advocates of a transcontinental railway. When the new dominion government decided upon construction of the Canadian Pacific Railway, Fleming in 1871 was appointed chief engineer. It was under his direction that the almost unknown country north of Lake Superior, across the prairies and through the mountains of British Columbia was surveyed for a practicable line of railway. After the surveys were complete the government turned over the enterprise to a private syndicate and Fleming retired.

After 1880 Fleming took little part in active engineering work and devoted himself to ad-

vancing various projects which he had at heart. The chief of these was the government owned Pacific cable from Canada to Australia; he persuaded the dominion and imperial governments to cooperate in the project as a means of promoting imperial unity. He was an imperialist, was prominently identified with the Imperial Federation League and participated as one of the Canadian representatives in the first two colonial conferences of 1887 and 1894. Another achievement with which his name is prominently associated is the adoption of "standard time," after an intensive struggle against local and national prejudices. Fleming is notable as an engineer who spent the greater part of his life in official or voluntary public service and who combined vision with practical persistence in converting dreams into realities.

FRANK H. UNDERHILL

Consult: Burpee, L. J., Sandford Fleming, Empire Builder (London 1915); Grant, G. M., Ocean to Ocean (Toronto 1873); Fleming, S., The Intercolonial, an Historical Sketch: 1832-1876 (Montreal 1876).

FLEURY, ANDRE HERCULE DE (1653-1743), French cardinal and statesman. Through the patronage of Pietro Bonzi, a clever and influential Florentine diplomat in the service of the Bourbons, Fleury received an appointment in 1679, not many years after his graduation from the Jesuit Collège de Clermont, as almoner to the queen and upon her death in 1683 was given the same office under Louis xiv. He profited by observing his patron and rapidly developed into a genial man of the world, well received in all circles and discreetly paving his way to fortune by pleasing every one and offending no one. Because Louis believed he detected, in spite of Fleury's probity, a deficiency of ecclesiastical temperament, it was not until 1698 that he was given a bishopric, that of Fréjus in Provence. The will of Louis XIV, appointing him preceptor to the dauphin, gave him opportunity to establish a lasting influence over Louis xv. For a while after the conclusion of Louis' minority in 1723 he thought it prudent to dissimulate his power behind the shadow of the duke of Bourbon. But in 1726 he secured the dismissal of the bungling duke and at the age of seventy-three was himself invested with full control of the kingdom. Although he cleverly declined the title of first minister and his elevation to the cardinalate was the only official sign of his new position, the unwavering confidence of the king, sustained in the face of incessant court intrigue, made his

counsel prevail in France until its single costly defeat in the last year of his life.

Most historians since Saint-Simon have agreed with Fleury's political adversaries in censuring the peace policy which he founded upon the alliance with Robert Walpole as senile and unworthy of the youthful heir of a great king. Voltaire, however, did him justice. After the long wars by which Louis XIV had exhausted France the years of peace under Fleury enabled her to balance her budgets, to achieve commercial prosperity by developing her Indian and Canadian colonies and thus to recover her strength. His policy toward the Jansenists, one of bloodless persecution, superficially timorous but in reality manifesting the unobtrusive consistency characteristic of Fleury, was justified by the same fundamental concern for public tranquility and order as a condition of internal integration. Drawn into the War of the Polish Succession he not only succeeded, to a certain extent, in confining its course but extracted from the Treaty of Vienna (1738) at its close the completion of national unification through a clause sanctioning the reversion to France of the duchy of Lorraine. In order to defend the commerce and colonies of France and Spain after English ambitions had become emancipated from Walpole's pacific influence Fleury was preparing to make an alliance with Austria when French tradition, more powerful than his prudence, swept Louis xv in 1741 into the War of the Austrian Succession. So good a judge as Frederick II, "the young prince who had started the dance, leaving it to the king of France to pay the piper," thus vindicated Fleury's position: "He raised up France again and healed her. His countrymen owe their success to his skillful negotiations."

ÉMILE BOURGEOIS

Consult: Verlaque, V., Histoire du cardinal de Fleury et de son administration (Palmé 1879); Vaucher, Paul, Robert Walpole et la politique de Fleury (1737-1742) (Paris 1924); Bourgeois, Émile, Manuel historique de politique étrangère, vols. i-iii (4th ed. Paris 1902-19) vol. i, p. 475-98; Voltaire, F. A., Siècle de Louis XV (new ed. Paris 1870), especially p. 20-24; Hardy, G., Le cardinal de Fleury et le mouvement janséniste (Paris 1925).

FLINT, ROBERT (1838-1910), Scotch theologian and philosopher of history. Flint was the son of humble parents; he was able to prepare himself for the ministry, whence he entered into chairs of divinity at St. Andrews and Edinburgh successively. In addition to his many writings

concerned with theistic sociology he has left *The Philosophy of History in Europe, France and Germany* (Edinburgh 1874), of which the part on France was subsequently expanded into *A History of the Philosophy of History* (Edinburgh 1893); *Vico* (Edinburgh 1884); *Socialism* (London 1894, 2nd ed. 1908).

Preoccupation with the work of his chair and even more an extreme conscientiousness about committing himself to print before he had examined all material available have left his work on the philosophy of history a fragment. Flint deliberately refuses to define "philosophy of history." He starts with "a notion quite general, even although vague," that human affairs have not been abandoned to caprice, to chaos, but exhibit somehow the reign of law. But he warns against the error of a "too definite or rather too narrow view of law and order; one drawn from physical science alone," and insists that moral laws cannot be brought under physical laws. In one sense he finds human curiosity from the very first concerned with the problem of the development of the human race. But in a stricter sense the philosophy of history begins with the Renaissance—perhaps with Bodin—since this philosophy involves three primary notions not adequately worked out until that period. They are the notion of development or evolution, that of human unity and that of liberty. He postpones the full explanation of his own philosophy of history as hinted at in these three notions for later and unfortunately unwritten volumes. Flint concerns himself in his published work not only with professional philosophers of history like Hegel and Cousin but also with practising historians like Voltaire and Michelet. He is no mere summarizer but a critic. His critical canons are substantially those of traditional British empiricism, with which his firmly held theism does not in the least conflict. The quality of his mind as well as his ethical standards reminds one of his countryman Adam Smith. Flint has temperamentally no sympathy for such transcendentalists as Hegel; yet his treatment of them is notably fair. He has left no grand system; but his work is painstaking, sensible, lighted with ideas and by no means outlived. His very refusal to set up a system of his own as a prolegomenon, which to Morley was a weakness, may well be one of the reasons for his vitality.

CRANE BRINTON

Consult: Acton, J. E. E. D., A History of Freedom and Other Essays (London 1907) p. 588-96; Morley, John, "Mr. Flint's Philosophy of History" in Fortnightly

Review, n.s., vol. xvi (1874) 338-52; Guilland, Antoine, "R. Flint's History of the Philosophy of History" in Revue historique, vol. lvi (1894) 402-14.

FLOOD, HENRY (1732-91), Irish statesman and orator. Flood's political career began at a time when the Irish people were in a state of apathy and the Irish legislature was in complete subjection to England. In the sixteen years succeeding his entrance into the Irish Parliament in 1750 he built up a strong parliamentary opposition to English domination and became the recognized leader of reform. In 1775, however, for reasons variously interpreted, he accepted office as vice treasurer of Ireland with a seat in the Privy Council. This move, which seemed to his party an act of treachery, robbed him of public confidence; and when he left his position in the government in 1780 he was for a time without influence or friends in the Irish Parliament.

He had given his support to the free trade measures of 1779, and in 1782 he cooperated with Grattan in securing the repeal of the Declaratory Act, an achievement which represented the first landmark of Irish independence. Not satisfied with this, Flood contended that Irish independence was not secure until England had formally renounced the right to legislate in addition to repealing the act which defined that right. Public opinion and the recently organized volunteer army supported Flood, and his success in securing the Renunciation Act from England restored to him a great deal of his former popularity. Flood was strongly opposed to any reduction or dissolution of the volunteers, and it was with their support, gathered in a convention in Dublin, that he brought to the legislature in 1783 his bill for parliamentary reform. Although his measure still excluded Catholics from the franchise it represented an admirable solution of the abuses then existing in Parliament. It was defeated, however, on the ground that it proceeded from an armed body, although the failure of subsequent reform bills, after the volunteers had disbanded, seemed to indicate that the cause of failure was not unrelated to the conditions which the measures attempted to remedy. In the same year Flood entered the English Parliament, although he retained his seat in the legislature of Ireland. He did not, however, achieve success or prestige in the former, and his activity in the latter rapidly declined after his defeat on the question of reform.

Flood as an orator combined emotion with

logic, invective with reason, political theory with a broad constitutional knowledge. As a statesman he was exceedingly effective in stating and popularizing the political needs of Ireland, although his reputation has suffered from the ambiguity of his motives. Unquestionably, however, his missteps resulted from personal ambition, jealousy and faulty judgment rather than from any lack of patriotic devotion.

W. P. M. KENNEDY

Consult: Flood, W., Memoirs of the Life and Correspondence of . . . Henry Flood (Dublin 1838); Grattan, H., The Life and Times of Henry Grattan, 5 vols. (London 1839–46); Lecky, W. E. H., Leaders of Public Opinion in Ireland, 2 vols. (London 1912) vol. i, p. 35–93; Bowers, C. G., The Irish Orators (Indianapolis 1916) ch. i.

FLOODS AND FLOOD CONTROL. The land surface of the earth is in a state of continual change: it is slowly being elevated by geological forces and as slowly and inevitably being eroded and leveled by the action of water. Water falls as rain or snow, a large portion of which runs off the land as rivulets and creeks, which later unite to form large rivers. On higher elevations the river cuts a deep channel which is more than capable of caring for the maximum flow of water, as, for example, the Grand Canyon of the Colorado River. When the river reaches the lowlands it becomes sluggish and meanders over wide areas, so that its channel is not deep enough to take care of the maximum flow of water. Consequently, when heavy rains or snows occur on the watershed of the river, floods inevitably must occur in the lowlands of the valley. Floods of this type are largely seasonal and have occurred and are apt to recur whenever the rainy season begins on the lowlands of such large rivers as the Mississippi, the Hwang Ho or Yellow River, the Ganges, the Rhine and the Nile.

Other floods may be caused by inundations of the seas, such as those which have repeatedly taken toll of Holland. An inundation caused the disastrous Bengal flood of 1876, in which 200,000 lives were lost; and the Philippine flood of 1911, which killed 850 people. Floods also occur because of the breaking of dams constructed for impounding water or as a result of so-called cloudbursts. The Johnstown, Pennsylvania, flood of 1889 was preceded by torrential rains which caused a break in the dam above Johnstown on the Conemaugh River; cloudbursts caused the Constantinople flood in 1913 and the Wellton, Arizona, flood in 1931.

Occasionally floods are beneficent, as in the valley of the Nile. Heavy tropical rains occur on the headwaters of the Nile River in April and May, causing the river to rise often as much as three feet per day. The resulting flood invariably reaches a maximum at Aswan early in September. For over seven thousand years the flood waters, rich in fertilizing material, have been diverted by a series of canals so as to flood the whole Nile valley, where they are held for a period of forty-five days and then drained back into the river. Egyptian agriculture is entirely dependent on the certainty of this flood condition.

The case of the Nile is exceptional. Floods are a calamity from which no continent or people is immune. Since the beginning of history China has been afflicted by floods, becoming progressively worse in their destructive effects. In 1887 a flood on the Hwang Ho, known as the "Sorrow of China," killed millions of people; 100,000 persons lost their lives in the 1911 flood on the Yangtze River. There were severe floods in mediaeval Europe; and in the past hundred years Europe has experienced a dozen disastrous floods, some of which extended from Belgium to the Adriatic. The rising of the Seine in 1910 flooded Paris, killing a large number of people and destroying property valued at \$200,000,000.

In the United States the most persistent flood problem is that of the Mississippi River Since the alluvial valley of the Mississippi has been formed by the flood waters carrying the silt from the higher elevations, floods must have always occurred there. From 1785 to 1930 there were thirty major floods, the destructive effects of which were progressively aggravated by the increasing density of settlement. In 1912 there occurred the greatest flood then recorded, followed by one still greater in 1913. The flood which occurred in 1927 was the greatest in the history of the Mississippi. It began with the abundant rains of August and September, 1926, which maintained the water of the Mississippi above normal for the season. The torrential rains on the watershed of tributaries of the Ohio in December increased further the volume of water. Early in 1927 there were rains over the entire watershed sufficient to maintain the rise already obtained on the Mississippi. The heavy rains of March and April were so far above normal and the volume of water was so enormous that the water completely overflowed all of the protecting banks, levees and dikes of the

lower valley, causing one of the most disastrous floods on the American continent. The flood covered 18,268,780 acres of land, of which 4,417,500 were crop lands, and submerged the homes of 750,000 people. About 700,000 people were rendered destitute and were dependent on the American Red Cross and other relief agencies for shelter, food and medical attention. Property damage amounted to nearly \$300,000,000, of which over a third was in crops, livestock and farm property.

The persistent and catastrophic nature of floods early led to efforts at their control. There is little new, except as to magnitude, in modern methods of flood control, which include the construction of levees, spillways and reservoirs, reforestation, terracing cultivated soil and the creation of flood ways to care for the river at flood time. The Chinese, as early as 2000 B.C., built levees and drainage canals, combining flood control, land protection and irrigation. Flood ways have been used by the Egyptians for thousands of years. Recently discovered ruins of terraces in South America antedate the Inca civilization. During the Middle Ages levees were constructed on the Po, Danube, Rhine, Rhone and Volga rivers, supplemented in modern times by reforestation and storage reservoirs.

Levees have been the most favored method of flood control. Since the water of a river runs more slowly near its edge than in the center it naturally deposits its silt and mud to form banks. The banks of the river in a low valley therefore are higher at the river's edge and slope away from it. The inhabitants of a region adjacent to a river menaced by floods early sought to protect their homes, property and lives by strengthening these banks, naking them higher and stronger. The theory is that if these levees are constructed high and strong enough they will confine the river and cause it to construct, by scouring, a channel deep enough to care for the maximum flow of the river at flood time. For forty centuries the Chinese have been trying to control the Hwang Ho in this manner, constructing higher and higher levees. But the river bed does not scour: it rises a foot a century until today the bottom of the river, confined by levees, is twenty feet above the surrounding country. When the levees break as they do in time of flood, the terror, suffering and desolation on the lower plains are inconceivable. Experience indicates that levees must be supplemented by other means of flood control.

The establishment of reservoirs on the head-

waters of the various streams which make the main river would be of immeasurable value in holding back flood waters and lowering their crest. But many experts consider the construction costs prohibitive; it is estimated that Boulder Dam on the Colorado River, which is the only feasible way of controlling the flood waters of this stream, will cost \$165,000,000. Reservoirs have proved their value in the Miami valley. They can also be used for irrigation, water supply storage and the control of navigation.

Another method of control is the construction of spillways and flood ways to divert and accommodate the flood waters. Advocates of flood ways would widen the river at certain points to permit and cause it to spill over and flood a confined portion of the surrounding country which would be deliberately sacrificed to protect the remainder. But here again opponents consider the costs prohibitive.

Reforestation and improved soil management are vital problems of flood prevention and control. Floods occurred on the Mississippi River long before white men settled in its valley or had removed the protecting tree and sod cover of the timbered watershed or sod bound prairie. Yet it is true that the accepted method of crop production on the uplands by breaking up the sod and producing only cultivated crops promotes soil erosion and decreases the water holding power of the soil. The same thing is true when the primeval forest is destroyed and the protecting vegetation thus removed. Soil erosion under these conditions takes place more rapidly. More water escapes to the river, especially where swamps are drained, and the soil debris is deposited in the river channel in the lowlands, thus increasing the damage from floods. The Chinese cut down forests and cultivated the soil on the upper reaches of rivers, and when the rains came the soils washed away; hundreds of square miles of land once farmed are now a desolate waste which produces neither forest, grass nor food and increases the menace of floods. These man made conditions aggravate the menace of floods, and they must be considered in any program of adequate flood control. Reforestation and improved soil management are important also because of their pronounced influence on the state of agriculture and lumbering.

Flood control in the United States is hampered by lack of centralized control due to constitutional limitations and to sectionalism. Although the Mississippi valley is the drainage basin for thirty-one states, the problem and burden of flood control, up to 1879, was left to a few. After 1879 the federal government, under the fiction of improving navigation on the Mississippi, paid one third and later two thirds of the cost of levee construction. The national government's authority is neither complete nor clearly defined. Legislation varies in the different states and there is serious conflict of authority owing to the many different bodies participating in levee construction and other methods of flood control. There is no adequate federal water power code for the development, cortrol and conservation of rivers.

Legislation for the construction of levees on the Mississippi was adopted by Congress in 1928; its costs are to be borne exclusively by the federal government. This program, for which \$325,000,000 is appropriated, officially sanctions the theory, adopted by the Mississippi River Commission soon after its formation in 1879, that "levees only" will solve the problem of flood control, although further surveys are authorized of the feasibility of constructing flood ways, spillways or diversion channels. There is no recognition in the law of 1928 of the possibility of lessening the damage from floods by adopting a national policy of reforestation, improved soil management to prevent erosion, and restoration of some of the bottom lands to their original condition as carriers of flood waters.

Adequate flood control is a vast and complicated undertaking. It encounters obstacles in the wide divergence of opinion on methods prevailing among recognized authorities. Taxpayers object to increased government expenditures. Reservoirs, flood ways and the restoration of swamps are opposed because they render useless enormous tracts of arable land. Timber owners destroy forests and farmers plant the most profitable crops regardless of the danger of soil erosion and floods. Adequate flood control depends in the last analysis upon a proper adjustment and combination of the different methods into a comprehensive program. The cost would be heavy, but so is the cumulative cost of flood disasters.

ROBERT STEWART

See: DISASTERS AND DISASTER RELIEF; RED CROSS; FORESTS; WATER SUPPLY; IRRIGATION; STATES' RIGHTS; COMPACTS, INTERSTATE.

Consult: Hazen, Allen, Flood Flows: a Study of Frequencies and Magnitudes (New York 1930); Sonklar

von Innstädten, C. A., Von den Ueberschwemmungen (Vienna 1883); Alvord, J. W., and Burdick, C. B., Relief from Floods (New York 1918); Frank, A. D., The Development of the Federal Program of Flood Control on the Mississippi River (New York 1930); Frankenfield, H. C., "Floods of 1927" in United States, Department of Agriculture, Yearbook, 1927 (1928) p. 317-20; United States, Senate, 70th Cong., 1st sess., Commerce Committee, Hearings Relative to Flood Control of Mississippi River, Jan. 23-Feb. 24, 1928 (1928); United States, Department of Agriculture, Relation of Forestry to Control of Floods in Mississippi Valley (1929), and "Soil Erosion a National Menace" by H. H. Bennett and W. R. Chaplane, Circular, no. 33 (1928); Bock, Carl A., History of the Miami Flood Control Project (Dayton, O. 1918).

FLÓREZ ESTRADA, ALVARO (1765–1854), Spanish economist. After studying law Flórez Estrada entered the government service and in 1798 was appointed attorney general of Asturias. In this position he distinguished himself by his active opposition to Napoleon. In 1813 he was made chief justice of Seville. Because of his revolutionary activities he had to leave Spain several times and spend long periods of exile in London and Paris. He was elected corresponding member of the Académie des Sciences Morales et Politiques in 1851.

In his Examen imparcial de las disensiones de América y medios de conciliación (Madrid 1814) Flórez Estrada criticized Spain's vicious and antiquated system of colonial government, which estranged the colonies from the mother country, and strongly advocated the adoption of a less oppressive system. The period of his second exile was characterized by his greatest literary activity. During it he published the pamphlets Efectos producidos en Europa por la baja en el producto de las minas de plata (London 1824; English translation 1826), Examen de la crisis comercial de la Inglaterra en 1826 (Paris 1827, 3rd ed. London 1828) and his leading work Curso de economía política (2 vols., London 1828; 6th ed. Madrid 1848), the first systematic treatise on economics written by a Spaniard. This work was based principally upon the theories of Adam Smith and the English economists contemporary with Flórez Estrada. Although he defended commercial freedom and advocated the abolition of customs duties he admitted the expediency of export duties in certain cases. He supported Malthus' theory of population and Ricardo's theory of rent. His most original doctrine was that private ownership of land was an unjust privilege to which should be ascribed "the laborer's failure to obtain the entire fruit of his labor." Anticipating John Stuart Mill and

Henry George he was one of the first to defend on economic grounds the common right to land. To this subject Flórez Estrada devoted his La cuestión social; origen, latitud y efectos del derecho de propiedad (Madrid 1839), which proposed the gradual socialization of land through the purchase by the state of the real estate offered for sale. The state was to derive its funds for these purchases from the proceeds of a special tax. Flórez Estrada's analysis of taxes and their effects, especially those that fall upon land, is one of the most interesting parts of his work. He considered that a tax on rent is the most just and convenient tax but he did not favor making it the sole one, nor did he advocate direct taxes exclusively. He was opposed to the policy of paying current expenses by government loans.

Flórez Estrada had considerable influence upon the development of the science of economics in Spain. His works were published in many editions and translations and won the respect of his contemporaries. His most original ideas, however, found no echo in his own country.

GERMÁN BERNÁCER

Consult: Heckel, Max von, "Zur Entwickelung und Lage der neueren staatswissenschaftlichen Literatur in Spanien" in Jahrbücher für Nationalökonomie und Statistik, n.s., vol. xxi (1890) 26-49.

FLORIDABLANCA, CONDE DE, José Moñino y Redondo (1728–1808), Spanish statesman. Moñino studied law at the University of Orihuela and soon became interested in political and economic questions. In 1766 he was appointed fiscal to the Council of Castile and as such issued in collaboration with Camponanes the well known Respuesta fiscal—contra los ganaderos trashumantes (Madrid 1770), which protested against the grazing privileges of the mesta as a menace to Spanish agriculture. He was sent as ambassador to Pope Clement XIV to negotiate for the suppression of the Jesuit order. In 1773 he was raised to the nobility and from 1777 to 1792 was prime minister of Spain.

Floridablanca was strongly influenced by the French philosophes and economists, and his ministry was marked by a series of far reaching reforms, most of which are summed up in his Representación hecha al Sr. Rey D. Carlos 111 (Madrid 1829). Through his efforts a uniform system of import duties was established throughout Spain and a number of regulations which hampered industry and trade were suppressed. The alcabala, which weighed most heavily upon

the circulation of merchandise, was lowered and in certain instances done away with entirely. The trade with America was expanded and internal communication improved by the building of roads. Floridablanca also succeeded in abating the activities of the Algerian pirates who harassed the eastern coats of Spain and in establishing commercial and friendly treaties with various countries, including Turkey. With the cooperation of Cabarrus he established in 1782 the first Spanish bank of issue, the Banco de San Carlos.

He aided the improvement of agriculture by modifying the traditional pasturage rights of the *mesta* and by limiting entails through the provision that new ones could be created only by royal license. He undertook vast irrigation projects, fostered agricultural and technical education and encouraged manual labor. Believing that only the state could organize charity efficiently and economically, he attempted to abolish vagrancy and beggary by a system of public beneficence supported by special taxation.

Floridablanca was a skilful diplomat who favored peace and understood the politics of his time thoroughly. He increased the international prestige of Spain and contributed effectively to the formation of the armed neutrality directed against England. In his relations with the papacy he was an uncompromising supporter of royal authority. Some of his works have been published in Biblioteca de Autores Españoles series (vol. lix).

GERMÁN BERNÁCER

Consult: Alcazar, Molina C., El conde de Floridablanca (Madrid 1929); Ferrer del Rio, Antonio, Introduction to Obras originales del conde de Florida Blanca, Biblioteca de Autores Españoles, vol. lix (Madrid 1867); Colmeiro, Manuel, in Real Academia de Ciencias Morales y Políticas, Memorias, vol. i (1861), bibliography p. 119-21.

FOLK HIGH SCHOOLS (Folks H ϕ jskole). The folk high school is a distinctive type of educational institution for adults, indigenous to Denmark, which within the last two or three decades has taken root in Sweden and Finland and more recently has been copied in America and to some extent in Germany, although the German *Volkshochschule* is generally a very different sort of institution despite its similar name. These schools grew out of a national need. Denmark had been ruined politically, economically and morally by the Napoleonic wars. At the mercy of tyrannical landlords the peasant farmers had become poverty stricken and mo-

rose. The churches housed a formal and decadent "Christianity" which attracted nobody; the schools including the university were centers of an irrelevant classicism.

The history of the folk high school goes back to an educational project proposed in 1832 by Nicolai S. F. Grundtvig, a liberal theologian and social philosopher, who had been banned from the pulpit. Grundtvig had dug deep into the old Norse cultures, had felt the rising tide of science, had made the acquaintance of such educational reformers as Rousseau, Pestalozzi and Fröbel, with their emphasis upon the participation of the individual in his own education, and had discovered, as he himself said, "what the Englishman calls freedom." In 1832 in the preface to a book on Norse mythology he proposed to wipe out the decadent and irrelevant cultures of the churches and existing schools and replace them with the old folk cultures of the Danes, thus restoring the nation's morale, and with the new applied sciences, thus creating a nation of technicians and restoring its economic position. To do this new schools were needed in which personal growth could be stimulated and in which a social life might develop out of individual freedom. A new Denmark must be brought into being by means of a new education.

The first of these schools he set up in 1844. but Grundtvig was no practical school man and the project failed. In 1851 Kristen Kold, who had found teaching in the formal state schools intolerable, established the first successful folk high school. After 1865 the number of such schools increased rapidly, and by 1885 there were more than a hundred of them. In 1930 there were sixty with an enrolment of 7000 students, almost half of whom were women. A few have been organized by the so-called "inner mission" religious movement in small cities and very recently the socialists have set up several in the larger cities, but on the whole they remain village and countryside institutions. Of the approximately eighty schools now existing about sixty are rural.

Leaving academic learning to the Latin schools and the university, the folk high schools try to discover the occupational, sex, social and spiritual interests of each individual and to release, clarify and integrate them. Grundtvig regarded the realization of such a process as the only true form of education; learning he considered secondary. The curriculum covers four or five fundamental areas: the wealth of northern culture, especially that of Denmark; world

history; the life of the modern community, especially its social and economic aspects; and the great cultural meanings of life expressed in literature and modern science. There is no attempt to teach facts; the object is only to develop interests and suggest meanings. Education is primarily through conversation, the "living word." There are no recitations, assigned lessons, examinations, grades, credits, diplomas or other academic gestures. Lectures are intended to stimulate reading without assigning it as a command.

The schools are small communities containing about a hundred students and four or five teachers with their families. The students live in the school. There is a five-month session for men in the winter and a three-month session for women in the summer. This separation is based partly on economic needs, partly on the pedagogical theory that it would otherwise interfere with the development of an intensive intellectual life in the students.

The schools are privately owned and controlled in many cases by the teachers, in some by religious organizations. In general, those owned by the teachers do the best work. The state recognizes the schools and grants some financial aid either by supplementing teachers' salaries or by subsidizing needy students, without attempting political control. At present, it is said, the state subvention makes it possible for every Dane to attend a school.

The only qualification for admission to most of these schools is that the pupil be eighteen years old. Most of the students finish elementary school at about fourteen, spend the next four years working in the home and on the farm and then go to a folk high school for a term or two. Since about 30 percent of the adult population goes through these schools, Denmark has the best educated village and rural population in the world. This fact is intimately related to the intensive development of farmers' cooperatives and an agricultural political party which in coalition with the urban Social Democrats has largely dominated the state in recent years, as well as to the growth of a liberal wing of the state church, the so-called Grundtvigians.

Denmark, however, cannot escape the effects of world wide economic forces which in recent years have upset national prosperity. For example, unemployment in Great Britain, by seriously contracting the market for Danish foodstuffs, has embarrassed the cooperative associations and given support to critics of cooperative education. In addition, international move-

ments such as the International Peoples' College at Elsinore have won wide support, putting the nationalist folk high schools on the defensive. Whatever their fate is to be, however, the high schools have contributed to pedagogy some realistic lessons in the profounder meanings of education.

The Danish folk high schools were brought to America (notably to Nebraska, Iowa and Minnesota) by Danish immigrants in the seventies and eighties of the last century. They were consistently ignored by American educators who, regarding them from the American academic point of view, found nothing significant in them. Later, American educators became aware of the distinctive nature of these schools and within the past decade have realized their possible values. That realization has resulted in a number of significant books on education and at least three schools modeled on the Danish plan: Pocono Peoples College at Henryville, Pennsylvania; the John C. Campbell Folk School at Brasstown, North Carolina; and Ashland College at Grant, Michigan.

There is a definite conflict between the American conception of education as something to be got at a school, to be taken on in units and measured in credits, to be passed and to be graduated from, and this Danish conception of education as something to be achieved during all the years of life and to be valued for its own sake. Hence there has been much discussion as to whether anything of the Danish type can take root in American life. It was assumed by the founders of the Pocono and the Campbell experiment that the distinctive thing about the Danish movement in Denmark was that the Danes are a homogeneous race and that therefore it would be best to begin similar work in America among a similarly homogeneous people. Hence both efforts were begun among the allegedly homogeneous racial groups of the eastern American mountain regions. The founders of the Ashland experiment, assuming that the distinctive thing about the Danish movement was the moral and intellectual contribution it made to the economic recovery of discouraged Denmark, began their work in the heart of agricultural Michigan. The greatest difficulty encountered in both Pennsylvania and North Carolina has been the precariousness of the local economic bases of existence; although the people may be easily stimulated to new moral and spiritual outlooks they lack secure economic foundations upon which to build a new civilization. The greatest difficulty encountered in comparatively prosperous Michigan has been that little need of spiritual or intellectual nourishment beyond that furnished formally by the local schools is felt. Probably many experiments must be undertaken before the American folk high school learns how to meet American needs and avoid American pitfalls.

JOSEPH K. HART

See: EDUCATION; ADULT EDUCATION; VOCATIONAL EDUCATION; AGRARIAN MOVEMENTS, section on DENMARK; RURAL SOCIETY.

Consult: Hollmann, A. H. H., Die dänische Volkshochschule . . . (Berlin 1909); Foght, H. W., Rural Denmark and Its Schools (New York 1915); World Association for Adult Education, Adult Education in Denmark, Sriniketan, etc., Bulletin no. xviii (London 1923); Begtrup, II., Lund, H., and Manniche, P., The Folk High Schools of Denmark and the Development of a Farming Community (new ed. London 1929); Hart, J. K., Light from the North (New York 1927); Campbell, O. A. D., The Danish Folk School (New York 1928); Schröder, Ludvig, Den nordiske folkehöjskole (Copenhagen 1905); Otte, Fritz, Wesen und Gestalt der deutschen Volkshochschule (Charlottenburg 1928).

FOLKLORE. The term folklore was first used in the middle of the nineteenth century to denote folk traditions, festivals, songs and superstitions. Much of the anthropological material called folklore comes from rural populations of the civilized world. It is the field in which the culture of peasant Europe is most obviously similar to the cultural traits of primitive peoples and as such has been used since the time of Tylor to document the parallelisms of primitive and modern culture. More than any other body of material it makes vivid the recency and the precariousness of those rationalistic attitudes of the modern urban educated groups which are often identified with human nature. Two fields of inquiry have become differentiated: the study of popular superstitions, including proverbs, songs and popular sayings; and research connected with folk tales.

Superstitions among civilized peoples have been widely collected. The best known repository of peasant magic and festivals is Frazer's Golden Bough, although the author makes no attempt at systematic study. Some degree of order has been brought into the vast mass of available material by Hazlitt's dictionary (Brand's Popular Antiquities . . . Faiths and Folklore), the Mitteilungen zur jüdischen Volkskunde and especially the Handwörterbuch des deutschen Aberglaubens. The vast available heterogeneous material has, however, hardly been made the subject of sci-

entific analysis. Future studies will probably be made under the headings of specific subjects, such, for example, as folk songs, food tabus and magic.

The branch of folklore dealing with the traditional tales of primitive and modern peoples ranks among the important humanistic sciences. The history of the attempts to understand folk tales goes back far beyond the coining of the word folklore. Religious prophets, poets and philosophers from primitive times have been compelled to adopt some attitude toward the myths which incorporated the religious dogma of their times. Priestly reworking of myths is clearly seen in various primitive American Indian tribes, and, as Lang points out, the Rigveda left out the most glaring indecencies in the behavior of the gods and Homer avoided the worst scandals. Confucian and Buddhist scribes and the writers of both the Old and New Testaments allegorized or definitely made light of the myths that formed the body of the religious belief with which they were confronted. The early philosophers rationalized the myths of their times in accordance with their leading concepts. Aristotle used them as allegories of political philosophy and Porphyry of mystic experience.

Early modern scientific study of folk tales was motivated by a desire to find a rational explanation for their abhorrent and fantastic content. Max Müller proposed the theory, eagerly taken up by students of Aryan languages, that mythology was to be understood as a disease of language, a pathology of words. Lang, the most vigorous critic of the theory, showed that the myths occurred far beyond the regions inhabited by peoples of Aryan speech and that they could not be founded on the same allegories based upon puns on completely different proper names of gods and heroes. The great diversity in interpretation among Aryan students also helped to discredit the theory.

The Euhemerists, whose best known spokesmen were the abbé Banier and Lemprière, interpreted myth as fantasy concealing historical fact. Danaë's golden shower was said to represent the gold with which her guards were bribed; Daedalus' walking images were said to portray the fact that legs were just being separated in the contemporary sculpture instead of being modeled in one piece as in archaic sculpture. Jakob Grimm considered unnatural and extravagant incidents in secular household tales as degenerations of serious cosmic allegories in earlier religiously motivated mythology.

The survival theory of Tylor and Lang was also an effort to explain away fantastic and abhorrent elements. They believed that myths arose in savage society and remained comparatively unchanged as survivals in higher and later civilizations. However unintelligible a tale appeared in its present setting, all its incidents were thought to have been originally in keeping with the ethos of the people who invented them. This theory was supported by the obvious survivals of feudal customs in Grimm's tales, survivals which are due to the fact that European folklore is not living. The theory of survivals assumes too great a stability in culture traits, for the importance of survivals naturally decreases as one deals with a still functioning mythology. Tylor, for example, speaks of South American myths as containing reference to the polar sun of the arctic regions through which the South American peoples presumably passed in remote ages, and Lang would apparently have us believe that the myth of Cronus survives from a primitive stage in which fathers were accustomed to eat their children. Studies of the myths of primitive peoples who have established themselves in different culture areas within the past hundred years, however, reveal that myths change much more rapidly than either language or physical type.

The nature symbolists, who have dominated German mythological studies and continue to dominate the field of the mediaeval romances, have in common the dogma that all mythology reproduces the phenomena of nature under hidden figures of speech. The death and rebirth of the hero is interpreted, for example, as a parable of the succession of winter and summer; the warriors' combat with arrows as the shooting of the sun's rays; the tremendous bulk of test themes, in which the hero submits to and conquers in tests set by his prospective father-inlaw or uncle, as dramatizations of the sun's progress through the underworld before it is permitted to rise again at dawn. Such sun allegories are made the basis of mythology by Seler, Ehrenreich and Preuss; a similar role has been claimed for fog by Laistner and for the moon by Siecke, and more generalized theories of nature symbolism include as well allegories of the seasons and of storm. It is not held that the tales are considered allegories by their present tellers, but they are thought to have so originated. Careful studies in folklore, such as Ehrenreich's collection of New World mythology, have been inspired by this theory. Its popularity may perhaps be explained by the fact that late Greek mythology is compact with nature allegories and also by the fact that the study of myth in the nineteenth century coincided with a great romantic revival of the cult of nature. Once one questions the dogma that imagination expresses itself in myth only by allegory, it is difficult to see why tales of fights between the hero and the dragon are intelligible only as they are explained by the phenomena of sunset or other natural phenomena. Human war and marriage and birth and death are themselves capable of suggesting tales. Lowie has further shown that the complex of traits which Ehrenreich posits as solar symbolism is definitely unstable and that the crucial symbols are often lacking in any given version. This fact and doubt concerning the validity of the major premise of the nature symbolists, that a fixed symbolism exists without reference to the culture or associations of the people among whom a tale is current, have caused modern realistic students of primitive mythology to abandon the nature symbolism theory. It is recognized, however, that sometimes native story tellers have made their own allegories of their tales and have given them nature symbolism, as when an American Indian or Siberian tribe has developed a cycle of star myths or of storm myths.

Psychoanalysts also interpret folklore in terms of allegory. Instead, however, of seeing in the myths cosmic phenomena hidden under fixed symbolism they see physiological and especially sex processes so portrayed. Fixed symbolism according to which one reads fire as the sex act, water as birth, whetstones, knives and serpents as the male organs is a gratuitous interpretation in cases where the symbolism of the region has not been studied. Snakes, for example, are the prime symbol of immortality over large parts of the world because snakes rejuvenate themselves by casting off their skins, and it is untenable to interpret snakes in the mythologies of such regions as phallic. The psychoanalytic school has further weakened its position by adopting the familiar and sex situation of urban twentieth century western civilization as the standard of reference in all primitive mythologies, interpreting them in the light of Oedipus fixations, castration complexes and the inhibitions and displacements consequent on the particular sex tabus of modern western society. They commit the serious methodological error of interpreting myths as representing the father-son conflict in a matrilineal society where the father is shorn

of all authority, which is instead vested in a person outside the biological family, usually the mother's brother. Symbolists, whether they find in myth nature or sex symbolism or prognostications of the future, as in certain schools of Biblical exegesis, have failed to realize the cogency of the criticism made by Tylor that mere possibility is worthless in mythological speculation.

Certain scholars regard myths as primarily etiological. According to this view man desired to explain the material world in terms of the human and animal world and therefore sought narrative forms under which to interpret the processes of nature and of culture. The explanatory conclusions of many tales are held to be the most significant and dynamically important mythological elements and it is believed that these are the sources of the tales. The etiological motivation is sometimes deduced from tales although it has not been specifically formulated in the telling. Dähnhardt was especially interested in the etiological use of tales, rather than in their etiological origin. Rivers argued that man would naturally be driven to explain the more unfamiliar or insecure aspects of his environment and that hence the comparative recency and historical background of those aspects of social life which his myths explain could be learned therefrom. The primary hypothesis here involved, that myths are fundamentally explanations, is open to two thoroughgoing criticisms. One of these rests on the ground of its intellectualistic character, for emotional stress and fancy both play a role in folklore themes as well as does the intellect with its effort to seek explanations. A further criticism is that of Waterman, who in his examination of the "that's whys" of Indian folk tales shows that mythological plots are often very stable over wide distributions, but the facts that they are supposed to explain and from which they are supposed to have originated are the most unstable of all elements of the plots. He found ten different origins of animals, names or customs added by as many different tribes to the same tale; in as many more variants all mention of origins was absent. The explanatory elements therefore, far from being the source of the plot, are secondary and local associations.

The modern study of folklore stresses equally diffusion and acculturation, the study of the geographical distribution of tales and the absorption of local cultural material into tribal mythology. The importance of the study of diffusion in folklore was early recognized. Lang spoke of it as

the driftwood theory and collected widely dispersed examples of the Jason, or magic fleece, story, which is still one of the best available stories with which to document the importance of contacts of peoples in early times. The emphasis on the importance of diffusion led to two exaggerations: one school derived all myths from the Euphrates valley and the other derived all myths from India. The pan-Babylonian school, which was interested in showing eastern analogues to the Hebrew Old Testament tales, effectually refuted the dogma of the uniqueness of the Bible but has had little evidence with which to reenforce its position that all myths originated in the Euphrates region. The pan-Indians on the other hand have a strong case for their argument that world mythology can be traced to ancient India. Benfey and later Cosquin have demonstrated that Indian parallels of both animal and novelistic European tales are legion and that the oldest versions are found in the Orient. The genetic relationship of tales in Europe and in Asia is no longer questioned and, broadly speaking, all Eurasia and Africa may be considered as one culture area in regard to mythology. The criticism against the pan-Indians is that the fact that the oldest versions are recorded in Indian sacred literature does not prove India to be the place of origin of these tales. The study of contemporary preliterate peoples has shown that unwritten literature often maintains itself with remarkable stability, as, for example, in widely separated Eskimo tribes. The fact that the tales had been first written down in one area rather than in another, while significant in relation to the history of written literatures, does not settle the question of the region in which the tales were current earliest.

The distribution of myths has been studied for several other ends than that of proving the source of origin of mythology. Dixon has used it to determine movements of peoples. Frazer's works and Bolte and Polívka's concordance to Grimm's tales have been compiled without theoretical preoccupation. The modern Finnish school under the leadership of Aarne and Krohn, represented in the United States by Taylor and Thompson, have set themselves as their aim the reconstruction of the archetypal tale. Their thorough work is important because they have isolated the most stable and widely distributed elements of the tale in order to define the limits of investigation. The archetypal tale has been, however, in much of their writing a somewhat mystic abstraction, and their method a search

after fixed laws that they conceive to be necessary to give meaning to folklore study. Boas, in his concordance of the Indian tales of the North Pacific coast, analyzes mythology like any other culture trait to show its content over a considerable area and the kind of changes that may be expected—the breakdown and recombination of the elements of a tale as it passes from one people to another and the incorporation of cultural material.

The excessive stability of tales in European folklore, due partly to the fact that they are current within a single culture area very slightly differentiated and also to the illusion produced by the fact that a tremendous profusion of variants is known as compared with other mythologies, has prevented the understanding of the usual morphological behavior of folk tales. Folklore incidents combine and recombine with ease, attaching themselves now to one plot and now to another. In the process they are necessarily reconstructed to suit the new association that has been set up. Only by a study of their diffusion can it be determined which aspects of a tale are present because they are the traditional and common property of the entire area or even of a large part of the world, and which elements are the peculiar contribution of the people under discussion. Historical analysis must thus precede the psychological study of tales.

Among any people tales are individualized as a part of their adoption into the local culture and acculturated by the incorporation of cultural detail and by marked changes of motivation. The picture of their own daily life is incorporated in their tales with accuracy and detail. This is well illustrated by Boas in regard to the tales of the Tsimshian (Tsimshian Mythology, p. 393-477). Peoples' folk tales are in this sense their autobiography and the clearest mirror of their life. Not all elements of culture, however, are reflected and even important ones may be ignored because of local literary convention. In most of the world the culture reflected is roughly contemporaneous—not of a distant past, as has been argued on the basis of European folklore. When mythology is living and functioning even the most recent cultural innovations may be reflected in the tales.

Behavior and attitudes become more articulate in folklore than in any other cultural trait, and folklore then tends to crystallize and perpetuate the forms of culture that it has made articulate. This is true especially in regard to religion, which is largely unintelligible with-

out reference to sacred tales, often specifically designated mythology. The animistic attitude universal in religion expresses itself freely through the medium of tale making, giving embodiment to the spirits which religion postulates in the universe. These tales sometimes become the most stressed aspect of the local religious complex. Folklore plays a similar although less noticeable role in relation to other cultural traits such as etiquette, morals, avoidances and occupational pursuits. It crystallizes the forms that are locally favored or insisted upon, and gives therefore one of the important available sanctions to the mores of the group. The social acceptance or intolerance of the autocratic attitude, the behavior toward the poor, the treatment of the elder generation by the younger, and innumerable other points of ethics are in this way reenforced and perpetuated by the folklore of the group.

Modern folkloristic study is freeing itself of preconceptions and of far fetched allegories and is founding itself upon the importance of folklore as a social phenomenon and as a means of expression by a social group of its own attitudes and cultural life. By regarding folklore as a cultural trait tike technology, social organization or religion any special consideration of communal authorship is made unnecessary, since myths are as much and as little due to communal creation as marriage or fertility rites. All cultural traits including folk tales are in the last analysis individual creations determined by cultural conditioning. They must, however, each be socially accepted, a process with which the individual has comparatively little to do and which is dependent upon the cumulative social traits and preoccupations of his group.

Folklore is literature and like any art it has traditional regional stylistic forms which may be studied like any other art forms. The elaboration of many African tales on a stylized framework of songs or on local proverbs, the device of the theme of the youngest of three sons in European folk tales and the frequent formalized repetition that is common almost everywhere are literary conventions. Folklore is an oral art and involves all the special arts of oral narration, only some of which survive reproduction on the printed page. The most complex mythological art form is the epic which is common to a large part of Eurasia and comprises many epic cycles. Strictly speaking the form is not known outside this region.

It is ironic that the academic study of folklore

should have labored throughout its course under the incubus of theories explaining seven-headed monsters and magic swords as survivals of primordial conditions, allegories of the sun and moon or of the sex act or etiological philosophizing and have ignored the unconfined role of the human imagination in the creation of mythology. Exaggeration is inherent in the play of imagination; distance and time are annihilated and natural phenomena personalized spontaneously without rationalistic background. The play of imagination, fundamental in folklore, is given direction by the great opportunity for wish fulfilment. More than in any other form of art there is the possibility of pleasurable identification and whatever is thought of as most desirable in personal experience in any region finds free expression. In hero tales as nowhere else man can indulge his desires without running the risk of consequences or flying in the face of possibility; thus the dead are brought to life, days are lengthened or shortened, the despised hero triumphs and pride goes before a fall. Since the wish fulfilments of different cultures vary, strongly contrasting myth cycles develop. The Hebrew mythology was cast in the form of history portraying the drama of the race in its role as the chosen people of God. In mediaeval Europe the peasant folk tales, the Grimm's collection, were motivated by naïve grandiose dreams of the success of the despised; those of the aristocrats, the chansons de geste, by the glory of hereditary lines in a society where chivalry was dominant; those of the growing urban proletariat, such as that of Reynard the Fox, by the dream of living by one's wits. In the same manner the themes of primitive mythologies incorporate dominant daydreams of the tribe or culture area.

The autobiographical character of folklore is preserved in present day mythologies in those regions where mythology is still a living cultural trait. The mockery of the priest in German folklore as contrasted with the ubiquitousness of the church background in Spanish tales, or the great number of episodic adventure stories, often picaresque, in Spain as compared with the overwhelming popularity of the love theme in Russia, reflect characteristic preoccupations. In those rural sections of North America where folklore is still found there are wide divergencies in the degree to which the customs and attitudes of the narrators are reflected in their tales. In some regions the tales are ossified and the traditional form is retained in the most

incongruous settings. This is especially true in Mexico, where mythology is filled with characters and appurtenances like lions, thrones and scepters, retained from the Spanish folklore that has quite superseded the older Indian mythologies. The same is true to a somewhat slighter extent of the folklore of the French Canadians and of the mountain whites of the Cumberlands. The latter have preserved, for instance, the old English ballad. The incongruity between the traditional forms of folklore and the cultural practises of the present day is less marked in Negro folklore and in the Paul Bunyan tales of the lumbermen. Negro folklore varies comparatively little wherever it is found in North America and in the West Indies. A considerable proportion of it seems to have received its present form in the New World, but it is all fundamentally related to West African mythologies which are in turn genetically related to European folk tales. However, all of it has been remodeled to serve as a vehicle for comment on the conditions that surrounded the Negro in his new environment. Brer Rabbit and Anansi are opportunities for slave comment and the Massa stories are often direct transcriptions of slave life. The one native American folklore is that of the lumbermen, the "tall tales" of Paul Bunyan or similar heroes. Here self-expression is at a maximum and historical analogues are almost non-existent. The tales are all extravagant exaggerations of exploit, a folk form that is common in America but which has nowhere except in the Paul Bunyan cycles become traditional folklore. These tales, said to have been current in the middle of the last century along the Susquehanna, are now found throughout lumbering centers in North America.

Except that folk tales still flourish in America in these few rural groups, folklore has not survived as a living trait in modern civilization. It has been perpetuated by the printed page, however, in the nursery through the fairy tale and the animal anecdote of European derivation and in the church, which perpetuates much Semitic mythology. Thus in a strict sense folklore is a dead trait in the modern world. All study of it from the point of view of furthering the understanding of present social forms, is in order to comprehend, from the one example available, the changes that occur when a culture trait ceases to follow a traditional mold and becomes an affair of individual responsibility and initiative. For while individual expression is still largely curtailed in other aspects of culture, such as marriage and education, by an emphasis on the value of conformity to traditional standards, in literature, which throughout previous human history has been traditionally determined, individual creativeness is now indispensable for popular approval and plagiarism is a punishable offense. The study of folklore therefore makes more vivid than any other discipline the contrast between behavior as it finds expression under traditional cultural forms and as it finds expression as a manifestation of individual creativeness.

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See: Mythology; Literature; Superstition; Symbolism; Magic; Religion; Tabu; Sacred Books; Tradition; Culture; Anthropology.

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FOLKWAYS are group habits or customs. The word folkway was coined by W. G. Sumner (1840–1910) in order to give definiteness and tangibility to similar sociological concepts al-

ready in use, such as custom, social usage and tradition, and to avoid the set of vague connotations that cling about the more familiar terms. Folkways win traditional authority by becoming intertwined with cult practises and religious concepts. They become regulative for succeeding generations and assume the character of a social force controlling individual and social undertakings. They also belong to a system of social relations, conventions and institutional arrangements and in virtue of this characteristic constitute the leading factual material in the "science of society." To Sumner thus the study of the folkways "is for a science of society what the study of the cell is for biology" (Science of Society, vol. i, p. 31).

Folkways originate in the frequent repetition of petty acts, usually by a number of individuals acting in concert or at least acting similarly when faced with the same basic need. The simultaneous efforts of many to satisfy their personal interests produce mass phenomena, which are folkways by virtue of the uniformity and repetition they possess and the wide concurrence in them. The process of custom forming is thus similar to that of habit forming, and the same psychological laws are involved. Folkways tend to group themselves about the major interests looking toward the maintenance, protection and perpetuation of the individual and toward security and satisfaction in life. They are attended by pleasure or pain according to the measure in which they are adapted to these needs. They thus constitute a means of adjustment to life conditions, and the more expedient ways tend to survive.

The development of these group habits is largely unpremeditated or automatic, and they tend with time to become more and more arbitrary, positive and imperative. If primitive men are asked why they behave in a certain way in particular cases they usually answer that it is because they and their ancestors have always done so. Moreover, the ancestral ghosts would be angry if the living should deviate from the ancient ways. Despite this apparent rigidity the folkways nevertheless change to meet new conditions; innovations appear and practises that become inexpedient are discontinued. The folkways are also subject to a strain toward consistency with one another, for they answer their several purposes with less friction when they harmonize and cooperate.

"Use and wont" are as characteristic of modern as of primitive civilization. People adjust themselves to the telephone and the automobile through folkways as distinctive as those which clustered around the courier and the horse. The factory system has produced a body of folkways which distinguish the manufacturing town from the residential suburb or the agricultural village. Technological advances have altered the standards and habits of all classes. But despite changes in form the folkways still retain their essential character and authority in modern society.

Expediency by no means explains all folkways. There always resides in them a large element of force, and this may be directed by the ruling class or interested persons. They may likewise be due to accident, to false inference or to irrational and incongruous action based on a sort of pseudo-knowledge. On the Nicobar Islands, for example, some natives who had begun to make pottery died; from then on the art was given up. A Winnebago girl who had been expelled from her tribe for bobbing her hair was recalled when an epidemic followed; the new custom was then sanctioned. These cases illustrate the generally prevalent mode of reasoning of primitive people-post hoc ergo propter hoc. Traditional folkways that are gross, absurd or inexpedient may often be preserved by the process of conventionalization. Thus there may be nakedness without indecency and tales of adultery told without the stigma of lewdness.

When the conviction arises that certain folkways are indispensable to the welfare of society, that they are the only "right" ways and that departure from them will involve calamity, i.e. when philosophical and ethical generalizations are developed about them, they are called mores. Sumner borrowed the word with its implications from the Roman usage and defined it as "the popular habits and traditions, when they include a judgment that they are conducive to societal welfare, and when they exert a coercion on the individual to conform to them, although they are not coördinated by any authority" (Science of Society, vol. i, p. 34). The term, like folkways, has found its way into common usage. Mores differ from folkways not in kind but in degree. The removal of the hat when a man meets a woman on the street is a folkway, while the practise of monogamy belongs to the mores. Neglect of the former usage is not usually regarded as dangerous to society, although it is discreditable to the individual; but the latter is regarded as so valuable that in the supposed interests of society the polygamist is promptly and severely repressed.

Morals are those mores which have become positive in dogma and which dominate on account of their importance, real or assumed. "The morality of a group at a time is the sum of the taboos and prescriptions in the folkways by which right conduct is defined. Therefore morals can never be intuitive. They are historical, institutional, and empirical" (Folkways, p. 29). Morals, like the mores in general, have their strongest hold in the masses, for the masses are ever conservative. The folkways are their ways because they constitute the supporting core of society.

Another important fact about the mores is to be found in their dominion over the individual. He is formed under their influence before he is capable of reasoning about them. Rules of action and standards of ethics set before him an ideal of the "man as he should be," and mold him by repeated suggestion in spite of himself and without his apparent knowledge. Only in so far as social rules have been transferred from the mores into laws and positive institutions are they to be viewed with any objectivity. It is always easiest to conform and the unconventional is penalized. Even the enlightened can free themselves only in a measure. The mores thus constitute an engine of social control. They regulate the political, social and religious behavior of the individual.

But the individual is not entirely powerless to influence the mores of his group, since he exercises a function of surpassing importance as a source of their variations. Slight departures from the code are always in evidence; indeed, the code of a society is merely a sort of average or mean about which cluster the codes of classes, sects and other larger and smaller subgroups. The individual not infrequently finds himself in involuntary antagonism to the mores of the society or the subgroup to which he belongs.'When a man passes from one class to another, his behavior shows the contrast between the mores in which he was bred and those in which he finds himself. Satirists have ridiculed the parvenu for centuries. The mistakes and misfortunes of this class reveal the nature of the mores, their power over the individual, their pertinacity against later influences, the confusion in character produced by changing them and the grip of habit which appears both in the persistence of old mores and the weakness of new ones. The immigrant to be

assimilated must undergo an even more radical change of mores.

Tabus are negative mores—the thou shalt not's. They usually contain a greater element of philosophy than the simple positive injunctions, because they imply a rationalization such as, for instance, that the act would displease the ghosts. Tabus thus provide a means by which fear of the supernatural comes into play to prevent actions which are believed to be harmful to public health, industry, sex and family regulation, established religion or any other social interest. Often they are attenuated in more developed societies into a proscription of "bad form."

Laws are those folkways and mores which in addition to the uncoordinated approval of public opinion are given the added and specific sanction of the group as organized politically. That this is the fundamental nature of laws is seen by the countless cases throughout history of governments that have unsuccessfully attempted to establish as laws certain modes of behavior which had not already become fixed as group habits, i.e. which were not already folkways.

The mores form accretions about the nuclei of outstanding social interests, such as those of sex regulation or of worship, and, through selection, assume a definite and specific structure which takes the form of institutions such as the family and the church. As institutions take these definite forms and somewhat disengage themselves from the mass of custom they do not lose but carry with them that approval and that conviction as to their indispensability to social welfare which are accorded the mores in the first place.

Folkways are to be regarded as the units or elements of culture or civilization and by the same token all culture may be resolved into group habits. Customary modes of behavior and thought are obviously of this character. Folkways originate in "inventions" in the broader sense; these are adopted by the group and become thereby a part of its culture; they may then spread to other groups by diffusion. The concept of folkways differs from that of culture traits primarily with reference to material culture. Anthropologists use the term culture trait generally to designate a spear, a pot, an article of clothing, etc. as well as common habits of thought and behavior. Sociologists regard as the units of culture not such material objects themselves but rather the ways of making and using them and the ideas entertained about them. These are group habits, and culture consists basically of habits carried in the nervous system of the individual. A culture area is a geographic region in which the various social groups possess a large proportion of their folkways in common.

From the fact that culture consists of folk-ways or group habits, i.e. habits shared by many individuals rather than possessed by one, culture is superindividual. Individual habits die with their possessors, but folkways or group habits live on in the survivors. The young in any society are initiated into the group habits of their elders, thus insuring the continuity of culture in spite of the impermanence of the individual. Habits so transmitted constitute the social heritage of a group.

Folkways and mores, laws and tabus, culture traits and customs, are specifically human phenomena. Only the most meager evidences of culture are discernible in non-human organisms. The so-called social insects, for example, do not possess culture in the sense that this is true of human societies. Animal behavior is innate in character rather than acquired, instinctive rather than habitual. The fact that culture is superindividual raises its phenomena to another plane, that of the "superorganic" of Herbert Spencer and A. L. Kroeber. To be sure, the superorganic rests on the organic, as the organic in turn rests on the inorganic, but the social phenomena of humans nevertheless belong to a different order, governed by distinctive laws and principles.

Maurice R. Davie

See: Custom; Morals; Culture; Tradition; Conventions, Social; Conformity; Tabu; Institution; Law; Social Process; Change, Social; Functionalism.

Consult: Sumner, W. G., Folkways (Boston 1906); Sumner, W. G., and Keller, A. G., The Science of Society, 4 vols. (New Haven 1927-28); Keller, Albert G., Societal Evolution (New York 1915); Hertzler, J. O., Social Institutions (New York 1929); Wissler, Clark, Man and Culture (New York 1923); Lowie, Robert H., Culture and Ethnology (New York 1917); Willey, Malcolm M., "The Validity of the Culture Concept" in American Journal of Sociology, vol. xxxv (1929) 204-19; Kroeber, A. L., "The Superorganic" in American Anthropologist, vol. xix (1917) 163-213.

FONTANELLA, JUAN PEDRO (1576–1680), Spanish jurist. At an early age Fontanella became famous as a practising lawyer in Barcelona and as the author of *De pactis nuptialibus*. He was also active in the nationalist movement and his name is connected with the organization of the Catalonian uprising against the Castilian troops of the Marquis de los Vélez. In 1651 he moved to Perpignan, where in addition to his work in law he continued his political activities and was made president of the council of the city.

Fontanella was one of the leading Spanish jurists of his time. In his writings he avoided the ineffectuality of the traditional commentaries and tried to make the law a vital force. De pactis nuptialibus, sive capitulis matrimonialibus tractatus (2 vols., Barcelona 1612) is a systematic discussion of all the legal problems connected with matrimony and a very shrewd exegesis of the different points in marriage articles and the legal questions to which their stipulations may give rise. In it Catalonian laws and customs are compared with those of other countries, frequently in terms of their social and historical implications. In 1639 and 1645 he published the two volumes of Sacri regii senatus cathaloniae decisiones. His Testamentum illustratum, a study of testamentary succession as complete as his book on marriage articles, has unfortunately never been published.

The tendencies found in Fontanella's writings are representative of the Catalonian jurists of the seventeenth century. He manages, however, to avoid the narrow viewpoint which characterizes some of them and the exaggerated respect for the Roman law which marks others.

Antonio Royo Villanova

Consult: Pella y Forgas, J., "Juan Pedro Fontanella" in Real Academia de Jurisprudencia y Legislación, Jurisconsultos españoles, 3 vols. (Madrid 1911-14) vol. ii, p. 49-52, and Código civil de Cataluña, 4 vols. (Barcelona 1916-20) vol. i, p. 107-10.

FONTENELLE, BERNARD LE BOVIER DE (1657-1757), French writer and philosophe. The versatile Fontenelle wrote no masterpiece and his important ideas are scattered through numerous works: Dialogues des morts (Paris 1683, last enlarged ed. Amsterdam 1710); Digression sur les anciens et les modernes (published together with Poésies pastorales, Paris 1688), in which he defended the moderns in the great dispute over the relative merits of ancient and modern literature; Histoire des oracles (Paris 1686, rev. ed. The Hague 1728); De l'origine des fables (published in 1724 ed. of Entretiens); Entretiens sur la pluralité des mondes (Paris 1686, last enlarged ed. 1724), a pioneer work in sci-

entific popularization in which he chatted very pleasantly to the social élite about the Copernican system; a history of the Académie des Sciences, of which he was perpetual secretary for sixty years; and vivid and just Eloges of members of the academy (first collected ed. Paris 1708; final ed., 2 vols., 1744). He was the most intelligent and discerning representative of that French philosophic spirit which became increasingly prevalent from about 1680 to 1740. A freethinker, believing neither in a revealed Christian religion nor in current moral standards, he considered many so-called virtues to be no more than "prejudices." He found it tempting to believe in nothing at all except an intelligent egoism, distrustful of men and entirely wrapped up in the quest of exquisite pleasures. But as time went on Fontenelle became more and more estranged from the pure Epicureans of his day, because for him the best pleasures were those of the intellect. From his skepticism there thus emerged a great confidence in the progress of the human reason. He thought that there were few reasonable men and doubted if there would ever be many. These few, however, had caused the human mind to make essential progress in the past; and now there was opening up before that mind the boundless vista of the experimental sciences, which were to overthrow mystical credulity and the systems of abstract philosophers. So far did Fontenelle carry his confidence in reason and in the methods of experimental science that, like many of his contemporaries, he would have submitted art and poetry to their canons.

Daniel Mornet

Works: Fontenelle's complete works have been published in 11 vols. (Paris 1758-66); the 1825 edition (5 vols., Paris) contains a Notice historique by J. B. J. Champagnac.

Consult: Maigron, L., Fontenelle, l'homme, l'oeuvre, l'influence (Paris 1906); Mornet, D., La pensée française au XVIIIe siècle (Paris 1926) p. 27-34; Bury, J. B., Idea of Progress (London 1920) ch. v; Delvaille, J., Essai sur l'histoire de l'idée de progrès (Paris 1910) p. 210-23.

FOOD AND DRUG REGULATION. Records of government efforts to prevent food and drug adulteration go back to antiquity. Both Athens and Rome made provision against the adulteration of wine. With the growth of the mediaeval towns there was a gradual transfer of certain forms of food manufacturing from the home to the artisan's shop. As bread baking, milling, wine and beer making and slaughtering

became recognized trades the government began to regulate them. In the reign of Edward the Confessor brewers were punished for bad work, and during the sixteenth century many English towns employed ale tasters. Beginning in 1203 the Assize of Bread regulated the price of the loaf and gradually clauses controlling adulteration of bread and other products were added, until the later acts, finally abrogated in 1836, acquired some of the character of a general law.

In 1316 the London pepperers, or spicers, began to regulate the quality of their produce, and the drug and grocery trades, which were one until 1617, followed the same practise. The College of Physicians was authorized to supervise apothecaries in 1540 and in 1553 and published the first pharmacopoeia in 1613. From the early eighteenth century onward special legislation, primarily to protect the revenue, controlled such articles as tea, coffee, chicory, beer and wine.

In France food control statutes were early enacted. In Paris that of 1292 forbade the adulteration of beer and that of 1330 the mixing and misrepresenting of wines. In 1708 Paris had 200 public wine inspectors. In 1382 millers were forbidden to mix foreign cereals or legumes with wheat; in 1420 bakers were forbidden to grind wheat, in order to make adulteration more difficult to accomplish. In 1396 Paris forbade the coloring of butter or the mixing of old butter with new. Henry II proceeded against the adulteration of saffron and Philip IV against that of drugs, spices and related products. The Paris Conseil de Salubrité, established in 1802, and later other departmental and municipal councils examined and reported on the quality of products and began to acquire jurisdiction over foods and drugs.

In Germany records of regulation go back to the thirteenth century. In 1532 Charles v attempted some imperial regulation, but control was exercised almost wholly by local authorities, the towns or the guilds. The dukes of Saxony regulated druggists as early as 1607. Frederick 11 of Prussia appointed drug inspectors. In the seventeenth century commissions of physicians supervised apothecaries and published pharmacopoeias.

In no country does a general law seem to have been enacted before the second half of the nineteenth century. Such laws would have been futile in the main, for until the invention of the microscope about 1590 and the development of

analytical chemistry the means of detecting more than a very few kinds of adulteration did not exist.

In 1820 Frederick C. Accum inaugurated a period of muckraking in England with A Treatise on Adulteration of Food, and Culinary Poisons (London). There followed an anonymous brochure, Death in the Pot, and finally Hassall's Food and Its Adulterations (London 1855), embodying the investigations of the Analytical Sanitary Commission organized by Wakley, the editor of the London Lancet. As a result general regulatory laws were enacted in 1860 and 1872. In 1874 there was established in London the Society of Public Analysts, which set up standards of food quality and purity. The Sale of Food and Drugs Act of 1875 with the Amendment of 1879, the Margarine Act of 1887, the Sale of Food and Drugs Act of 1899, the Butter and Margarine Act of 1907 and the Sale of Food and Drugs Act of 1927 form the existing English law.

In France from 1884 onward general and special laws were enacted. In Germany widespread outbreaks of trichinosis resulting from measly pork aroused public interest. The imperial health bureau (now the Reichsgesundheitsamt) was founded in 1876 and a general food law passed in 1870; it has since been widened to control margarine, filled cheese, edible fats, butter, wine and saccharin. In 1900 a new Meat Inspection Act was passed. The administration of these laws is aided by special research laboratories supported by government bodies, chambers of agriculture and universities; in 1921 there were about 120 such institutions. Between 1874 and 1921 Sweden, Austria, Switzerland, Denmark, Italy, Japan and Russia passed laws controlling food and drug trades largely along lines laid down in the German and English regulations. The laws are administered generally by health departments of central and local governments. Within this same period Portugal, Rumania and Spain issued royal ordinances designed to cope with the problem, but neither these countries nor Russia provided proper administrative or scientific apparatus to detect or prevent frauds.

Agricultural chemists under the leadership of Samuel W. Johnson paved the way for state food legislation in the United States by exposing adulteration in the fertilizer industry and led in the fight for further laws to curb adulteration of meat, kerosene, milk, feedstuffs, foods and drugs, paints, insecticides and fungicides. As a

result numerous state and federal laws against adulteration came to be administered by departments of agriculture or by agricultural experiment stations and colleges, with which such chemists were early connected.

The city boards of health established between 1850 and 1875 advocated and secured legislation regulating the quality and sale of meat and market milk. As a result of conflicts between cities, milk dealers and dairy farmers dairy associations were formed which succeeded in having state laws controlling dairy products enacted. In some states a dairy commissioner still supervises dairy products. The first general food law was passed in Illinois in 1874. In 1878 a joint committee of the principal scientific societies concerned with public health matters drew up a model law for New York. In 1879 the National Board of Trade recognized by resolution the need for food and drug legislation.

About this time the success of oleomargarine in competing with butter induced the well organized dairymen to secure remedial legislation in a number of states. In 1881 food and drug laws were enacted in New York and New Jersey, and in the ensuing twenty-five years most states enacted food laws. In 1871 general food inspection was begun in the District of Columbia and in 1888 Congress enacted a food and drug law for the District to be administered by the Bureau of Internal Revenue. In 1898 the District health officer was put in charge. Beginning in 1906 many states which had been without regulation laws until that time passed legislation similar to the federal laws; other states brought their laws into harmony with the federal statute. Boards of health enforce the laws in sixteen states, boards of agriculture in eleven, independent commissions in fifteen and agricultural experiment stations in four. In a few states there is no active enforcement.

The first national food adulteration law, the Oleomargarine Act of 1886, since repeatedly amended, was enacted after a hard struggle. In the following year the Division of Chemistry of the United States Department of Agriculture, then under the direction of Harvey W. Wiley, began issuing a bulletin on "Foods and Food Adulterants" (no. 13, 9 pts., 1887–1902). This and later supplements furnished ammunition in the struggle for legislation. In 1889 the Department of Agriculture was given its first appropriation to "extend and continue the investigation of the adulteration of food, drugs and liquors."

A United States Supreme Court decision of 1887 denied to the states the right to interfere with the shipment of original packages into the states and thus materially handicapped the enforcement of state laws. As early as 1879 European countries began to restrict the importation of meat animals from the United States because of pleuropneumonia and trichinosis and by 1888 eleven countries had prohibited the importation of pork products from the United States. In 1890 Congress passed a very general law relating to exported and imported foods and drugs. The administration of this law was placed in the hands of the secretary of agriculture, but no special provision was made for its enforcement.

In 1891 a not very effective meat inspection law was enacted. From 1890 to 1893 there was a bitter and unsuccessful fight in Congress over a bill analogous to the margarine law to curb the very prevalent adulteration of lard. In 1895 filled cheese was so heavily taxed that it was practically driven off the market, in 1897 the importation of tea was regulated and in 1898 mixed flour was heavily taxed.

In 1902 the Division of Chemistry (called the Bureau of Chemistry after 1901) of the Department of Agriculture was authorized in an appropriation bill to deny entry to adulterated or misbranded importations of food. Even wider powers were conferred upon the secretary of agriculture in the appropriation act for the fiscal year 1904. In 1902 Congress authorized the secretary of agriculture "to investigate the character of proposed food preservatives and coloring matters, and other substances added to foods, to determine their relation to digestion and to health, and to establish the principles which should guide their use." Under this authorization the so-called poison squad formed by Harvey W. Wiley investigated boric acid and borax, salicylic acid and its salts, benzoic acid and its salts, sulphur dioxide and sulphites, formaldehyde, copper sulphate and saltpeter.

In an appropriation act for 1903 the secretary of agriculture was authorized to establish standards for food products, but no means were provided to enforce such standards.

Most of the federal laws enacted up to this time had an economic motive. They either protected the farmer from competition or safeguarded the export trade in foodstuffs or both. Some dealt with imports and so had a protective or retaliatory effect as well. Domestic interests bitterly opposed federal control over the domestic food and drugs trades, and after the present

tation of the first bill to Congress in 1879 there ensued a struggle lasting more than twenty-five years. Special interests opposed federal legislation and many members of Congress and learned jurists questioned the constitutional right of Congress to legislate on the subject as well as the wisdom and the constitutionality of using the taxing power for such purposes. The outstanding leader in the fight for federal legislation was Harvey W. Wiley, chief of the Bureau of Chemistry. The "embalmed beef" scandal of the Spanish-American War and the muckraking that followed Upton Sinclair's The Jungle (New York 1906), which dealt with meat packing, and Samuel Hopkins Adams' articles on patent medicines in Collier's Weekly in 1905 and 1906 did much to assist his efforts. In 1906 the Food and Drugs Act and the Meat Inspection Act were passed, dealing only with the interstate and foreign commerce in foods and drugs. The Food and Drugs Act makes a misdemeanor not of adulterating or misbranding but only of the shipment or offering for shipment in interstate or foreign commerce of adulterated or misbranded goods. Products manufactured and consumed within the confines of a single state are subject solely to the control of state laws. The Food and Drugs Act has been amended to require that the outside of a package bear a statement as to the quantity of food within and to prevent the placing of misleading curative claims on the labels of medicines, but it does not cover statements made in advertising matter not accompanying the goods.

The early history of the enforcement of the law was a stormy one. The Bureau of Chemistry, charged with the collection of the evidence of violation of the law, came into conflict with the secretary of agriculture, with some Department of Justice officials and finally with Presidents Roosevelt and Taft.

The lack of harmony in Washington was reflected in a lack of uniformity in local food and drug control in the states, in part because of differences between laws but largely also because of differences in interpretation and administration. One of the principal sources of lack of uniformity was and to some extent still is the lack of legally enacted standards and definitions, which under the federal law exist for drugs only, as set down in the *United States Pharmacopoeia* and the *National Formulary*. As the result of a conference in 1913 of officials enforcing state food and drug law the secretary of agriculture established a Joint Committee on

Definitions and Standards, representing the National Association of Food, Drug, and Dairy Commissioners, the Association of Official Agricultural Chemists and the United States Department of Agriculture. The secretary of agriculture publishes definitions and standards for food or drug products set by this committee. Although such standards do not have the force of law, in practise they have great weight with the trade, local enforcing officials and the courts and have helped to bring about a greater degree of uniformity in the control of food and drug products.

The enactment of food and drug standards by law has often been advocated both in this country and abroad. While such standards would make enforcement simpler, less expensive and more efficient, the existence of rigid standards difficult to change would be likely to hamper progress in the food industries and to render difficult the introduction even of meritorious new articles or new methods of manufacture. This might be avoided by delegating the authority to promulgate and to alter definitions and standards to some responsible government administrative agency.

The history of legislation in control of drugs differs from that dealing with food because of the general regulation of pharmacy as a profession. The practise of pharmacy laws passed by the states early in the nineteenth century helped maintain the purity of medicines. Furthermore, a large proportion of crude drugs has always been imported, and proposals to supervise importations met little opposition. The New York College of Pharmacy, soon joined by the Philadelphia College of Pharmacy, urged legislation in 1831, and Congress responded in 1848 with an Act to Prevent the Importation of Adulterated and Spurious Drugs. The administration of the law became unsatisfactory after a few years, since drug examiners were usually appointed for political reasons rather than for

In 1887 Congress passed an act to prevent the importation of opium, and from 1895 to 1906 many states and territories paid special attention to opium and other habit forming drugs in their general food and drug legislation. In 1907 North Dakota required the presence of habit forming drugs to be declared upon the labels of medicines, establishing a widely followed precedent which has practically driven narcotics out of patent medicines. Such legislation failed to control the opium evil, in which the United States

had become especially interested with the acquisition of the Philippine Islands; and by the act of March 4, 1909, amended in 1914, the United States prohibited the importation and use of opium for other than medicinal purposes. The Harrison Narcotic Act, applying to both opium and cocaine, was passed December 17, 1914, and amended May 26, 1922. It is administered by the Bureau of Internal Revenue, which through the imposition of a small tax requires all who handle or use these drugs to be registered and to keep records in order that illegitimate trade and uses may be punished. In addition, international conventions have been adopted in an effort to restrict international trade in opium and its derivatives.

While the Harrison Narcotic Act, the Meat Inspection Act and the Food and Drugs Act have cured or restricted many very great evils, they have grave defects apart from errors of administration. So far as concerns the Food and Drugs Act the most serious are the lack of authority to inspect warehouses, of any restriction whatsoever upon the use of the most virulent poisons in drugs or of jurisdiction over fraudulent statements other than those in or upon the packages of foods or drugs. Furthermore, the common practises of adulterating such commodities as textiles, leather goods, cosmetics and articles of common household use, sometimes with dangerous substances, is altogether uncontrolled.

CARL L. ALSBERG

See: Adulteration; Consumer Protection; Public Health; Inspection; Food Industries; Meat Packing and Slaughtering; Medical Materials Industries; Opium Problem.

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Drug and Insecticide Administration, Institute of Government Research, Service Monograph, no. 50 (Baltimore 1928).

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FOOD GRAINS. See Grains.

FOOD INDUSTRIES

Introduction
BAKING INDUSTRY
Europe
United States
BEVERAGE INDUSTRYROBERT W. DUNN
CONFECTIONERY INDUSTRYROBERT W. DUNN
FOOD DISTRIBUTION
Grocery Trade
Perishable Products, United States
Food Distribution in Western Europe INEZ POLLAK
Food Distribution in Russia

Introduction. Food industries are a product of urban civilizations. Primitive peoples, whether absorbed in the struggle for mere existence or relying on nature's bounty, lead too immediate a life to develop what could strictly be called industries of any kind. But when at certain favorable sites the city evolved from the village, growing wealthy through trade or through military strength, the community ceased to be self-supporting. Foodstuffs had to be secured from the surpluses of surrounding territories and the maintenance of the food supply became a prime object of government. Dealers in grain, oil, wines, figs, spices and dried fish appeared; they organized, usually under the supervision of the authorities, the earliest food industries.

With the disintegration of the Roman Empire the channels of economic life in the western world were blocked and cities dwindled in size and power. The agrarian feudal system, torn by constant strife, was forced to rely on the peddler, the fair and the market for all but the bare necessities of its food supply. Trade in spices and a few luxury products never ceased, but the preparation and distribution of most foods were entirely local matters. Gradually, however, as order was reestablished the towns revived and their skilled freemen formed themselves into guilds of bakers, vintners, pepperers, fishmongerers and the like, which acquired monopolies of the production and sale of certain foodstuffs.

The invention and use of power machinery and the industrialization it entailed, by enabling that fraction of the population which is engaged in agriculture to support large city populations, have vastly raised the standard of living of the community as a whole and have been both the cause and the effect of the development of modern food industries. In the newly settled countries this development has been more striking than in the old. European peasants have since the Middle Ages lived, for protection and mutual aid, in communal groups, which made possible a certain degree of specialization of function and the provision of common facilities, such as mills and bakeries supervised and regulated by

the authorities. But the settlers of the American continent were of necessity self-sufficient. Each household raised and prepared its own food and its own textiles. Today as a result of modern industrial processes the city dweller knows of milk only that it comes from a bottle, of bread that it is wrapped in cellophane, of vegetables that they come regularly to market. But to provide him with his fruit and cereal for breakfast, his coffee with cream and sugar, his bacon and eggs, his buttered toast and jam, great industries have been developed during the last hundred years to gather these foodstuffs from the producer and transport them to the manufacturer, to process them and to distribute them through wholesaler and retailer to the ultimate consumer.

Especially in the United States but also in many European countries in the last two decades changes in technique and scale of operation have had such far reaching results that the situation in 1931 differs in kind rather than in degree from that of the pre-war period. At each stage the individual enterprise is being superseded by the heavily capitalized corporate or cooperative organization. The producers' society now sells fruit, dairy products, milk, livestock and wheat directly to the chain store or to the large manufacturer. Nationally advertised brands are proof of the fact that the whole United States forms essentially one market for the less perishable foodstuffs. The market for staples such as cereals, canned goods, chilled meat and fruit and even cheese is world wide. The consumer alone lags behind in successful joint action to promote his interests.

Nevertheless, the changing demands of the consumer have fundamentally modified the manufacture and distribution of foods. The average diet today includes more milk and dairy products, more sugar, more vegetables, more fruits generally, but fewer apples and fewer breadstuffs than thirty years ago. An estimated decline of 10 percent in the per capita calorie value of the food consumed has been attributed to the lessening of physical labor in the machine age; to the increasing proportion of old people in the population; and more particularly to a greater knowledge of food values, which has led to care in the selection of the diet, partly in the interest of fashion, partly of hygiene. The growing demand for ready to serve foods may be attributed more directly to the effect of industrialization and mechanization on community life. The smaller families, which make possible women's activities outside the home; the shift

from houses to apartments with their small kitchens and decreased storage space; and the increased renting and frequent moving, which deter the installation of cooking equipment, have combined to revolutionize the types of food purchased by the housewife in the large and even the medium sized American city. Bread, breakfast foods, canned goods, soft drinks, ice cream and confectionery are now staples. The trend away from home cooking has gone even further: according to the census of distribution 136,000 restaurants and other eating places sold in 1929 food valued at \$2,100,000,000, an amount almost one fifth as large as the net sales of \$11,-300,000,000 made by the 408,000 retail food stores. Combined sales of restaurants and food stores accounted for more than a quarter of the total retail sales of the country.

Great as the changes have been, the problem of the efficient distribution of food is by no means solved. The wastes of overproduction and of spoilage and the distributive costs resulting from unnecessary handling, too much competition and excessive advertising are enormous. The problem of price control looms more insistently with every increase in the size and power of the corporations controlling the food industries.

The importance of reducing costs and stimulating consumption is obvious in a world where large parts of the population suffer from periodic famine and chronic undernourishment. The Chinese, who live on a daily handful of rice or pulse, cannot support large scale food industries. In certain parts of Europe the lower standard of living limits trade in cereals, dairy products and meat intended for domestic consumption. And even in the United States there are wide variations in effective demand for foods. Consumption of meat, dairy products, white flour and vegetables is greater in the north and west than in the mill villages and mining communities of the south, where compulsory trading at high priced company stores often cuts far into the worker's low purchasing power.

Governments have from the earliest times been forced by the narrow margin of subsistence to take action to preserve and promote the quantity, quality and price of essential foods. In Europe prices of important commodities have been determined by the authorities and the hours and conditions of work in food processing establishments regulated. In the United States emphasis has been placed on inspection and regulation of quality and on the prevention of monopoly control. The tariff has also been used to influence

prices—generally, as in Germany today and less effectively in the United States, to protect the farmer; few countries have followed the English in rejecting tariffs on food. Yet even Great Britain has levied the customary internal revenue duties, sometimes with startling results, on such staples as tea, salt and beverages, the consumption of which, it was thought, would scarcely be affected.

In Europe the consumers themselves have shown a more active interest in the question of food distribution than have the more mobile populations of the United States; and by the organization of consumers' cooperative societies they have done much toward its rationalization. The English Cooperative Wholesale Society, for instance, owns a tea plantation in India, dairy and fruit farms in Great Britain and is the largest flour milling operator in the country. In Germany, the Scandinavian countries, Switzerland and Czechoslovakia the consumers' societies are especially significant; only in southern Europe have they failed to make much headway. Soviet Russia has gone farthest, in theory at least, in fitting the food industries into a planned economy and in encouraging the consumers' cooperative society, an organic part of the state, to undertake the production as well as the distribution of food.

With increasing integration lines of demarcation between the various food industries are becoming less clearly drawn; large distributors of food themselves engage in its processing; meat packers are drawn into the production of staple grocery products. It has therefore been somewhat difficult to separate sharply the discussion of food industries from other topics. In general this article has been restricted to a treatment of those still distinct industries which involve only the processing of food and to a survey of the problems of food distribution. Food supply and the production of certain foods as well as those industries, such as meat packing and slaughtering, canning and the dairy industry, in which the earlier stages of production form an integral part of the industry, are treated separately.

INEZ POLLAK

Baking Industry, Europe. The early records of every known civilization make it clear that from time immemorial peoples living in close settlements have been served by members of the bakers' craft. The small unleavened cakes which primitive peoples baked before a fire on flat

stones had by the time civilization had progressed far enough to leave written records been largely superseded by the more satisfactory fermented product. All the cereal grains and many varieties of nuts, vegetables and fibers have been used as breadstuffs at one time or another. Wheat, however, has always been the staple grain of the Mediterranean peoples, and as the northern Europeans became acquainted with its use they too tended to adopt it as a basic food. While rye is still the major cereal food for large portions of the human race, the use of wheat has grown steadily even in areas where it cannot be raised in sufficient quantities to satisfy the demand.

Early in the history of Egypt, Greece and Rome as well as of China and the rest of the Orient there existed a thriving bakers' trade, which because of its fundamental relation to the food supply was invariably under close state supervision. Although in these early communities the baker often operated on a purely commercial basis he sometimes performed also a communal or religious service. Bakers' guilds were of importance in Rome and also in Hellenistic Egypt and the Byzantine Empire.

In mediaeval Europe baking and milling were feudal rights accruing to the lord of the manor and were among his most lucrative forms of taxation. In order to enforce his right and since moreover he alone owned the rather expensive equipment necessary to perform these operations he compelled all baking to be done in a communal oven. Where the feudal authority rested in a monastery or in some religious dignitary, either of these exercised the same privilege. It is probable that the more isolated rural communities always did their own baking.

In the towns the monopolistic character of the baking industry closely resembled that of other mediaeval industries. The bakers' guilds attained a high rank among the industrial guilds. In general their position was protected by stringent apprenticeship requirements restricting entrance to the trade. In return for a monopolistic relation to their market they were subjected to rigorous supervision designed to restrict the price of bread and to protect the food supply by definite provisions as to the exact quantity, quality and type of ingredients to be used in the composition of bakery goods. At a somewhat later period more general codes for the conduct of the baking industry became common. The English Assize of Bread of the year 1266 affords an example of this early type of restriction. The enforcement of the law was left to the local authorities, who at set intervals drew up tables of the required weight of a loaf of bread of a given price and quality as determined by the existing price of wheat plus an allowance for expenses of production and a small profit. The assize was still in effect in parts of England in 1836, when it was finally repealed and bakers were required to sell their bread by weight.

In other countries restrictions surviving from the Middle Ages still hamper the freedom of the baker. French bakers in addition to being subject to the ancient taxe du pain are forced to sell their bread at a price set by the local authorities; and although the law of 1924 gives the industry more freedom, they claim that the price is often set with a view to political expediency regardless of bakery costs. Bread prices in Germany are also fixed by governmental authority and the condition of the trade is strictly controlled by the government acting in conjunction with a very effective union organization. In certain countries the vital importance of bread has caused the authorities to regulate the industry more drastically than ever before in peace time. Since 1928 Italian bread production has been subject to complete control by the state. In Russia bread can be sold only to holders of ration cards.

The European baking industry emerged from the Middle Ages with a well Jefined market. Since the average European household was not equipped for baking, the consumer was accustomed to supply his bakery needs at the bakeshop. This situation affords an interesting contrast with that in the United States, where the isolation of the pioneer household with its ingrained custom of home baking definitely retarded the development of the commercial bakery. At the present time the commercial baker produces practically all the bread consumed in most countries of Europe. In contrast with the prevalent over-the-counter methods of retailing in the United States, in Europe over 80 percent of all bread is delivered at the door by the baker's

The greater part of European baking is still done on a very small scale by craftsmen producing a varied line of baked goods and catering to the demands of particular clienteles. Little or no machinery finds its way into such shops and, while many individual bakers have become consummate artists in some particular line, standardization of product as it is known in the United States has been very slow to take root among European populations. The typical European baker today uses inherited rule of thumb

procedures which do not differ fundamentally from those described in the inscriptions and literature of ancient civilizations. There is, however, considerable interest in baking techniques; in England, Scotland, Germany and France the industry supports trade schools with expert staffs engaged in both training and experimental work.

The bread industry as a sheltered trade safe from foreign competition has paid relatively high wages. In Germany the average wage for skilled workers as established by collective agreements increased from RM 28.84 in 1913 to RM 46.18 in 1928 and made a further advance in 1930 to RM 50.69. The wages for apprentices rose from RM 23.45 in 1913 to RM 39.89 in 1928 and RM 43.58 in 1930. In England in 1924 men, who form 85 percent of bakery employees, earned 54/1 for a 48-hour week, women 24/11. Trade union organization is fairly strong when allowance is made for the large portion of the industry still conducted on a small scale, often by the proprietor and his family. In 1929 Germany reported 23,400 bakers in the open union, 2300 in the Christian Socialist union and 32,840 sons of master bakers in the Meisterfreundliche "Bund der Bäcker- und Konditoreigesellen."

Night work has been characteristic of the baking industry. The nature of the production process and the time element involved have made it expedient for the baker to work at night if he is to supply his clientele with fresh bread at an early morning hour. European governments have universally prohibited night work on the ground that it is unhygienic and deleterious to the workers' health; but in many cases the bakers themselves strenuously protest against such regulations and are often willing to pay the penalty involved by violation rather than conform.

In many parts of Europe cooperative societies have been conducting bakeries for many years. In England these bakeries form one of the largest departments of the cooperative society and have attained a size not surpassed by the non-cooperative commercial establishment. In France the cooperative has been smaller in character and has been largely a place where arrangements are made for farmers to exchange wheat for bakery products. In Germany 30 percent of the consumers' cooperatives operate bakeries.

Certain advantages accrued to the baking industry as a result of the World War. The problem of baking the immense amounts of bread required by the armies hastened the introduction of more modern methods of production, and

government operated bakeries equipped in the most modern manner were erected in many places to supply this demand. Chemists devoted their attention to problems of fermentation and the best combination of materials. Production wastes were investigated and cut down. At the end of the war the industry found itself with a body of authentic information which was based on scientific knowledge rather than the rule of thumb procedures of centuries. Although the relaxation of government supervision in the past decade has allowed most of the bakers to fall back into their old habits, a modicum of improvement remains. Several mechanized bakeries have sprung up in northern England, Scotland and Ireland. Austria has one of the largest and most perfect mechanical bakeries in the world in the Hammer Plant at Vienna. Soviet Russia has built a mechanized plant in Moscow which is big enough to feed one third of the population of that city. Mussolini has decreed the remodeling of all bakeries so that bread can be produced by the most sanitary and efficient methods. He proposes that in five years all Italian bakeries located in cities of 20,000 inhabitants shall be equipped in the most modern manner.

The European baking industry will no doubt gradually develop more large scale units, particularly if the apparent trend toward mechanization continues; but for the present such bakeries are not making great inroads upon the small established bakeries. There are two essential reasons for mechanization: conservation of raw materials and conservation of labor. It has never been demonstrated that a mechanized bakery unit uses raw materials more effectively, although it does of course conserve labor. Since, however, labor is plentiful in Europe and since there is no reason to believe that the mechanized product is superior to that of the craftsman, it is probable that in the near future there will be relatively few changes in the essential character of the baking industry.

URSULA BATCHELDER STONE

Baking Industry. United States. In America the growth of the baking industry has accompanied the urbanization and industrialization of the country. The isolated farmer's wife baked her own bread, and until recently many a city housewife followed her example. But beginning with the discoveries of Pasteur concerning yeast and its cultivation science and invention have so perfected automatic mixing, baking and wrap-

ping machinery as well as standardized materials that bakers' bread is often superior to the homemade product. It may generally be had so cheaply that where readily available it has practically eliminated domestic baking of plain breads. While it was estimated that in 1901 only one third of the urban bread consumption was supplied by the baker, in 1918 the baker's share had risen to two thirds, and in 1928 according to a study made of bread purchasing habits in fifteen Pennsylvania towns fully seven eighths was purchased. Per capita consumption according to the Pennsylvania survey averaged 2.53 loaves a week, ranging from 3.05 loaves per capita in Russian households to 2.32 loaves in American. Lower American consumption is perhaps an indication that as standards of living increase bread tends to form a smaller part of the food supply.

In spite of the increasing diversity of the average diet bread remains an important food. Commercial baking ranked tenth among the fifteen billion-dollar industries in 1927, and was exceeded among the food industries only by meat packing and slaughtering. Factory production of bakery products in 1929 was valued at \$1,510,-000,000, of which approximately 55 percent was bread, 26 percent cake and pastries and 19 percent biscuits and crackers. Progress in the techniques of baking has served both as cause and effect of the expansion of the baking industry and has made possible an increase in the scale of production. The modern factory is superseding the cellar bakery in the making of bread as well as of crackers. As in other industries the growth in the size of the production unit has been followed by the grouping of units under central control. Of the nearly 17,000 bakeries in operation in 1925, 278, or 1.6 percent, operated by fifty-seven companies, produced more than 30 percent of the estimated output of commercial bread.

The first consolidations of bread bakeries occurred early in the nineteenth century and were local in character, uniting actual or potential competitors. After 1910 combinations of plants located in different cities began to take form and in 1921 reconsolidation of bakery organizations was begun. By 1925 there were thirteen companies operating 222 plants. Early in 1926 the Ward Food Products Corporation was organized; its apparent purpose was to hold the stock of the three corporations in which W. B. Ward was interested: the Ward Baking Corporation operating eighteen bakeries, the General Baking Corporation operation operating forty-two and the Conti-

nental Baking Corporation operating, in the United States, ninety-one. These three corporations had been affiliated at one time or another through a community of stock ownership and of organizing personnel and produced nearly one fifth of the commercial bread of the country as well as a considerable proportion of the cake. Shortly after the organization of the Ward Food Products Corporation the Department of Justice filed a bill in equity against the several Ward corporations and against various individuals alleging violations of the federal antitrust acts and asking for an injunction to prevent further violations. The court entered a consent decree dissolving the Ward Food Products Corporation and restraining the several defendants in respect to their future interstate activities. Notwithstanding the activity of the government the merging of bakeries has continued and has sometimes proved very profitable. In 1930 the common stock of one, the General Baking Company, expanded by stock dividends, was earning the equivalent of \$146.97 per original share valued in 1916 at \$2. Consolidation of baking and other general food companies is also taking place. In 1931 after a bitter proxy fight control of the Ward Baking Corporation passed to interests connected with the Gold Dust Corporation and the Standard Milling Company.

Classified by method of distribution bread bakeries fall into two principal groups: the wholesale bakery system and the retail. The Ward companies are the leading examples of the former, the chain stores of the latter. According to the preliminary census of 1929 approximately 82 percent of the 16,204 bakeries reporting did an exclusive or partial counter business; this group, however, apparently produced less than 50 percent of the volume. The study of purchasing habits in the fifteen Pennsylvania towns referred to above indicated that grocery and delicatessen stores selling their own or wholesalers' brands supplied 58.9 percent of the bread consumed, retail bakeshops 16.4 percent and bakers' wagons 28.1 percent.

Average bread costs of wholesale bakeries for the period from 1923 to 1925 as shown by the Federal Trade Commission were \$.067 per pound, of which \$.023 was for flour, \$.091 for other ingredients, \$.017 for manufacturing, \$.016 for selling and delivery and \$.002 for general and administrative expense. Labor costs for three large companies were only \$.006 in 1930. Average profits were \$.007. An average retail grocer's margin of \$.012 gave a consumer's

price through the wholesale channel of \$.086. This included credit and delivery on perhaps 6c percent of the bread. The consumer's price on bakery bread delivered from house to house was slightly more (\$.089) and included full delivery and large credit services. The consumer's price on chain store bread averaged \$.06 and included no delivery or credit. Generally speaking, ingredients of poorer quality are used in chain store bread and selling and advertising costs appear to be lower. On the other hand, chain stores frequently sell bread as a "leader" at little or no profit, while some bakeries appear to charge a part of the extra cost of their fancy products against their plain staple loaf. The advantage of lower costs claimed for the bakery merger has not been proved by cost studies, in which comparison of the costs of plants of single plant companies with those of multiple plant companies, size for size, has disclosed little difference, slightly lower administrative costs being offset by higher expense for materials. The case is better for large scale plant production, for although there are marked exceptions, large plants usually have lower costs than small.

Bread prices follow in a general way those of flour but with considerable lag and with less frequent and extreme changes. Where differences in costs are slight, the greater stability of bread prices in some cities than in others indicates a lessening of competition. To what extent the merger is a contributing factor in this has not been demonstrated. The three companies formerly dominated by Ward are, however, said to control go percent of the wholesale market in New York and other large eastern cities. Trade associations, national, district and local, are often instrumental in reducing competition. Local price agreements have been found to be operative in some instances. The fact that the bread trade is usually intrastate makes action by the federal government impracticable even where monopoly conditions prevail. Bread prices in the United States are not only higher than Canadian prices and twice as high as British prices, although British bread is made from imported wheat, but they show less tendency to decline during depression. The American retail price in December, 1930, averaged \$.085 as compared with \$.00 for the yearly average in 1929, while the corresponding figures for Canada were \$.066 and \$.078 and for Great Britain \$.038 and \$.044

Cooperative bakers have had comparatively small success in the United States. Out of 656 distributive societies studied in 1930, including over a third of the consumers' cooperatives in the United States, only eight were bakeries. In addition twelve general societies operated bakeries, as did one wholesale society. The eight bakeries reported a net gain of 1.8 percent on sales totaling almost \$1,000,000.

The manufacture of biscuits and crackers constitutes a distinct although minor branch of the baking industry and is characterized by a relatively small number of plants of large but practically stationary output. The value of the product of the 176 plants in the United States in 1919 averaged \$1,159,000, of the 220 plants in 1927 \$1,132,000 and of the 261 plants in 1929 \$1,-010,000. Large scale production is made possible by the low perishability of the product and by the simple processes of manufacture, which favor the use of automatic machinery and high division of labor. Because of the large capital outlay required plants are usually owned by corporations. The leading cracker manufacturer, the National Biscuit Company, operated in 1921 twenty-eight cracker plants having 29.9 percent of the output of this branch of the industry. In 1928, besides increasing its cracker bakeries to forty-one, producing about half of the total in the United States, this company was operating eighteen bread and cake bakeries and a milling company which milled flour exclusively for the company bakeries. Not only has it acquired many of its bakeries through merger but it has recently added the Shredded Wheat Company and Wheatsworth, Inc., to its holdings. Its policies have been so successful that since 1922 it has been able to split its stock seventeen and one half for one.

The nineteenth century bakery was generally small. Much of the labor was performed by the owner and employed labor was never strongly organized. Hours were long, frequently running to 120 per week, and night work was the rule. Wages for the skilled baker rarely exceeded \$2.50 per day. The growth of the bakery unit which created an increasing proportion of wage workers was followed by more effective unionization. The Bakery and Confectionery Workers' International Union with 20,000 members, including workers in ice cream and cracker establishments, has locals in many cities where there are considerable numbers of bakery employees. The larger bakery plants have, however, proved harder to organize than medium sized plants. The great majority of the 200,000 workers in bread and biscuit establishments are still unorganized.

Partly as a result of aggressive organization activities the nominal yearly wages of bakers have more than doubled since 1909 and hours have been reduced 20 percent. The forty-eight hour week with one day off is becoming common. Night work is gradually being eliminated by agreement and in the case of women by state legislation. The percentage of child wage earners is much smaller than formerly; on the other hand, women are increasing in number, comprising over one fourth of all the wage earners in the industry in 1919. Union agreements provide for equal wages for equal work as between men and women and otherwise safeguard the working conditions of women. The yearly income of all wage earners, evoluding those in the biscuit and cracker industry, averaged \$1450 in 1929. Hourly earning, however, as of January, 1931, in nine large cities showed great variation, ranging from \$.93 in New York and \$.82 in Chicago to \$.73 in Boston and \$.56 in New Orleans. A study of wages in Cincinnati in 1925, where 75 percent of the workers are organized and 40 percent are on night shift, indicated that women's modal earnings averaged from \$12 to \$15 a week while the men averaged about \$30. In the cracker industry, where less skill is required than in the bread and cake industry, the number of women workers is relatively large and wages are consequently low. In 1929 annual income averaged only \$1010 for all wage earners.

With a view to safeguarding the cleanliness and wholesomeness of the product two thirds of the states have enacted legislation regulating the conditions of employment in bakeries and other food producing and distributing establishments. This legislation sometimes combines ideas of employee welfare with protection of the public health. Since 1917 the establishment of a tenhour limit for men in certain trades, which was held unconstitutional in 1905 in the case of Lockner v. New York (198 U. S. 45), has been recognized as legitimate. New Jersey has such a law today. Many states have enacted laws requiring bread to be wrapped, regulating weights of loaves and prohibiting the return of stale bread to the bakery. Both federal and state governments have, under the authority of pure food acts, adopted standards of quality and purity of bakery products.

G. A. STEPHENS

BEVERAGE INDUSTRY. Mankind has made use of a great variety of beverages in the course of the centuries. Water, the simplest, is still the

most widespread and in bottled form it is the basis of a minor industry for regions where the local water supply is impure. Alcoholic beverages are among the oldest of all drinks (see Liquor Industry; Wine); of more recent use, especially in Europe, are tea and coffee (see Plantation Wares).

Most recently developed are the carbonated beverages, the manufacture of which has grown to striking proportions in the United States in recent years. Mechanically carbonated or aërated waters were first manufactured in Geneva by Nicolas Paul in 1790. In the United States they were first produced by a Philadelphia chemist, who in 1807 used the process of artificially charging water with carbon dioxide, which had been discovered by Joseph Priestley in 1772. The soft drink became the popular substitute for the spring waters which had long been used for their medical properties by wealthy Europeans.

Since the passing of the Volstead Act the term beverage industry as used by the United States census includes only the manufacture of what are popularly known as soft drinks, carbonated beverages (soda, pop, ginger ales and the like), cereal beverages, fruit juices and mineral waters. This article will be confined to a discussion of such beverages. In 1929 approximately 10,000 concerns in the United States were engaged in manufacturing and bottling these beverages; in 5047 of these establishments the census in 1929 reported some 28,000 wage earners engaged in the manufacturing processes.

The prohibition law in the United States has contributed considerably to the demand for nonalcoholic drinks. Sales of one national brand of root beer increased fourfold during the first ten years of prohibition, and the market for ginger ales and other mixers has widened enormously. The near beer industry has disappointed the hopes raised by its first six months of popularity. Real beer, whether imported or diverted, has competed all too successfully with the legal article. The total output of \(\frac{1}{2} \) percent beer in 1927 amounted to only 7 percent of the beer production of 1914. In 1926 the Enforcement Bureau established the Brewers' Unit, with which the legitimate brewers cooperate in detecting offenders; but, although this has improved the situation to a certain extent, the conversion of the old breweries has been a difficult and often disastrous process. In 1930 only about 200 breweries in the United States were engaged in the manufacture of substitute beverages as against 667 in 1921.

The largest division of the beverage industry accounting in 1929 for about 80 percent of the value of the total product, manufactures carbonated beverages. These are made of water, sweetening, fruit juices, fruit acids or root flavors and coloring ingredients, into which carbon dioxide gas is forced under pressure. Of the 7500 bottling plants in this field only about half are large enough to be included in the census figures. Output in the United States increased from 6,-000,000,000 half pint bottles in 1916 to 12,500,-000,000 in 1930, indicating an average per capita consumption in 1930 of 110 half pint bottles without allowing for exports. Producers and bottlers of these carbonated drinks claim to employ more than 120,000 persons, including salesmen, delivery men and salaried employees, or an average of about sixteen to a plant. Workers engaged in manufacturing operations number not more than 25 percent of those employed by the average firm, because of the unusually large sales and distribution force.

The introduction of modern automatic machinery has revolutionized beverage production. Until 1914 hand processes were still nearly universal. But by 1919 specialized automatic machinery had been installed which mechanized almost all operations from the mixing of ingredients to the filling and corking of bottles. Automatic conveyors are used extensively, especially in the larger plants. Where the best foot power machines previously produced forty to fifty cases a day, the present day machines will produce 600 to 2000 cases; and new machines with faster speeds are being developed each year to wash, sterilize, syrup, fill, crown and label bottles. Automatic labeling machines, for example, work at the rate of 120 bottles a minute; large bottle washing machines both cleanse and sterilize as many as 6000 a minute. A typical crowning machine has a capacity of about 130 a minute.

Large scale production and the growth of companies doing business on a national scale have been greatly facilitated by scientific discoveries, such as new methods of refrigeration, and crystallization and electrical pasteurization of fruit juices. Refrigeration has made it possible to concentrate and freeze certain fruit juices for storage and shipping without impairing their flavor or quality. The growth of motor truck transportation has stimulated the development of companies serving a much wider territory than formerly. Some 28,000 motor trucks are used in the United States by the beverage bottling industry.

With the exception, however, of cereal beverages, some fruit juices and ginger ales made by large national distributors most beverages are still made from flavors, syrups or concentrates and bottled at plants serving a local territory in order to avoid the relatively great expense involved in shipping the product. In the case of nationally advertised specialty drinks it is customary for the proprietors to manufacture the syrup or flavor, which is then sold to individual bottlers who are given a franchise for a definite distribution territory. The Coca-Cola Company, for example, has some 1250 bottlers and 2200 jobbers and sells the ultimate product through more than 120,000 soda fountain distributors and 800,000 bottle retailers. It distributes its syrup in some seventy-six countries, having its own bottling plants in some twenty-seven foreign countries. The company spends more than \$5,000,000 a year in advertising its product. The smaller local manufacturer of the typical soft drink who has no franchise from such a big national advertiser makes and markets his own product, although he often buys his syrups and other ingredients from companies specializing in these lines. He is assisted in his sales efforts by the advertising and publicity prepared by the American Bottlers of Carbonated Beverages, the national trade association of the industry. This advertising has increased sales not only in the summer but also in the colder months of the

New developments in bottling machinery have not only made beverage manufacturing much more profitable to the bottlers but have at the same time reduced wage costs through the introduction of what the employers called unskilled and cheaper labor. With the exception of a few technical men, brewers and chemists, the labor now used is unskilled. This is reflected in the wages of unorganized workers in 1929, averaging from \$20 to \$25 a week depending on local conditions. Labor cost is the smallest item in factory cost; in a group of plants of various sizes examined by a national trade association labor costs averaged about 17 percent of total factory costs. Low wages are made still more inadequate by seasonal unemployment; many of the smaller plants operate with only skeleton forces during the fall and winter, while others shut down entirely when sales drop off. The low wage scale of the industry is in part due also to the fact that practically none of the employees are organized. The brewers' union, which before prohibition had a membership of 100,000, now claims about 15,000 members, some 13,000 of whom are employed by cereal and carbonated beverage concerns. These workers still have wage rates substantially higher than those of unorganized workers. But even where this union has collective bargaining agreements with employers, as in New Orleans, typical workers such as crowners, fillers and machine men were working in 1931 for a rate of only \$21.50 for forty-eight hours. Others in bottling departments in other cities worked for \$20 in 1929, while in Philadelphia union soft drink bottlers were reported to be working for a rate of \$31 a week.

Although labor has been poorly paid, the companies, especially those producing nationally advertised products, have been making huge profits. One concern, the Canada Dry Ginger Ale Company, largest manufacturer of ginger ale in the world, increased its output from 1,-000,000 bottles in 1923 to 90,000,000 in 1929 and increased its profits more than tenfold during the same period. The Coca-Cola Company, whose sales comprise over 10 percent of the total beverage sales of the United States, has increased its business about 10 percent each year since 1920, and it now makes about 38 cents profit on every dollar of sales. A group of beverage companies investigated by the National City Bank in 1929 reported a higher percentage return on their stock than any other group of corporations in the food and food products field.

ROBERT W. DUNN

Confectionery Industry. Sweetmeats have tickled the palate of mankind since the dawn of time. Trade in honey and sugar developed early, but the appearance of a confectionery industry is a recent occurrence Even the use of chocolate, now almost a synonym for confectionery, is of modern origin. Cacao beans were first brought to Europe by the Spaniards, who had found bitter chocolate to be a drink highly esteemed by the Aztecs. In spite of Spanish secrecy the new chocolate drink rapidly became popular throughout Europe and the culture of the cacao plant was introduced into the rival colonies of the East and West Indies. Fifty years ago it became established on the African Gold Coast, which now produces annually over 200,000 tons of cacao beans, nearly half the world's annual supply.

Milk chocolate, invented by King George II's surgeon in 1727, soon became a popular prescription. Its manufacture on a large scale was begun in 1876 by Daniel Peter, the founder of the

high quality Swiss confectionery industry. Chocolate candies had, however, been sold by Fry and Cadbury before the middle of the century. The old English confectionery house of Terry, founded in 1767, added chocolates to its line in 1886. It is, however, in the United States that the consumption of confectionery has reached the most astonishing total and become most widespread.

WORLD CONSUMPTION OF CACAO BEANS (Tons of 1000 kilos)

COUNTRY	1912	1927
United States	67	188
Germany	55	70
Great Britain	28	57
Netherlands	25	40
France	27	28
Switzerland	10	8
All other countries	40	7 8

Source: Knapp, A. W., The Cocoa and Chocolate Industry (2nd rev. ed. London 1930) p. 173.

Nearly 1,500,000,000 pounds of confectionery, worth \$750,000,000 at retail (almost \$400,000,000 wholesale), were consumed annually in the United States in the five-year period ending in 1929. These figures do not include factory sales of chewing gum, totaling \$60,000,000 in 1929, or of other chocolate and cocoa products, totaling \$110,000,000.

The marked increase in the consumption of confections in the United States in recent years has been attributed to the prohibition law, although authorities disagree as to whether it is due to the release of more dollars to be spent on food products in general or to the fact that persons who have stopped the use of alcoholic beverages have substituted candy for its stimulating effects on the body. Other factors in the increased consumption of candy are the more convenient five and ten-cent packages and bar forms now distributed and the much wider variety of retail outlets available. Increase in output has been due in part also to strenuous advertising campaigns. In 1927 alone some 495 leading firms spent over \$9,000,000 in advertising, the large firms with the highest sales totals spending a larger percentage of their total sales than the smaller companies. In efforts to combat the competitive appeal of certain cigarette companies the National Confectioners' Association, the trade association of the industry, has conducted expensive publicity campaigns which included the giving of free samples to school children, the celebration of National Candy Week and "Sweetest Day," radio hook ups, "Sweetest Girl" contests and the distribution of slogans and information about sweets to health workers, doctors and dieticians. Mother's Day raised candy sales for May, 1929, 22 percent above the average for non-holiday months.

In the pre-war period candy was distributed almost entirely through grocery stores and a few candy stores. In 1929 confectionery was distributed through 62,000 candy stores and approximately 60,000 drug stores as well as through soda fountains, restaurants, cigar, chain, department and general stores and thousands of stands and vending machines along the motor highways. In 1930 more than half the sales of manufacturers were through jobbers, 16 percent through chain stores and 20 percent through other retailers, while about 7 percent were sold directly through stores belonging to the manufacturers. Chain stores have been gaining most in sales in the last few years: in 1929 nearly half the manufacturers were selling at least a part of their products through them.

Over two thirds of the confectionery made in the United States comes from factories in the eastern and central parts of the country; New York, Pennsylvania, Indiana, Illinois, Ohio, Massachusetts and Michigan are the leading states and New York, Philadelphia, Chicago, Boston, Milwaukee and St. Louis the leading cities. The factories have concentrated near the centers of population to lessen costs of distribution and to benefit from the unskilled female labor available. Control of the industry has become increasingly centralized because of the growth of larger concerns and the introduction of more capital. In 1929, 65 firms, 13.5 percent of all those reporting to the government, had annual sales of over \$1,000,000 and controlled 63 percent of the national sales volume. The number of larger firms increases, and mergers have absorbed hundreds of smaller ones. Large concerns making other types of food and tobacco products have bought into the industry and grocery and restaurant chains operate their own confectionery plants. This centralization has been accompanied by the manufacture of standardized products by medium sized concerns and by the mechanization and specialization of plants. Automatic machinery is now used, especially in making hard candies, marshmallows and certain kinds of chocolates. Even in chocolate and cream candy plants where hand dipping processes have prevailed there is a tendency to supplant the old methods with machine dipping units. Concentration is most marked in the chewing gum industry, where standardization and

low perishability early led to large scale production and nation wide distribution.

With the exception of the cooking processes, which employ men almost exclusively, and the process of hand dipping, in which fairly skilled women workers are employed, most operations in confectionery manufacture require no training or special skill and consequently absorb chiefly unskilled and inexperienced girl workers. As many as three fifths of the 63,000 wage earners employed in the United States in 1929 were women and girls. Half the candy workers covered in an investigation made in New York City in 1928 were earning less than \$13.75 for full time work during a fairly busy season, while 45 percent of those who worked undertime were earning less than \$11.75 a week. The Industrial Bulletin of New York state gives the average weekly earnings for women in representative candy factories in that state in June, 1931, as \$12.37.

Although state laws limit the hours of work, violations are frequent; sixty-five and seventy hours a week are not uncommon among women workers, especially in the busy seasons preceding the Christmas and Easter holidays, Employment is extremely seasonal. In typical plants from 33 to 45 percent of the workers are laid off in the slack seasons early in January and during the summer. During rush seasons work is speeded up. In packing, machine dipping and other processes conveyors are used, while systems of wage payment calculated to achieve the greatest output are in force in many plants. This speed, eye strain, the absence of seats and the low temperature in some of the rooms create health hazards. Studies in New York and other cities showed a large number of factories with low sanitary conditions involving risk for the consumer as well as for the worker. Although health examinations for new workers or a food handler's card are required by law in some states, investigations show that they are disregarded by many concerns, small as well as large. Finger licking is also permitted in some plants. Of fifty-one plants investigated by the government in Chicago and St. Louis in 1921 thirty-seven, or almost three fourths, fell below the standard of providing hot water, soap, individual towels and other indispensable features of sanitary toilet facilities.

Efforts have been made by the National Consumers' League, cooperating with local consumers' leagues, to secure better wages and shorter hours for the workers in candy factories, especially the women, and to see that candy is made

in clean factories by clean workers free from contagious diseases. As its chief weapon it has drawn up a list of standards affecting hours, beginners' wages, seats, cleanliness, sanitation and temperature and has included in a white list those manufacturers in certain territories who meet these minimum standards. Some manufacturers improved their working conditions in order to have their names appear on the white list

Although in many European countries the manufacture of confectionery has long been concentrated in a few large houses, neither the multiplication of products nor the introduction of machinery has proceeded so fast as in the United States. Problems of sanitation and protection of the workers are, however, similar wherever the industry exists. Cadbury's and Rowntree's in England claim to have model factories, but Board of 'Trade figures for the whole English confectionery industry show that in 1924, 29 percent of the workers were less than eighteen years old. Average weekly wages for females were twenty-five shillings and ninepence in 1924, ten shillings and fivepence in 1906.

The high quality Swiss milk chocolate export industry, which expanded early in the twentieth century, has since the war been limited by the exploitation of Swiss patents in the United States and other countries. France remains the outstanding exponent of the small scale production of confectionery delicacies by master craftsmen.

ROBERT W. DUNN

FOOD DISTRIBUTION. Grocery Trade. Originally grocer meant one who bought and sold in the gross; that is, in large quantities. A grocer was therefore a wholesaler. In England from mediaeval days dealers engaged in wholesale trade or foreign trade were known as merchants. In Scotland, however, as well as later in America the term merchant was applied to retailers as well as wholesalers. In time the term grocer came to be applied to the kinds of goods handled rather than to the quantities bought and sold. Today groceries may have either of two meanings. The first and older use implies a limited list of specific food products; the second includes all foods. The older and more restricted use applies to such commodities as tea, coffee, chocolate, spices, flour, salt, sugar, vinegar, molasses, dried fruits, packaged and canned goods. These were the goods carried in the traditional retail grocery store as distinguished from stores and shops selling other food products, such as butcher shops,

bakeries, dairy and poultry products shops, fruit and vegetable stands, fish markets and so on. During the nineteenth century the traditional grocery store of this type bought all or most of its supplies from the wholesale grocer, who in turn bought his supplies from the manufacturers or producers. The lines of demarcation between food trades were clearly drawn not only as to the types of products handled but also as to channels of distribution. During recent years, however, there has been a decided tendency toward the breaking down of these demarcations and classifications. Great numbers of grocery stores have added meats, fish, fruits and vegetables, dairy products and baked goods as well as ice cream, confectionery, tobacco products, cleaning supplies and many other lines of household wares. Relatively few of the traditional types of either retail or wholesale grocer are still in existence. A survey of the grocery trade in modern times must therefore touch upon the marketing and distribution of all food products.

In earlier times staples such as wheat, oil, dried fish and spices were the chief foodstuffs distributed over any large area. Ancient nations carried on an extensive trade in these products. Greece and Rome had highly developed systems of wholesale and retail trade in food (see Food SUPPLY). The grocery trade proper may be said to have begun in classical times with the bringing of spices from the East. Throughout the Middle Ages, even when commercial activity was supposed to have reached its lowest point, there continued to exist an extensive trade between Mediterranean cities and the Orient in which western products were traded for spices, dried fruits, oils, sweets and essences. These in turn were widely distributed from Mediterranean cities throughout northern and western Europe.

The Italian cities early took the lead in this trade between the Orient and the rest of Europe. Pepper and spice merchants, chiefly of Italian origin, from Genoa, Florence, Lucca, Venice and Pisa established themselves in England, France, Holland, Germany and the Baltic seaports. There was a regular trade in pepper and other spices as early as the twelfth century. The great demand for spices swelled the fortunes of the traders on the one hand and on the other stimulated interest in a cheaper route to India and the Spice Islands.

The various tradesmen of the later mediaeval period grouped themselves together in guilds for mutual protection and promotion of their

special interests. While the word grocer does no. appear to have been used in the English language before the fourteenth century, the guild known as the Company of Pepperers of Soper's Lane, of London, the forerunner of the grocers' guild, was in existence before 1180. Similar guilds developed in France and other European countries during the twelfth century and even earlier. The pepperers' guild absorbed the spicers, apothecaries and canvasmen in 1345, forming a body officially known as the mestier averii ponderis. At the same time they organized an inner body, the Fraternity of St. Anthony, in honor of the trading saint of Egypt, who later became the patron saint of the entire trade. The pepperers' and spicers' guild already known as the Grocers' Company was first incorporated in 1428. During the fifteenth and sixteenth centuries it exercised great influence in public affairs, not only in London but in all England. It elected several lord mayors of the city of London and its livery and pageants were said to have exceeded all others in grandeur and magnificence. Like the other great liveried companies the Grocers' Company regulated its own trade. Everyone carrying on the trade was required to join the company. Strict rules were set to prevent monopoly or unreasonable prices. The company assumed the responsibility for honest weights and measures as well as for the purity and other standards of the goods handled. For many years the pepperers and grocers had the monopoly of all goods measured by weight. Through the collection of dues and fees as well as by wise investments, the Grocers' Company became wealthy and used its means for charity and education and for the support of the government at critical times. Today the company exists as a social organization and fraternity.

With the opening up of many new lines of commerce during the nineteenth century, with the development of new products and new methods of processing and with changing standards of living the grocery trade developed several new forms of organization and new channels of distribution of food products. Increasing standardization and grading of products made possible widespread purchase by sample. Commodity exchanges (q.v.) now act as central markets and price regulating agencies for grains, coffee, sugar and cocoa as well as many of the more perishable food products.

In the marketing of grocery specialties such as package goods, sugar, coffee, tea, canned goods, flour and so on the broker has been and is still an important factor. He brings manufacturer and buyer together, receiving for this service a commission or brokerage based on the amount of sales and generally paid by the seller.

Between the producer and consumer the wholesaler has, at least until very recent years, been the typical middleman. The wholesaler of the nineteenth century bought in large quantities, often taking entire outputs of canneries and factories; he provided storage space and sometimes financed the producers' operations. He supplied the retailers with stocks of goods and granted them credit, often to the extent of setting them up in business. Thus the old time wholesaler assumed the burden of risk both in carrying goods bought from manufacturers and in granting credit to hundreds of small retail establishments. In spite of recent criticism of the wholesaler and the rapid development of more direct methods of distribution by far the largest bulk of food products still finds its way to consumers through some kind of wholesaler. The wholesaler and his sales representatives were and are still the mentors and advisers of the masses of small independent retailers in all matters of merchandising, store arrangement, display, advertising and the like.

Many wasteful practices had crept into the food distribution system of the nineteenth century. Unnecessary services had developed. Expenses of operation both in wholesale and retail concerns had run unnecessarily high. New types of distributors came into existence, such as chain store systems, mail order houses and large department stores. These large concerns found ways of buying direct from producers or through brokers and of eliminating part of the wholesale expense. This in turn led to marked changes in the organization and methods of operation of traditional types of wholesalers and retailers. Several new varieties of specialty wholesalers have largely taken the place of the older general type. Some have branched out into the production and sale of goods under their own brands and have therefore become manufacturers as well as wholesalers. A great many general wholesalers have given up their former general lines of goods and are now devoting all or most of their attention to the distribution of a limited line of products. Most wholesalers who formerly tried to cover the entire country or even large sections of the country have found that they can operate more economically and satisfactorily by limiting their territories to a small radius rather than attempting to cover the extensive territories

formerly served. The jobber in the food trades, once a separate and distinct type of distributor functioning between the large wholesalers and the retailers, has now largely merged in the classification of specialty wholesalers. Several variations in wholesale service have been devised, such as cash and carry wholesalers, wagon or store door delivery wholesalers, desk and telephone wholesalers and institutional wholesalers. There are still many general grocery wholesalers, but their most successful fields of operation seem to be in the parts of the country where population is sparse and the distances between towns fairly great.

Retail grocery trade outlets now consist not only of regular grocery stores but also of meat markets, delicatessens, dairy and poultry shops, fruit and vegetable stores, food department stores, public markets, food departments in department stores, food departments in drug stores, roadside markets, company stores, restaurants and consumers' cooperatives. The total number of food outlets in the United States according to the 1930 census of distribution was nearly 500,000, or approximately one third of the total number of retail outlets of all kinds.

The chain store system of distribution has reached a high stage of development in the grocery and food trades. Beginning in a very small way with the establishment in 1858 of the Great Atlantic and Pacific Tea Company and others in the 1880's and 1890's, the chain systems now have a volume amounting to about 30 percent of the entire retail food trade of the country. The Great Atlantic and Pacific Tea Company, the oldest of the grocery chains in the United States, is also the largest, with more than 15,000 retail shops and annual sales in excess of \$1,000,000,-000. Other large grocery chains include the Kroger Grocery and Baking Company with more than 5000 stores, Safeway stores on the Pacific Coast with about 3000 stores, American stores and First National stores, each with more than 2500 shops, and several other smaller concerns ranging downward to local organizations consisting of two units or more.

One of the recent developments of major importance affecting both the wholesale and retail grocery trade is the organization of retail cooperatives, or so-called voluntary chains. To meet chain store competition on the one hand and to offset the danger of retailer customers forming cooperative buying groups of their own, several hundreds of grocery wholesalers throughout the country have organized and tied up their retailer

customers by understanding or contract in agreements to carry on programs of merchandising much like those of the chains. Most of these wholesalers are in turn members of organizations that are national in scope, serving their wholesale associates by education in proper methods of merchandising, by central buying of both goods and supplies, by advertising and more particularly by promoting the organization among new members. The leading organizations in this field include the Independent Grocers' Alliance, the Red and White stores, Clover Farms stores and many others. By the end of 1930 there were probably fully as many independent food stores tied up in voluntary chain arrangements with wholesalers as there were units in actual chain store systems.

Under the stress of competition with chain stores and other large retail organizations many of the small, independently owned retail food stores have shown marked progress in operating methods. They have learned how to keep their accounts properly, how to gauge consumer demand and its changes and particularly how to modernize their stores to bring them up to date in appearance and in the services rendered to the public. In addition many independent retailers have learned how to sell goods as cheaply as the chains. Although for many years the trend of expenses of operation due to rising wages and increased services and higher costs for advertising has been upward, during the past four or five years the rise has apparently been checked. Wholesalers and retailers have in many cases been able to reorder their business so as to make their total expenses of operation comparable with those found in chain store organizations carrying the same sorts of merchandise and rendering similar services to their customers.

But in spite of the partial success of the independent grocery chains there has been increasing pressure for antichain store legislation on the part of independent retail store interests, retail trade associations and local business men. It may be presumed that special taxation of chain stores will be attempted in numerous states.

Competition in the food trades must continue to be keen while, as is the case at present, scarcely a line exists in which there is not overcapacity in relation to consumption requirements. There is a crying need for control of production of raw materials to the point of proper adjustment to consumption requirements so that prices may be stabilized at points permitting the rank and file of producers to cover at least their costs of pro-

duction. Existing difficulties have led many individual concerns and groups of concerns to attempt to raise their products above the level of some of the most vicious forms of competition Branding and advertising, particularly of package goods, was one of the earliest and is still one of the most outstanding movements in this direction. Resale price maintenance was another device generally followed by many specialty manufacturers before this method of trade control was outlawed by the Supreme Court in 1911. Some of the most ardent support for specific legislation permitting price maintenance has come from both manufacturers and distributors in the grocery trades.

The merger movement found in other large industries has had its counterpart in the food industries and trades. A large part of the production of refined sugar, soap, corn products and meats is concentrated in the hands of relatively few concerns. During the past five years the amalgamation of companies producing branded and nationally advertised grocery specialties has paralleled the rapid growth of chain store systems and the voluntary chain movement. The most outstanding examples are General Foods, Inc., Standard Brands, Inc., the Gold Dust Corporation, the California Packing Corporation and the National Biscuit Company. There are many other smaller concerns attempting to forge ahead. General Foods alone manufactures and sells more than a hundred products, many of which are nationally advertised. For a number of years there has been a growing undercurrent favoring some change in the antitrust laws of the nation to permit some degree of cooperation among competing producers and distributors in stabilizing the condition of competition.

A certain measure of cooperation among the competing concerns of each of the many industries in the food field has been achieved through trade associations. There are both national and local associations in most of the individual food manufacturing industries. There are also general trade associations, such as the American Grocery Specialty Manufacturers' Association, the American Institute of Food Distribution, Inc., and others, which combine the interests of several industries concerning problems of mutual interest. The American Wholesale Grocers' Association and the National Wholesale Grocers' Association serve the national interests of the wholesale trade, while the National Association of Retail Grocers and the National Chain Store Association represent those of retailers.

One of the most interesting developments of recent years is the attempt to regulate some of the worst features of competition by means of trade practise conferences, rules and codes of ethics. The conferences have been held under the supervision and with the help of the Federal Trade Commission and are intended to find ways of lawful cooperation among competitors.

Through the trade associations considerable progress has been made in educating great numbers of individuals and concerns in methods of accounting and in the computation of expenses of operation. Through association exchanges of information on prices, costs, methods of operation, credit and market conditions the food trades have become much better informed than ever before. Several trade associations carry on a number of cooperative activities, such as trade advertising and sales promotion, market research for new opportunities of trade extension and, in general, sales efforts to increase the consumption of particular products. Some of them have cooperated with the business schools and the Department of Commerce in making trade surveys.

Out of these surveys and out of the attempts of the trade to meet changing consumer demand have arisen a number of interesting theories and experiments. Indeed, the retail food trade constitutes an experimental ground of great extent in which wide varieties of new ideas concerning distribution are being tried out. An increasing proportion of the public seems to desire an increasing proportion of ready to serve foods. Formerly such foods were distributed largely through delicatessens, but they now constitute an important part of the sales volume of all types of food stores. Another interesting experiment involves the introduction of what is known as the quick-freeze process of refrigeration, by which all types of perishable foods are preserved by freezing in such a way as to prevent for indefinite periods of time deterioration in flavor or quality. Still other experiments involve the application of ultraviolet rays, the addition of vitamins and the destruction of all bacterial action and decomposition by a process known as irradiation.

Another line of experimentation lies in finding the price lines at which various food products sell most readily. For example, surveys made in several cities have led to the conclusion that goods priced at 25 cents each, two for 25 cents or three for 25 cents sell more readily than at any other price. A price of 30 cents each seems to result in a total lack of sales. More goods can

be sold at 25 cents or the chain store variants of 23 cents or 21 cents than at 20 cents, even if the amounts and qualities of goods are the same.

The organization of the grocery trade in other countries is very similar to that in the United States, except for some differences in commodities carried and differences in services desired by consumers. In addition to the traditional lines of distribution through wholesalers and retailers, found everywhere, there is in most of the European countries a high development of consumers' cooperative societies, which not only operate local retail stores but also wholesaling and manufacturing establishments. Consumers' cooperation is particularly strong in the food trades in England, the Scandinavian countries, Holland, Switzerland, Czechoslovakia, Austria, Germany and Russia. It is relatively weak in Spain and France and very weak in Italy. In Russia it constitutes the chief channel of distribution for food products. Its only competitors, in fact, are the state owned retail outlets and a few retail stores serving certain manufacturing industries. Private enterprise in the distribution of food has all but disappeared under Soviet rule.

Small food shops abound in all countries of Europe except Russia. These shops are in many cases conducted by old people, women and exsoldiers. Chain store systems exist to some extent in the field of food products in European countries but not nearly so extensively as in the United States. There are important grocery chain systems in England, France and Germany, but in the other countries the chains are still largely in the stage of infancy.

The European food trades, despite the fact that retail shops are in the great majority of instances very small, are well organized. Trade associations abound, and various forms of cooperative activity, such as cooperative buying, mutual insurance and agreements as to trade practises, are common.

Paul H. Nystrom

Perishable Products, United States. The last decade of the nineteenth century marked the beginning of a new era in the distribution of perishable foodstuffs and radically changed the nature of the problem of urban food supply. The successful introduction of the refrigerator car, refrigerated ship and more recently the refrigerated motor truck into the transportation system has transformed the face of the production map. Large urban communities no longer depend upon nearby truck gardens, orchards

and dairies for their food. Remote areas have been opened up for the production of crops on a vast scale in the most favorable climate. Areas like the Imperial valley on the border between southern California and Mexico have been developed under irrigation to produce cantaloupes, watermelons, lettuce, asparagus and tomatoes for markets 3000 miles away, reached by refrigerated freight in less than ten days. The average length of railroad haul for fruits and vegetables in the United States is estimated at approximately 1500 miles.

Since refrigerated transportation has virtually annihilated the limitation of distance upon supply, fresh produce is available to urban consumers at all seasons of the year. Lettuce, tomatoes, beans and cucumbers move to market in a continuous flow, one shipping area following another in rotation as the seasons change. In the course of a year New York City draws fruits and vegetables from forty-two states of the union and nineteen foreign countries. In one day the Covent Garden market in London handles South African peaches, plums and apricots, Nova Scotia and Washington apples, English and Belgian grapes, California pears, Canary Island bananas, Florida grapefruit, Jaffa, California and Spanish oranges, English and French asparagus, French lettuce, cauliflower, cabbage and turnips, Algerian and Azorian potatoes.

These new possibilities in the distribution of fresh foodstuffs have greatly expanded the range of diet of the average urban dweller and given to such perishable foods an increasing importance in the total food trade. At the same time they have been an important factor in changing methods of commercial distribution. When local production and wagon and boat transportation dominated the marketing system, middlemen were few. The producer often came to market with his own wagon to do business with the housewife, the retail storekeeper or the market stand man. Even in the staple grocery trade, wholesalers were few in number and the types of middlemen limited. But with the development of long hauls in car lot units, intermediate assemblers and distributors have rapidly assumed an importance in the marketing structure. To take advantage of the lower rates and quicker service offered by the railroads for solid carloads of a single commodity, car lot assemblers have sprung up at shipping points, buying from the producer for cash and shipping to the city distributors in markets hundreds or thousands of miles distant. Likewise, specialized

receivers, handling car lot units either for their own account or as shippers' agents, have arisen in the cities. These city receivers break up the carloads into fifteen or twenty lots for sale to jobbers or large retailers. The jobbers in turn sell to retailers, who trade with the consumer.

Long haul transportation has, however, by no means eliminated the local growers who truck their produce to nearby markets for direct sale to jobbers, retailers and consumers. Many important cities in the United States, located close to fruit orchards and truck gardens, receive an important part of their food supply by truck, and a goodly portion of this is sold to jobbers, retailers and consumers through municipal or privately operated farmers' plaza markets. Albany, New York, with a population of 127,000, in 1929 received 39 percent of its fruits and vegetables by truck, 30 percent through the farmers' market. Rochester and Syracuse received approximately the same percentages from nearby sources. Newark, New Jersey, with a population of 443,000, in 1930 received 35 percent by truck, 26 percent being sold through the farmers' market. New York City, however, receives only 10 percent by truck, of which only 5 percent is sold through the farmers' market.

Only a small part of the produce sold by farmers in public markets passes directly to consumers. The produce trucked in by farmers to the Detroit public markets in 1923 amounted to about 95,000 loads, or one quarter of the city's total supply. Of this, 75 percent was purchased by retailers and hucksters, 10 percent by wholesalers and only 15 percent by consumers; hence at least one or two middlemen took part in the distribution of 85 percent of the produce brought to the city by farmers.

But the major part of the produce distributed in the United States moves to urban centers by rail rather than by truck. Over 1,000,000 cars of fresh fruits and vegetables and 200,000 cars of butter, cheese, eggs and poultry are shipped annually by railroad. Approximately 80 percent move under refrigeration and nearly all in solid carloads. A refrigerator car in the United States holds a quantity far too large to be assembled by a single grower or handled by a small city jobber. The average carload of Maine potatoes contains 40,000 pounds; of California citrus fruit, 30,000 pounds. Someone must gather together the daily product of the field or orchard from each grower and ship it to the city, uniformly graded and packaged in standard containers.

The car lot assemblers who have established themselves at shipping points to perform these services differ to some degree in function and character. Some are strictly local dealers who maintain warehouses adjacent to railroad sidings at strategic points, to which the growers deliver by wagon or truck. In the case of semiperishables, such as potatoes and cabbage, the produce may be stored for weeks or months in the warehouses after grading and then shipped in car lots to distant city markets. Gross earnings of these shipping point dealers are derived from the difference between what they pay farmers and what they receive from city dealers. Their profit or loss is dependent upon the skill with which they judge the market prices during the season. Some of them are associated with city dealers, sharing the risks of the enterprise. An analogous type of car lot assembler operates from strategic points in shipping carloads of butter and eggs to the city markets.

In the case of the more perishable and scasonal produce the shipping point assemblers are characteristically traveling buyers who remain in one section for several weeks during the peak of the shipments and then move to the next center of production. Such a traveling buyer may be an independent dealer or the agent of a city operator. Many shipments of cantaloupes, lettuce, watermelons and peaches are handled in this manner in the United States.

A third type of assembler is the mutual or cooperative shipping organization. Cooperative growers' associations play a very important part in produce marketing and their functions and characteristics are so varied that no comprehensive treatment is possible here. Viewed purely from a marketing standpoint they perform a service for the grower which is distinct from that of other country shippers, primarily in their control not only over the distribution itself but in the picking, packing and grading of the product. They are non-profit organizations, managed by paid employees and controlled by representatives of the producers themselves. Some are entirely local, confining their operations to sales from shipping point auctions or consigning their produce to city commission merchants; others are federated into regional or national marketing organizations, maintaining sales, advertising and traffic departments for the purposes of regulating the flow of produce into markets, of conducting sales campaigns and of dealing collectively with transportation companies in the matter of freight rates and claim adjustments. A few of the national cooperative associations maintain district managers in important urban markets but do not generally sell directly to the jobbing trade. One exception is the Pacific Egg Producers, a joint sales organization in New York City for three of the Pacific coast egg cooperatives, which has an auction of its own through which it sells to jobbers, chain store organizations and other large buyers.

The fourth type of car lot shipper, known as the operator, is usually a large shipper, commission merchant or wholesaler, who in order to guarantee himself a sufficient volume of produce for sale has entered into contracts with growers under which each grower is obligated to deliver all of the product of a certain acreage to him for sale. In return the operator usually advances a certain minimum price per unit to the grower to finance the purchase of seed, box material, labels and the like. In the United States the operator is most active in those sections in the south or west which have been recently developed as producing territories. Probably more than 80 percent of the lettuce and cantaloupe acreage in the Imperial valley is under contract. A large part of the Florida tomatoes and northwest apples are handled in the same

After produce is dispatched from a shipping point it may pass through brokers or auctions operating on a national scale and handling carloads only. Such brokers are intermediaries between the shipper and the city receiver. Their activities are primarily conducted by telephone and telegraph. A shipper wires a broker that a car of apples is rolling; the broker finds a buyer willing to make an offer and wires the offer to the shipper for confirmation or rejection. A unique experiment in the expansion of this type of service in the United States has been afforded by the so-called f.o.b. auction. Through a chain of offices in leading markets and shipping points linked by private telegraph wires carloads of produce are offered simultaneously to bidders assembled in a far flung chain of salesrooms. Offerings described by federal or state inspection certificates are sold on a shipping point basis; the buyer pays freight charges and orders the car diverted to the desired market.

In the city are a number of dealers receiving carloads as they come to the terminal markets for resale in smaller lots. Partly through custom, partly through the exigencies of transportation facilities, these markets have become highly specialized. In a city like New York there are local-

ized fruit and vegetable, poultry, fish and meat and dairy products markets where dealers buy and sell. Historically the commission man is the oldest and most influential factor among city dealers. He acts as the shipper's agent in supervising the unloading of the car and the selling of the contents in job lots and retains a percentage, usually about 10 percent, of the gross sale price. The car lot wholesaler differs from the commission man in that he assumes ownership of the produce by buying from the shipper either at the shipping point or on delivery in the city, whereas the commission man is merely an agent of the shipper. The keen competition among city wholesalers and commission men for a constant volume of business to support a large overhead sales organization has forced many to become operators by acquiring a financial interest in the growing and shipping function, through crop contracts, joint sharing of profit or loss or guaranties of price and promises of premiums over market quotations.

In the city in recent years the terminal auction has assumed an important place in the distribution of produce. Cars are listed for daily sale by brokers, commission merchants, wholesalers and district managers of cooperatives, and the offers are split up into convenient lots identified by size, quality and brand and listed in printed catalogues. Large quantities of well graded and well packed fruit, melons and eggs are handled through these auctions. Buyers, who have previously examined samples of the offerings, assemble at specified hours to bid for each lot.

The jobber in the produce trade buys from the car lot receivers either directly or through the terminal auction and resells in units of one box or one crate to retailers at neighborhood markets.

The function of the retailer is well known. It is on him that the public depends for its daily food supply. A large portion of the fresh produce is sold to the consumer through specialized fruit and vegetable markets as well as through the regular grocery stores. In some cities, notably New York, the huckster and pushcart venders are important outlets. There are over 8000 licensed pushcarts operating in fifty-three open air street markets in New York City, furnishing an outlet for more than 10 percent of the city's fruits and vegetables. The hotel and restaurant trade is an increasingly important outlet in large urban centers. For the United States as a whole the so-called mass consumption market is estimated at 26 percent of the total, and in the case

of Manhattan Island a large percent of the consumption of foodstuffs is in public eating places rather than homes. The following tabulation based on preliminary reports of the 1930 census of retail distribution indicates the comparative importance of retail outlets for food products in New York City.

	Number of Stores	Number of Full Time Employees
Candy and confectionery	•	
stores	7,753	8,043
Dairy products, eggs and		
poultry stores (including	:	
milk dealers)	1,929	11,005
Delicatessen stores	2,383	2,227
Fruit stores and vegetable		, .
markets	5,534	2,953
Grocery stores	13,685	12,707
Combination stores (grocer-		
ies and meats)	1,620	4,336
Meat markets (including sea	ı ´	1755
foods)	8,492	9,229
Bakery goods stores	1,203	3,089
Other food stores	348	198
Food group, total	42,947	53,787
Total, all stores	103,623	316,201

The chain store, which started as a purely retail organization during the last quarter of the nineteenth century, has now become a dominant factor in the field of food distribution. In New York City, according to the 1930 census of retail distribution, 60.34 percent of the total sales of food products were made by 36,209 independent single stores; 24.24 percent of total sales by the 5011 branches of local chains; and 15.20 percent by the 1701 branch stores of sectional and national chains. The largest chain store company in the United States operates more than 15,000 retail units and has carried vertical integration to the point where it not only controls warehouses and processing plants but even country shipping stations as well. Thousands of carloads of produce are purchased each year by chain stores at shipping points, in many instances from cooperative organizations, and are distributed all over the North American continent to regional warehouses and then to the retail units.

The effect of this integration of merchandising control is profound. Many of the wholesalers, jobbers and commission merchants are being eliminated as the chain store assumes their functions. The demand for uniform quality and size by the chain stores has greatly stimulated a standardization of pack on the part of the pro-

ducer and has promoted cooperation among producers for standardization and bargaining purposes. Open market transactions are being considerably reduced by the contracts entered into between growers' cooperatives and chain store distributors. As a result new problems in price establishment and quotation are arising. The purchase of produce in carloads by chain stores with direct routing to their regional warehouses has become an important factor in modifying the physical layout and design of city markets and terminals. Chain store distribution tends to a decentralization of the physical terminal operations as well as of commercial trading and makes the distribution of produce more nearly resemble the handling of meats through packers' branch houses and of milk through distributors' pasteurizing plants.

The cost of distributing produce has been a subject of numerous investigations and a great deal of popular discussion. Analysis of the consumer's dollar into its component parts, while subject to marked variation in periods of rising and falling prices and in different channels of distribution, indicates that approximately 50 percent of the cost of distribution takes place after the produce has arrived at the city terminal. Because of the item of spoilage, which has been reliably estimated to approximate more than 10 percent of the total retail value, the retail margin for perishable produce is considerably higher than that for package groceries. The retail margin for fruits and vegetables in New York City has been estimated to run from 33 to 37 percent, depending upon the channel of distribution. Profits do not appear to be large. Exhaustive studies in 1924 indicated that the annual return per wholesale proprietor in New York City was approximately \$6400 and per jobber approximately \$4500. Independent retailers' profits are notoriously small and uncertain. The mortality of independent grocers in Buffalo, New York, and Louisville, Kentucky, has been calculated to be as high as 30 percent per annum. A study of meat shop profits by the Department of Agriculture in 1923 indicated that half of the proprietors made less than \$3500 per annum.

Apparently the large items in city distribution costs are those associated with cartage, cost of making sales and spoilage. Terminal cartage of produce in New York City, covering only the movement between railroad terminals and retail stores, appears to absorb approximately 6 percent of the consumer's dollar. In the case of milk distribution the trucking from the terminal

to the pasteurizing plant and thence to the retail and distributing branch amounts to 7 percent of the retail price. Milk route delivery to the consumer absorbs 28 percent. Spoilage in the case of the more perishable fruits and vegetables amounts to as much as 13.5 percent. The wage cost of making sales in the retail store amounts to 10 or 12 percent of the consumer's dollar.

Marked progress in reducing trucking costs and spoilage has been made by the chain store distributors in their handling of perishable produce by purchase at shipping point and direct routing to regional warehouses, and the planning of the package unit to conform more nearly with urban demand. The cost of retail delivery of milk appears also to be decreasing on account of the heavier loading of route wagons made possible by the greater concentration of urban population and the sharp reduction in the number of competing distributors.

The cost of making sales through retail stores, on the other hand, appears to be increasing by reason of the steady reduction in the size of the unit quantity purchased by the urban housewife, a result of the lack of storage space in city apartments and the increased irregularity of housekeeping arrangements. The service of filling many small orders and of minute packaging, plus the tendency to multiply stores, throws a greater burden of wage cost upon the retailer per unit sold. Just what will be the effect on food costs of the tendency toward increased mass consumption through restaurants is difficult to forecast. Margins of dealers catering to the more expensive restaurants and hotels are markedly higher than those of the dealer catering to the regular retail store trade. The erratic fluctuations in patronage in even the medium priced restaurants, due to holiday migrations, weather changes and other factors, introduce elements of risk and wastage which tend to keep the margin high.

Public control over food distribution has rapidly extended in some fields and has contracted in others. In the United States there has been a steady extension of government supervision over food dealers to protect the consumer by the maintenance of health standards and to regularize the trade through establishment of commercial standards and the restraint of fraudulent practises. There has been relatively little governmental price control except during war emergencies. However, government control over maximum rates charged by rail and water transportation companies and terminal agencies, such

as stockyards, has become an accepted policy. The antitrust laws have been applied to prevent the distribution of diverse food lines by the big meat packers.

Actual public participation in food distribution has been confined, with a few exceptions during war time, to the operation of municipal markets for the accommodation of farmers and retail dealers and an attempted use of the police power to prevent the racketeering invited by the present disorganized state of the industry. There are several notable examples of successful farmer market operation by municipalities, although the Bronx terminal market for the receipt of railroad hauled produce, constructed by the city of New York, plays a very unimportant part in the distribution of foodstuffs. The interdependence of terminal markets and railroad operation has made control of terminal facilities by municipalities much more difficult than in the days when farmers and housewives met to transact business in a plaza market.

W. P. HEDDEN

Food Distribution in Western Europe. Most European countries have a long tradition of government supervision and direct intervention in the processes of food distribution. Concern over adequacy of supply early caused the establishment of public granaries and led to stringent regulation of trade, quality and price. But the laissez faire impetus of the French and the industrial revolution gradually cleared the ground for the private exploitation of the food industries. At the present time the mechanisms of food distribution are as varied and as highly specialized in western Europe as in the United States. The international wholesale trade in exotic wares and plantation products, the first of the important food trades, has in recent years been vigorously developed and augmented by trade in grains, refrigerated meats and dairy products and fruits. In the period before the World War the local middlemen who gathered produce from the farms for redistribution to the rapidly growing cities increased in importance. In recent decades the functions of the city retailer have been growing more varied and more complex, while the costs of his services have been growing proportionately heavier because of the greater demands made on him by the consumer no longer willing or able to do the greater part of his shopping at the street market or fair.

In general, lines of distribution follow similar channels in the leading industrial countries.

But Germany may be said to show the most thorough group organization, England the greatest variety of middlemen and France the greatest centralization of wholesale trade and at the same time the greatest dependence on the primitive street market for its retail trade. Sweden is worthy of notice as a country in which consumers' cooperative societies have an almost complete monopoly of food distribution.

Almost universally the central fact in the city distribution of perishable foods is the municipal market (see MARKETS, MUNICIPAL), where the whole supply of one or more types of food is offered for sale to wholesalers, to retailers and sometimes even to consumers. The Halles Centrales of Paris, the oldest and most inclusive of these modern markets, sets the price for perishable goods all over France. It is regulated by municipal and departmental authority and goods are sold by official mandataires on a commission basis. In Great Britain there is little public regulation of sales, although the Smithfield meat market and the Billingsgate fish market are owned by the city of London. The privately owned Covent Garden is notoriously inefficient as a distributing center for fresh fruit, vegetables and flowers. In Germany, on the other hand, the system of public markets is well developed. Berlin has excellent markets equipped with good railroad connections and served by municipal salesmen and auctioneers.

Organization of individual branches of the food trades varies from city to city and from country to country. Certain operations are purely local, others international in scope. There is not space here to deal with trade in such staples as sugar (q.v.), grains (q.v.) or tea and coffee (see Plantation Wares), except to note that in so far as they are imported into Europe London is the wholesale center not so much for their actual distribution as for their sale on her produce exchanges and for the discounting of bills originating in such trade. Hamburg is an important redistributing center for imported foods destined for central Europe. Billingsgate and Hamburg are the chief salt water fish markets for the rest of Europe, while Paris and Berlin are the leading centers for fresh water fish.

The meat distributive trades reflect in all countries and in varying degree the competition between domestic meats and imported cold storage products. For Great Britain as a whole 50 percent of the meat is home killed; but for London the proportion, including that sent from

Scotland and Ireland, is only 30 percent. Home killed cattle are usually sold at local auctions directly to the small local retailer, who himself slaughters at private abattoirs. It is only in the larger cities that municipally owned abattoirs and wholesale markets have been established. Smithfield, the center for the imported cold storage trade, represents the opposite extreme of centralization. There the American and Argentine meat packers sell to jobbers and retailers supplying the London trade and much of the interior. One of these, the Union Cold Storage Company, Ltd., itself controls 3000 retail units throughout the country, a development viewed with alarm by the 45,000 independent meat retailers. Cooperative slaughterhouses and butcher shops are of considerable importance and are operating on a large scale with marked efficiency. Their net profit on turnover in 1924, as reported by the Royal Committee on Food Prices, averaged 10.1 percent as compared with 5.5 percent for the independent retailers. It is interesting to note that 80 percent of the meat sold by the cooperatives is home killed, whereas the small scale private retailer can assure himself of variety and standard quality only by buying imported meat. Berlin imports only 20 percent of its meat supply. There as well as in Vienna slaughtering at municipal abattoirs is compulsory. Interesting developments in Vienna include the organization of the Wiener Vieh und Fleischmarketkasse and of a company to run retail stores selling meat at cost plus 5 percent.

The wholesale distribution of dairy products and eggs in most European countries likewise reflects the influence of imports from large scale producing organizations, many of which are cooperatives. England and Germany are the principal importing countries. British wholesalers import eggs from the cooperatives of Denmark and Holland; from Belgium; and from Egypt and China, where British agents sometimes superintend the collection; from the packers in the United States and Canada; from the Overseas Farmers Cooperative Federations in Australia and New Zealand; and from local shippers in South Africa. Domestic eggs are seldom handled by English wholesalers; local retailers procure them direct from the producer. The same applies generally to butter. Cheese also is largely an imported product, the main supplies coming from New Zealand and Canada. Germany, on the other hand, draws her dairy supplies largely from the cooperative producers' societies of northern and eastern Europe. Except for the cooperatives, which are virtually the only important independent producers of dairy products on the continent, the trade is organized by cartels and strong combinations. Cheese exported from Switzerland is controlled by the Käseunion cartel. Margarine, used extensively in Europe as a butter substitute, is almost completely controlled by the international Unilever trust; in countries protected by margarine tariffs the trust has built its own factories and absorbed its competitors. The importance of this to the consumer is increased by the fact that resale price maintenance of trademarked goods is legally protected in Europe.

Trade in fresh fruit and vegetables is centralized for England and France in the Covent Garden market and the Halles Centrales respectively. The larger German cities are well equipped with wholesale markets, but there is no one distributing center for the country as a whole. Aufkäufer, buying from the farmers, are strongest in the south and west. British trade in fresh fruit and vegetables is outstanding for the variety of intermediaries involved. From sixteen to twenty handlings were reported as common in 1924 by the Committee on Distribution and Prices of Agricultural Produce, known as the Linlithgow Committee. This was partly the result of the practise of reconsigning goods by way of Covent Garden to the provincial wholesale markets.

It is difficult to secure for European countries figures comparable with those compiled by the United States Census of Distribution which would give an accurate picture of the organization of retail distributive agencies. For Great Britain the nearest approach is probably the record of the registration of consumers for ration purposes during the World War. At that time 23 percent registered with 5500 cooperative stores, 231 percent with 7000 branches of chains, 531 percent with 137,000 independent retailers. At that time three chains controlled over 2000 retail outlets and the number owned by this small group is increasing rapidly. It is estimated that the 1400 consumers' cooperative societies handle one third of the food consumed in Great Britain. The cooperatives have their own slaughterhouses, bakeries, margarine and soap factories. They import plantation wares and wheat and operate fruit and dairy farms-all most advantageously. But competition is becoming keener. Apparently the Civil Service Cooperative Society, Ltd., prompted the early

chains. Lipton, who started as a provision merchant in 1876, added tea to his line in 1889 and the company expanded rapidly thereafter. There are now important meat chains, Mac Fisheries, Ltd., with its own fishing fleet, Lyons and Co., Ltd., the Aerated Bread Company, Ltd., and general grocery chains. In London the large department stores are important distributors of food. In the smaller towns, however, street markets and fairs are still significant and there is considerable direct distribution of dairy products. In its final report on the problem of food distribution and production in Great Britain the Linlithgow Committee advocated, as needed improvements, standardization by trade associations and producers' associations of products and of weights and measures, the revision of railway rates, promotion of car lot shipments, better roads and lower parcel post rates. The report of this committee indicated its belief that in England the future for the wholesale trade is undoubtedly with the big unit; it condemned the wastefulness of small retail units but considered that the consumer was largely to blame because he persisted in dealing with many traders and in demanding too much in the way of style and service, including the delivery of infinitesimal quantities of goods. The report recognized, however, that the habits of consumers with respect to style and service were too ingrained to make practicable in England municipal retail markets of the continental type.

Whereas the English wholesaler still plays an important role in the distribution of groceries and general food products, in Germany the competition of chains and of cooperatives and the special position of trademarked goods are limiting the wholesale field and will soon eliminate the small wholesaler entirely, according to the opinion of the Enquête-Ausschuss on German economic life. A considerable proportion of the goods carried by grocery wholesalers in Gremany is imported, in the case of large dealers directly from abroad. The importance of the Hamburg market is indicated by the fact that certain English goods which before the war were sold directly to retailers can now be secured only through the Hamburg importer. Goods in transit to be processed and reexported form from 5 to 37 percent of the trade of importing houses. On the average, standard brands account for from 10 to 20 percent of the wholesale grocer's trade; for smaller houses they may be even more important.

Independent retail distributors of food have

apparently been increasing in number in Germany since the war and competition is consequently keener. The new small proprietors are drawn from those now unable to make a career in the army, from ex-soldiers or from dismissed officials. Such independent retail dealers have formed various associations to strengthen their purchasing position. The most important is the Edeka (Einkaufsgenossenschaft Deutscher Kolonialwarenhändler), which has some 250 local branches and total yearly sales of almost RM 200,000,000. The Edeka has its own trademarked brands, but its principal function is to buy for its members from manufacturers in quantities large enough to entitle them to the maximum discount. Its administrative expenses, however, in certain cases are so high as to nullify a large part of its advantages except to the small dealer. About 30 percent of its sales consist of cartel controlled goods, 15 percent of trademarked goods and most of the remainder of socalled competition articles-flour, sugar, eggs and the like.

Cooperation plays almost as important a part in supplying the public with food in Germany as it does in Great Britain. Societies belonging to the Zentral Verband operate 10,000 stores, 70 to 90 percent of whose sales are food products. The larger societies themselves produce most of their goods and the smaller buy from the central wholesale bodies. The development of their own trademarked brands has made them almost independent of the cartels. They use little credit, buying directly from the manufacturers and from producers' cooperatives. Certain societies have established joint buying days in order to reduce freight charges and the like.

Chains are playing an increasingly important role in German economy as in England and France; in general they lessen the importance of the wholesaler in the food trades more than that of the retailer. Of four general grocery chains examined by the Enquête-Ausschuss, two, with yearly sales ranging from RM 8,400,000 to RM 12,800,000, had established a joint purchasing office and an agency abroad. But they bought their vegetables from wholesalers because the wholesaler by sorting them guaranteed better quality; butter they bought from wholesalers or from the dairy. These two companies gave no rebates to their customers and were unaware of any price agreements in their territory. The other two chains, however, had been forced by cooperative competition to give rebates to customers and had made agreements with the cooperatives against price cutting, particularly on sugar. To represent their political interests the chains have organized the Reichsverband Deutscher Zweiggeschäftsbetriebe im Lebensmittelhandel, to which the great majority belong. Fifty-five of the smaller firms controlling from 2500 to 3000 retail units and with yearly sales totalling RM 250,000,000 to RM 300,000,000 haveorganized the Einkaufsgesellschaft Deutscher Zweiggeschäftsbetriebe im Lebensmittelhandel to get the highest rebates on trademarked While German chains selling food goods. products are not accused of price cutting, the department stores are. It is claimed that they use their food departments merely as a bait to get customers into the store.

Another type of distributive agency which is of particular importance in the industrial regions is the company store. One of the largest of the sixty-five corporations conducting stores (presumably Krupps), with 118 branches, reported sales in 1926 of RM 40,000,000—equal to one third of the wages bill. Groceries constituted 69 percent of the sales; textiles and shoes, 29 percent. Over one quarter of the food is of its own processing, especially meat, bread and flour. Other goods are bought direct from the producer. They are sold at cost or at cost plus 5 percent; on account of cooperative competition a rebate of 5 percent is paid to consumers at Christmas. Most of the company stores, however, buy their trademarked goods through the cooperative Vereinigte Werkskonsumanstalten, G.m.b.H., which was organized in 1922, during the compulsory period, to get sugar and the like on the same terms as the consumers' cooperatives.

Since the latter part of the nineteenth century a growing realization of the importance of guaranteeing the food supply of the urban consumer, with regard to both quality (protection from disease and from adulteration) and price, has occasioned the revival of government supervision of the food trades. The movement reached its climax during the World War, when government control and even government operation of many branches of the food industries became almost universal. Although such control was relaxed when more normal conditions were reestablished it has not been abandoned. Publicly authorized bodies in France and Germany can establish fair prices for various necessities, and Great Britain has passed a bill giving the Board of Trade greatly increased powers of investigation and control.

INEZ POLLAK

Food Distribution in Russia. In pre-war Russia the problem of food distribution was comparatively limited in scope. Except in periods of famine, when public relief was necessary, the overwhelming mass of the rural population subsisted in the main on locally grown breadstuffs supplemented by potatoes to a varying degree depending upon locality and the relative prosperity of the household. Because of sales in the autumn forced by the need for ready cash, purchases of grain during the winter and spring by a great part of the peasantry had become an essential element in the village economy even in the regions with a grain surplus, but these did not involve any processes extending beyond the home village or nearest country town. The limited demand for meat, vegetables and dairy products was supplied locally to an even greater extent; salt, tea and sugar were practically the only articles for which the peasant was dependent upon a broader market.

With the increase in the number and size of cities a domestic grain trade developed out of the earlier export trade. The primary problem here was that of reaching out into the country for whatever portion of the crops could be secured from large numbers of greatly scattered producers, including millions of peasants and village traders. A vast army of small dealers, operating independently or to a small although increasing extent as agents of large firms or commercial banks, collected and shipped small lots of grain, perhaps a carload or two at a time; having no working capital, they operated entirely on credit and were interested primarily in a rapid turnover.

Geographically the most important movement was that from the grain producing sections in the south and east of European Russia to the consuming areas in the north and northwest and also to the industrial centers within the producing areas. The rush on the part of producers and dealers for immediate disposal of the grain, the lack of country elevators and the miserable condition of the country roads, which were the weakest point in the grain movement, caused a strain on the railways and resulted in annual congestion and the accumulation of stocks of grain on railway platforms. The uneven distribution of railway facilities, with about two thirds of the mileage concentrated in the west in about one fourth of the area of European Russia, was becoming an ever more serious handicap to the grain movement as the importance of the agricultural output of the eastern sections on both

sides of the middle Volga increased. Water transportation played a secondary part; the most important movement was up the Volga, to and from the large flour milling centers along the river, which supplied about one fifth of the commercial output; but low waters in the summer and the early advent of winter interfered with its development.

The local markets, fairly important even for the grain trade, played an even larger part in the distribution of other agricultural produce. Only the two capitals and a small number of other leading cities derived the bulk of their meat supply from large scale receipts of cattle fattened for the market in the south and east; they also received shipments of fruit, vegetables and dairy products from distant regions. Elsewhere local markets were the primary source of supply. In 1913 less than 25 percent (including meat in terms of live animals) of the total number of cattle slaughtered were transported by rail; for sheep the proportion was less than one eighth. Since there were virtually no cold storage facilities or refrigerator cars, long distance movement of perishable goods was very limited. Butter shipped by rail for domestic consumption amounted in 1913 to about 150,000,000 pounds. Nearly one half of the milk supply of the two capitals and a large proportion of other dairy products were provided by a few large firms and procured from suburban farms, while the rest came from peasant deliveries, which constituted almost the sole means of distribution in other cities. By far the greater part of the vegetable supply came from suburban sources.

The old forms of distribution were destroyed in the course of war and revolution. The successive army drafts and the growth of the urban population produced within a very short time a tremendous marketing problem. The railways, inadequate from the earliest stages of the war to meet the food requirements of the industrial areas, taxed beyond capacity by the movement of troops and army supplies in the same western and northwestern direction, steadily deteriorated after the confusion of the retreat and evacuations of 1915; their complete collapse after the revolution accelerated the disruption of interregional intercourse. In the years 1918 and 1919 the occupation of the Ukraine, first by German troops and later by the White armies, and the civil war in the southeast, the Volga region and later in Siberia cut off the greater part of the productive agricultural area from the Soviet Republic. The intraregional exchange relations

between city and country were equally disturbed as the incentive for selling their produce diminished with the increasing money revenues of the peasants and later vanished completely because of the scarcity of manufactured goods. By 1920 all regular markets had disappeared and the economic ties between the several regions had completely disintegrated.

Beginning with the autumn of 1915, the shortage of food in the cities had led to public intervention in the marketing process. Local municipal and military authorities enforced the rationing of scarce food articles, the regulation of the prices of essentials and local export embargoes on specified products. Even such measures as direct sales of certain articles by public bodies, the provision of food to employees in munition plants by the army administration and to workers in other establishments by the employers were not uncommon before the revolution. Local effort, however, was poorly coordinated and there was a bewildering variety of rationing and price standards and of methods of enforcement. Measures designed to secure greater uniformity were enacted by the Provisional Government, but it was unable to make them effective because of the steady deterioration of the transportation system and chaotic political conditions. In the following period of war communism organized distribution became the most essential function of the state. A rigid and uniform system of distribution based upon consistent class discrimination was administered in accordance with a central plan by the local agencies of the Commissariat of Food Supply working through the medium of consumers' cooperatives, which had been transformed into distributive organs of the state with membership made compulsory.

The gradual extension during the war of government purchases of produce, particularly grain, marked the beginning of those concentrated acquisitions from the producers which have continued in one form or another ever since. The basic unit of the government purchasing machinery was the country "delivery point," where the grain is received from the producers of the surrounding countryside, thence to be taken to railway stations or river ports for shipment in large lots; all the later systems of public grain purchases have more or less followed this arrangement. Private grain trade, which was progressively curtailed from the beginning of the war, was abolished by the "grain monopoly" act of March, 1917, under which all agricultural surpluses in excess of the fixed requirements of the producers were to be delivered exclusively to public food supply agencies at fixed prices. Yet the grain monopoly was not fully carried out until 1918, when the systematic aid of armed force was called into play and committees of the "village poor" had been set up to assist the agencies of the Commissariat of Food Supply in requisitions from the richer peasants. Manufactured goods, whenever available, were offered in exchange for agricultural produce to communities rather than to individuals, the manufactured articles being distributed among the village poor in payment for products requisitioned from the kulaks. These exchanges were almost entirely in the form of barter; it was not permissible to pay in cash for more than 15 percent of manufactures delivered to a community. In addition labor organizations were authorized to send armed detachments of workers into the country to requisition foodstuffs, the supplies thus obtained being divided equally between the commissariat and the respective organizations which received the food as part of the quota allotted to

While the methods of war communism were substantially effective in extracting food from the producers, the condition of the railways and the appalling chronic shortage of food interfered with interregional distribution according to the general plan. Nor did the state agencies succeed in supplying fully the demands of the city population, even at the miserable standards of those times. Thus in 1918-19 they provided only about 46 percent of the total bread supply of the urban centers in the grain producing areas and approximately 38 percent in the consuming areas; even in 1920 they supplied less than 60 percent of the urban consumption for the country as a whole. The rest was secured by a variety of scattered individual transactions known as "bagman's" trade. The bagmen—petty traders, peasants trying to barter their produce against needed articles in the city or at the source of production or city consumers going out into the country to barter valuables, old clothes, textiles and similar articles for food-first emerged before the October revolution; but they became much more numerous as the rigors of war communism increased. Bagmen's trade, although alternately suppressed with extreme severity and allowed a fair degree of freedom, while overtaxing the meager transportation facilities, interfering with planned distribution and adding to the general chaos, nevertheless played an indispensable part in the food supply of the cities.

The restoration of the market as the medium of distribution was one of the principal objects of the New Economic Policy inaugurated by the act of March 21, 1921, which abolished the grain monopoly and substituted for the requisitioning of producers' surpluses a food tax payable in kind. The restoration was at first but a partial one, as the food tax was designed to serve as the chief source of city supply. Although assigned a subsidiary role in the food supply, the private food market began to expand as soon as the direct sales by the peasantry were resumed; and successive enactments allowed greater latitude to private trade. With the remarkably rapid rehabilitation of the railways the movement of goods on a nation wide scale was soon reestablished. With the stabilization of the currency, completed in 1924, the substitution of an agricultural tax payable in money for the food tax, the abolition of the Commissariat of Food Supply and the restoration of national economy as a whole to a monetary basis food distribution came to consist of a series of commercial transactions.

At no time, however, has distribution under the Soviet regime reverted completely to pre-war forms. Since the functions of public bodies as agencies of distribution had never been abandoned, state and cooperative organizations had a substantial share in the commerce of foodstuffs even in that initial three-year period of the New Economic Policy when they operated practically on a basis of free competition with private trade. Beginning about 1924 public agencies began to reassert their leadership and an aggressive policy of restriction of private trade was adopted, designed to bring about an extension of state planning and regulation of the food supply and a gradual socialization of distribution, chiefly through the agency of the cooperatives, which had become voluntary organizations operating by commercial methods. With the aid of such weapons as its general administrative and taxation powers and control of large scale industry, credit and transportation the state succeeded in subsequent years in greatly reducing the share of private traders in the turnover of foodstuffs. In 1928 by far the greater part of the commercial grain crop was handled by public agencies under a system of concentrated purchases at fixed prices. Some of these agencies were state controlled, but a growing proportion of them were cooperative organizations. There had been a similar, although belated and limited, extension of the share of planned public purchases of meat. dairy and poultry products. Also at the distribution end there was a steady expansion of the operations of public agencies, especially those of consumers' cooperatives.

Socialized trade was supplemented, however, by private trading, which became increasingly precarious, and by purely local transactions, which were neither regulated nor planned. Except for export, army and state reserve grain more than 35 percent of the commercial grain crop of 1927 still passed through private channels. About two fifths of this amount was represented by peasant sales in town bazaars and the remainder by purchases in the country by private traders. The importance of deliveries from suburban points and of direct peasant sales of milk, eggs, vegetables and especially meat had become even greater than before the war; and in the regular wholesale markets private traders still transacted in 1928 over one half of the total meat sales of the entire country, about 50 percent of the butter trade and about one third of the egg trade. Practically all of the fruit and vegetable trade was in private hands. In retail distribution private trade had continued to grow in absolute size, and even its relative importance had remained large not only in the turnover of such articles as were produced or processed in private establishments, comprising about one third of the total capital invested in food indusries, but also in the distribution of such products of state and cooperative industries as sugar, salt and tea, which the public agencies were not equipped to handle fully. There had thus developed a dual market, with a dual range of prices: a cumbersome and slow moving cooperative machinery and, partly competing with it and partly supplementing it, a profiteering private trade; in addition there was of necessity much dependence upon scattered local movements and transactions. It was an essentially unstable and unreliable system causing violent fluctuations in the food supply and in the workers' consumption budget, but until the grain crisis of 1928 it involved no general shortages so acute as to necessitate rationing.

Since the launching of the Five-Year Plan in 1928 distribution policies have been blended with the program of socialization and enhanced industrialization. The very problem of distribution has assumed new aspects in regard to scope, geographical trends, technical equipment and methods. The Five-Year Plan anticipates an increase of 23 percent in the urban population. The expansion of old industrial centers has been

accompanied by a mushroom growth of vast settlements at the new projects under construction and by the rise of new industrial regions. The program of agricultural transformation involves a high degree of specialization, carried to the extreme in the state operated grain farms (sov*khozy*) and to a smaller extent in the collective farms (kolkhozy). Regional specialization in agriculture is also projected and carried out on a scale which means a complete recasting of the agricultural map of the country. It was estimated that as a result of this specialization peasant purchases of grain through the market would increase twofold in the course of the fiveyear period. The building up of large scale farming also implies a change in the methods of procuring agricultural produce.

The actual situation in the past few years has been greatly complicated by the overthrow of old social relationships incident upon the application of intensive revolutionary effort to the reconstruction of industry and agriculture and by the acute shortage of food. Food rationing was reintroduced in 1928 and applies now in one form or another to all essential foodstuffs. It is based not only on the general principle of class discrimination but also on an elaborate schedule of preferences for the benefit of individual industries, localities and plants of momentary crucial importance and of groups of workers to whose labor performance special value is attached, such as "shock brigades." Because of the food shortage and of the feverish promotion of agricultural exports an immediate increase in the volume of commercial crops became necessary; and the collectivization of agriculture was thus stimulated at a much faster pace than was anticipated. The struggle for the extermination of the *kulaks* and its counterpart in the cities, the renewed drive against private trade, have resulted in the destruction of many of the former channels of food supply and distribution. Marketing processes which had been established under the NEP have been suddenly displaced by a system of organized distribution, whose technical apparatus has been lagging behind requirements. Emergency situations have been constantly arising, calling for departures from general plans and policies.

The central agency of food supply and distribution is now the Commissariat of Supply, created in 1930. It has charge through its specialized constituent bodies of the construction and operation of state controlled food processing industries, including the large scale projects now

under way in meat packing, canning and preserving, which are expected eventually to become the basis of modernized distribution. It also plans and directs the acquisitions of grain, cattle and to some extent of other agricultural produce; this planning has now become specific and direct, so that individual villages are assigned their quota of deliveries. At the other end the commissariat controls the allotment of the food supply of the cities, industrial settlements and construction camps, that of the non-agricultural portion of the rural population and a substantial part of the supply of specialized agricultural producers, such as workers on state farms and cultivators of industrial crops. Cooperative organizations, while preserving their autonomy as agencies of organized producers and consumers, have become at the same time organs of planned distribution and as such operate under the supervision and direction of the Commissariat of Supply and in conformity with the plans laid out by it. While consumers' cooperatives have been assigned the leading part in distribution, the procurements from producers have now become for the greater part a function of agencies of agricultural cooperation, of which the most important is the Khlebozhivotnovodtsentr. It has charge of procuring grain and cattle from the villages and collective farms, which it turns over to the agencies of the state. Its role has grown with the great extension of the practise of "crop contracting," which now applies virtually to all collective farms and to a growing number of peasant groups; it was expected that 85 percent of the commercial grain crop would be secured by this method in 1931. Instead of providing for consumption goods in exchange for a share of the prospective crops the contracts now call for the supply of production goods.

There has been a complete change in the methods of acquiring agricultural produce. While the "extraordinary measures" of coercion resorted to early in 1928 were repealed later in the same year, free peasant trade has never since been restored and a measure of pressure has been attendant upon the process of procuring agricultural products. To make sure that the kulaks supply their assigned quotas, that the collective farms and peasant groups live up to their obligations under the contracts, and to induce them to deliver exclusively to the state the greatest possible portion of their crops in excess of those contract deliveries "civil effort" is enlisted. This has been supplied by local village Communists and members of Communist Youth, by shock brigades delegated from the cities, by the village Commissions of Aid to Grain Procurements elected by the local "poor and middle peasants" and finally by the machine and tractor stations. The latter are in direct touch with the producers in the field and secure for the state agencies the part of the crop turned over to them in payment for their services; they have also been following the practise of stipulating in the contracts that producers are not to deliver any portion of their crops to private traders.

With the rapid increase in the size of the commercial grain crop its movement from producing areas to consumption centers, which has been expedited to an even greater extent than before the war, encounters considerable difficulties in regard to transportation and storage. The provisions of the Five-Year Plan for the improvement of transportation facilities were inadequate even for the original requirements of the plan. Since then the railway system, particularly its rolling stock, has been overtaxed by the enormous increase in freight caused by industrial and agricultural expansion. While the construction of the Turkestan-Siberian railroad stands as a positive achievement, little has been either planned or accomplished in regard to the old problem of improving facilities for the movement of grain from the producing areas in the east, which has in the meantime been aggravated by the importance assigned in domestic supply to grain from the Urals, Siberia and Kazakstan. Water transportation is still far below the pre-war level. Although there has been some construction of roads to connect the large state farms with railway stations, local transportation on the country roads is still the weaker link of the grain delivery system.

The problem of grain storing has been a serious one since the large scale government purchases during the war, when only port and terminal elevators were available. Since 1925, when the construction of country elevators was first begun, facilities have been greatly increased. Country elevator construction, which under the plan was to secure a total capacity sufficient to accommodate 50 percent of the commercial crop by 1933, has been since expanded and in addition hundreds of warehouses have been hastily constructed at the country "delivery points" by the grain producing organizations. The total warehousing capacity is still insufficient, however; only some 15 percent of it is in mechanically equipped elevators, and the other warehouses are often defective or inconveniently located. Many of them become obsolete and are being discarded; so also do many "delivery points" of the old type, as concentrated deliveries by collective farms or by "red caravans" of peasant groups are becoming more important. A recent tendency has been to promote direct deliveries to railway stations, necessitating a hasty endeavor to extend the warehousing capacity available there. Construction of elevators at state farms has barely started; these were not called for by the plan but have proved necessary in view of the transportation difficulties encountered in 1930.

The distribution of other foodstuffs was hampered by the technical deficiencies of the apparatus as well as by other factors. Of these the most disturbing has been the wholesale destruction of livestock by peasants (no less than one third of all animals and fully 50 percent of hogs) during the excesses of forced collectivization in 1929 and 1930. Pending the execution of the far reaching program of reconstruction of animal husbandry on the basis of large scale farming, with a rational distribution of animal raising for meat in accordance with the needs of the projected meat packing industry, the meat supply of the industrial centers has been unbalanced. To relieve the shortage long haul shipments have become necessary on a scale never anticipated; this is particularly evident for shipments of cattle and sheep to the Moscow region from the Caucasus, Siberia and Kazakstan in substitution for hogs from central Russia and the Ukraine.

An analogous situation has developed in regard to dairy products and vegetables. The large suburban dairy and truck farms of pre-war times had never been restored, and the peasant farms which flourished during the NEP, fair sized establishments employing hired labor, went under in great numbers in the drive against the kulaks. While the long term program of development of large scale vegetable farms in the industrial regions is under way and while an effort has been made of late to concentrate upon suburban development, the cities are still dependent upon distant regions for their vegetable supply to a greater extent than ever before. Although a great effort is being made to build up a system of cold storage warehouses and refrigerator cars, such construction is still in the initial stage. In addition the facilities for sorting, handling and distributing perishable products are very scanty, so that their movement is in a very precarious condition.

In the distributive trade the task of consumers' cooperatives as originally contemplated under the Five-Year Plan consisted essentially in extending, improving and modernizing facilities of retail trade, lowering costs and prices and securing an elasticity of methods in conformity with the great variety of local needs. The chain department store was set as the basic unit, and this has tended to become the predominant type of organization. In the rural sections it is a district store supplied from a regional warehouse, with branch stores in individual villages. In the cities in addition to the general department stores district department chain stores have received most attention; these include both general and special stores-particularly, specialized food stores—as well as a net of stands, tents, kiosks and traveling stores, especially in outlying factory sections, at railway stations and docks. The cooperatives were expected to bring about a radical improvement in the internal organization of the stores, to develop the practise of home delivery to consumers and to secure a gradually increasing control over the trade in the town bazaars, especially in provincial cities, with a view to transforming them eventually into modern markets. It was anticipated that in the course of the five-year period they would attain a dominant position in retail distribution; their share in the total retail trade was to advance from 57 to 76 percent, while that of private trade was to decline from 25 to 9 percent. Retail trade of state controlled organizations, with an increase of 38 percent in absolute volume, was to play a subsidiary and gradually diminishing part. A particular effort was to be exerted in expanding cooperative activities in food retailing; agricultural products were to increase from 30 to 40 percent in the total turnover of urban cooperatives. The program also provided for an expansion of the productive activities of consumers' cooperatives. Cooperative baking, which had supplied from 60 to 90 percent of the consumption in the larger cities, was to be extended so as to cover fully the supply of all cities with a population of over 100,000 and up to 75 percent of that of cities of 50,000 to 100,000. This was to be accomplished largely through the construction of more "bread factories," with the gradual elimination of the more obsolete old type bakeries. There was also to be a great expansion in the field of public feeding; the cooperatives were to establish restaurants, cafés and public kitchens dispensing prepared

meals for home consumption, school luncheons and the like.

A program of this magnitude, requiring so high a degree of initiative and flexibility, was imposed upon the consumers' cooperatives, which were handicapped by a scarcity of trained personnel and a poorly developed apparatus. They were not prepared to carry out even the original program; still less were they able to cope with the problems of the past few years, which have altered and complicated their task and changed their position in the economic system.

As a result of the forceful suppression of private trade instead of its gradual elimination as had been planned the demand upon the cooperatives has increased more rapidly than was anticipated. Practically all private stores in the cities, including food stores, have now been closed. There has been a sporadic revival of bagman's trade, alternately tolerated and suppressed, expanding and contracting. Peasant sales in the bazaars, while not prohibited directly, have been checked to some extent by the danger they imply for the peasant of affecting his official status in regard to class allegiance. The cooperative organizations, suddenly placed in a quasi-monopolistic position, have thus far proved inadequate to substitute effectively for the various private agencies, especially in the supply of perishable articles.

The requirements of stricter control arising from the food shortage and the system of rationing have brought about changes in the methods and structure of consumers' cooperatives. In 1928 sales to non-members were restricted and consumers were assigned to specific stores; in 1930 there were established "closed workers' cooperatives," exclusively attending to the supply of workers at individual plants; factory stores have been actively promoted, designed not only for the stricter enforcement of the "class principle" in distribution but also to provide for a partial elimination of money in the payment of wages. A parallel development has been the provision of dining halls at individual plants.

The problems of food supply arising from the growth of construction camps and new industrial settlements have assumed proportions never anticipated before. The situation under conditions of general food shortage has had to be met by emergency measures, with a great deal of improvisation both in regard to retail distribution in general and to the development of public feeding in particular. The latter, originally regarded as a phase in the gradual socialization of

communal life, has become a problem of first and most urgent necessity in the new settlements. It has also assumed an unexpected importance in the cities and old industrial centers, since the laboring population has grown out of all proportion to the meager housing facilities and since many women have been enlisted in industrial work. The failure of the cooperatives in the field of public feeding led in August, 1931, to a transfer of these functions to the organs of the Commissariat of Supply in the most important centers.

Of all Soviet organizations consumers' cooperatives have been the slowest to adapt themselves to a situation full of emergencies and calling for a great capacity for manoeuvring. Denunciations of their lack of militant initiative have become common. Their failure has been officially stated more than once, and it has caused in the past few years several programs of general reorganization to be enacted, which, however, have been slow to materialize; the deficiencies of technical equipment have been the chief obstacle. The latest reform, that of May, 1931, calls for the reorganization of the Centrosoyus, the central union of consumers' cooperatives, into a body of specialized agencies composed of wholesale trade concerns operating on a strictly business basis; these include, as far as the commerce of foodstuffs is concerned, three wholesale concerns dealing respectively with groceries, fruit and vegetables, and dairy products. In the several constituent republics and regions central retail concerns are to be established, likewise with specialized functions; they are to handle groceries, fruit and vegetables, dairy products, meat and poultry, pastry and confectionery goods and the food supply of children; all existing specialized food stores have been transferred to these concerns, and they are required to build up a system of shipping and warehousing of their own.

The same order confirms and extends the functions of consumers' cooperatives in procuring and processing agricultural produce for the supply of their members, either through acquisitions from producers or through the development of suburban farms of their own. These activities, not contemplated originally, have been gradually growing in importance. Over 300,000 hectares of suburban lands were planted to vegetables in the spring of 1931 by various city and regional unions of consumers' cooperatives. The object of this effort, however, was largely defeated by the general unpreparedness of the

organizations to handle the crop, by the lack of warehousing and shipping facilities and by the absence of provisions to finance their construction.

There is every indication, however, that a growing reliance will have to be placed upon the consumers' cooperatives for a large portion of the city supply. The shortcomings of centralized supply have caused since the spring of 1931 a distinct shift of emphasis from long term problems to immediate emergencies and from centralized planning to local initiative. Authority to purchase directly from producers all over the country and to build up suburban farms of their own, conferred at first upon the several regional and city cooperative unions, was later extended to the workers' cooperatives at individual plants and in August, 1931, to the several public feeding units in industrial centers. State controlled vegetable farms have been directed to contract directly with workers' cooperatives for the sale of their products, and the state grain farms have been advised lately to depart from the practise of exclusive specialization and to build up on their grounds such other forms of farming as may be required for the supply of their own workers. A number of conflicting cross currents have come to the surface since these departures, as keen competition has developed between the agencies of the central authorities and those of local organizations.

ALEXANDER GOURVITCH

See: AGRICULTURE; FOOD SUPPLY; GRAINS; MEAT PACKING AND SLAUGHTERING; FRUIT AND VEGETABLE INDUSTRY; MILK SUPPLY; DAIRY INDUSTRY; SUGAR; PLANTATION WARES; CANNING INDUSTRY; FISHERIES; HOTELS; RESTAURANTS; LIQUOR TRAFFIC; NUTRITION; STANDARDS OF LIVING; COST OF LIVING; FOOD AND DRUG REGULATION; WEIGHTS AND MEASURES; INSPECTION; HOURS OF LABOR; MARKET; MARKETING; RETAIL TRADE; AGRICULTURAL MARKETING; AUCTIONS; COMMODITY EXCHANGES; FAIRS; MIDDLEMAN; MARKETS, MUNICIPAL; COOPERATION.

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FOOD SUPPLY. In every age, with perhaps the exception of the present, the problems of food and food supply have been serious matters of

public concern. The part played by food in the myths and folklore of primitive and early historical peoples is well known; the anxiety felt over the adequacy of the food supply is written into the legal codes of almost every society well into the nineteenth century. In prehistoric times the inadequacy of the food supply acted as a control on population growth; during antiquity the course of civilizations was largely shaped by the same problem; in the Middle Ages a desire for certainty as regards food helped form the institutional life of Europe. Only in modern times has this feeling of uneasiness been relaxed; today one of the chief distinguishing marks of civilization is the existence of a technological basis for an adequacy, if not a surplus, of food.

The leading reasons for this change are worth summarizing. In the last two hundred years the science of agriculture has made great strides as a result of crop rotation (with the presence of a legume in the rotation), intensive cultivation and the growing use of chemical fertilizers. The application of machinery to farming and to allied processes has hastened technological changes. The development of rapid transportation on both land and sea, the appearance of a world wide machinery for credit and exchange, the creation of land banks and other devices to make farm financing easier, have changed the production situation. Refrigeration, the opening of new grasslands to cultivation, first in the United States and then in Canada, Argentina, Australia and castern Asia, and the development by irrigation and dry farming of areas possessing seasonal or inadequate rainfall have created new sources of supply. Since the beginning of the industrial revolution the world's population has grown at an extraordinary rate; yet, thanks to agriculture, transportation, credit and exchange, it has been fed comfortably and in some regions with a plenty which has been experienced before only on rare occasions and by the privileged classes.

Nevertheless, there continue to exist certain factors which, if they do not imperil the food supply of the world, make its status, particularly in separate regions, less certain than is commonly supposed. Undoubtedly the law of diminishing returns places barriers in the way of an ever growing application of capital and labor to the production of foodstuffs unless governments either resort to subsidy in order to assure the continuance of a farming class or else make food supply a state monopoly. Under the present

capitalist system difficulties of a financial nature. arising largely from the inability of many agricultural peoples to maintain their purchasing power, may affect the food supply. Natural threats to the food supply still function: droughts, floods, excessive moisture, insect pests, plant diseases. War as a destroyer of agricultural lands and as a disrupter of the mechanisms of transportation and exchange has its influence on belligerents and neutrals alike. Hidden hungers (scurvy, beriberi, rickets, pellagra and the like), due to dietary deficiencies, still carry off their victims. So great a future growth of the world's population as to tax seriously the land's power to produce the needed food resources is probably no longer to be regarded as a serious possibility.

Although the food supply of the modern world is plentiful, it can scarcely be said that all peoples enjoy diversification. At least 60 percent of mankind's diet is made up of grainsrice, wheat, rye, barley, oats, corn and so on. The remaining 40 percent must be divided among the legumes, sugars, vegetables and fruits, nuts and other oil producers and finally meats. The Orient subsists almost entirely on rice; the customary fare of many European agricultural laborers has been and is still largely rye bread. Fully half of the world's population eats very little meat; in fact, it has been estimated that the world's production of meat is by weight but one fifth of the world's production of wheat alone. In new countries where land is cheap or in sections of the world like western Europe where the standard of living is sufficiently high to permit of the importation of animal fodder, the raising of animals for food is economically possible. These factors help explain the large consumption of meat in countries like the United States, Canada, Argentina, Australia, the United Kingdom, Germany and Denmark.

Raymond Pearl (The Nation's Food, ch. ix) has found that the average annual use of food in the United States during the period from 1911 to 1918, in terms of caloric value, was divided into the following proportions: grains, 34.68 percent; meats, 21.63 percent; dairy products, 15.26 percent; sugars, 13.24 percent; vegetables, 5.32 percent; oils and fats, 4.82 percent; fruits, 2.20 percent; poultry and eggs, 2.02 percent; olcomargarine, 0.42 percent; fish, 0.41 percent. Among the grains wheat led easily; among the meats, pork. The annual yield of food in the United States was 26,068,700 metric tons, making an annual per capita yield of 2.3 metric tons.

In terms of energy the average adult male American consumed 4290 calories daily as compared with the 3000 calories stipulated as adequate in the typical food chart and the 3358 calories consumed per man in the United Kingdom during the war year 1918.

The extent to which the modern world is dependent for its food supply upon the international mechanisms of transportation and exchange is revealed by an examination of the far flung distribution of the principal food bearers entering into commerce. It is true that the larger part of the world's food is produced in those lands where it is consumed; nevertheless, complete self-sufficiency on national lines may be said to exist nowhere and interdependence on a world basis is increasingly becoming the rule. Even Java, the Philippines and the Straits Settlements must import rice. Brazil, whose chief industry is agriculture, must import wheat and meats; the same is true of Cuba. A large part of the temperate zone is dependent upon the United States, Canada, Australia, India, Argentina, Russia and the Danubian countries for its wheat; Argentina exports corn; pre-war Russia exported rye and barley; Siam, Indo-China and Burma export rice; Cuba, Java, Hawaii export sugar; Central America exports fruits; Argentina, Uruguay, the United States, Australia and New Zealand export meats; the Scandinavian countries and New Zealand export dairy products. Because the processes of distribution function in general so competently, direct social and public interest in the food supply has been relegated to a minor place among the activities of government; but a review of the status of the food supply in earlier times quickly indicates that this attitude is entirely a characteristic of the modern period.

Ancient man sustained himself in a comparatively simple fashion: he ate what he could find and nature was his only provider. He hunted, fished, tracked down small animals and insects; he collected fruits, mosses, roots and wild honey. Not until late in his development did he learn to domesticate animals and till the soil. Nevertheless, whether merely gatherer of foods, hunter, shepherd and herdsman or agriculturalist, he quickly appreciated the necessity for storing and preserving food to provide for periods of inadequacy. Nor was the machinery of exchange unknown, as is evidenced by the presence of barter among primitive tribes today. That he did not want for food the survival of the race testifies; nor are there any indications that hunger and

famine were ever present conditions of living. This equilibrium was undoubtedly maintained largely by checks on population growth, most common of which were restrictions on sexual intercourse among married persons, abortion and infanticide. In early historical societies in order to check population growth and to feed settled communities there was to be found a survival of primitive customs existing side by side with conscious planning on the part of governmental bodies. Abortion and infamicide were generally practised throughout antiquity and indeed continued to exist in China and India until quite recently. In addition, governments assumed as one of their major functions the task of providing agencies to safeguard and distribute the food supply. In Egypt, China, Greece and Rome one or another of the following measures was always found necessary: the erection of royal granaries for purposes of storage against lean harvest years, the encouragement of colonization for the purpose of opening nev: agricultural areas, military conquest to assure the steady flow of agricultural imports, the equipment of navies to convoy the grain ships or even monopolization by the state of the handling and distribution of grain. Despite the lavishness of nature, as in the case of the Nile; despite the widening of the area of supply, as in Greece; despite the greater agricultural skill of man, as in Rome, where crop rotation came to be practised, the threat of hunger was always real and the adequacy of the food supply had always to be considered. The decline of many early historical societies was due in no small degree to their inability to solve successfully the problem of food supply.

In Egypt royal granaries were early established, and the role of the collector and controller over the surplus grain of the kingdom has been made familiar by the Biblical story of Joseph. In China as early as the fourth century B.C. not only did the government maintain granaries for the storing of surpluses but it also inspected and graded the rice crop and fixed prices. In Greece and more particularly in Attica, where a primitive pastoral and agricultural economy had evolved into a metropolitan one, preoccupation with the food supply had become the leading concern of statecraft by the fifth century B.C. Colonization in Asia Minor, Sicily and Italy was encouraged; an attempt was made to establish a foothold in Egypt; friendly relations were set up with the grain growing countries of the Euxine; a large navy was provided to keep the straits open; the importation and ex-

portation of foodstuffs were closely regulated; agencies were created to supervise in every detail the warehouses of the emporium, to regulate grading and weights and to check the hiding of stocks, engrossing and price inflation. In the Hellenistic period the state was compelled to proceed from encouragement and regulation to direct participation in the grain trade. In the third century it was not uncommon for state officials to engage actively in the purchase and distribution of foodstuffs; at Samos, for example, the state assured a steady flow of food at low prices out of a fund especially set up for that purpose; at Tauromenion in Sicily there existed a complex bureaucracy made up of buyers, receivers and wardens handling sales of grain.

The record of Rome was not dissimilar. In her early history, thanks to the existence of a fertile soil and the development of peasant proprietorship, Rome had enough grain for her own needs and for the exportation of surpluses into Greece. But just as a metropolitan economy was in process of developing, the soil of Latium began to decline in fertility and by the third century Rome was embarking on the same imperialistic career that had made the Athenians at home in the whole Mediterranean basin. The wars with Carthage were fought over Sicily, which had become one of the great granaries of Rome; the Roman sphere later was extended into Egypt, Spain and the Pontus, largely for the same reason. During the reign of Augustus Egypt had become so important to the empire that the land of the Nile was declared forbidden ground and as such was to be kept closed to all Roman knights and senators unless permission had been expressly granted by the emperor. Tacitus indicated that the reason for such a policy was no hidden one: "It was seen that whoever made himself master of Alexandria . . . might with a small force make head against the power of Rome and, by blocking up the plentiful corn country, reduce all Italy to a famine." Just as Athens had seen the necessity of keeping the sea lanes open, so Rome realized that the land routes were the key to her power and through a ramified system of public roads was able to maintain that steady flow of foodstuffs required by her great urban populations. As N. S. B. Gras notes: "In more remote parts (of the Empire) lands would be devoted to the production of such commodities as could be transported long distances, livestock, fowl, wine, and olive oil. . . . The trade in these commodities was not only of the local town type, but interurban

and even international" (A History of Agriculture in Europe and America, p. 70). Nevertheless, the empire declined and even the desperate effort of Diocletian in the fourth century of the Christian era to save the towns by fixing prices for all foodstuffs was unavailing. Whether the continued sapping of the soil destroyed the towns by steadily limiting the food supply, whether the slowing up of trade due to the flight of hard money eastward destroyed the markets for agricultural surpluses, whether growing internal disorder led to a contraction of the economic round—whatever the chief cause for the disintegration of the empire, a declining food supply played its part. In the Eastern Empire a similar process of gradually increasing difficulties in maintaining the food supply led by the fifth and sixth centuries to the conscription of men for membership in the guilds responsible for the food of Constantinople.

For fully eight hundred years the Europe of the Middle Ages sustained itself because of controls exercised on population growth and by means of a self-sufficing economy. With the spread of Christianity abortion and infanticide had been abandoned, but for them were substituted celibacy and late marriage. Hunger, disease and war exacted their victims more frequently than ever before, so that Europe's population grew only slightly, if at all. The manorial system furnished security, but it checked enterprise and prevented the raising of agricultural surpluses. The three-field system, which was to be found everywhere in Europe and had not been extinguished in some areas as late as the middle of the nineteenth century, definitely hobbled agriculture: it committed all tillers of the soil in a village to the growing of the same winter or spring grains; since animals were few, it had no adequate means of sustaining the soil's fertility. Throughout the Middle Ages a commerce of a sort continued to exist of course, for the manorial system could not entirely satisfy all its wants; salt, iron and a few rude medicines, for example, still had to be obtained from abroad. In the occasional towns therefore there were to be found regular markets where exchanges and purchases might take place; there were also periodic fairs where wares from distant lands were displayed and bills of exchanges traded in; but except for spices and a few other luxury products the food supply was almost entirely local.

The end of the manorial system meant the end of this self-sufficiency; and the reappearance of

a metropolitan economy called again for social regulation of food supply in order to assure adequacy and to protect the consumer against extortion. At the same time an increase in supplies became possible as a result of new agricultural knowledge. The breaking down of the enclosures, in England particularly, was accompanied by a veritable agricultural revolution. The growing of field grasses and root crops and the fattening of barnyard stock, followed by the introduction of crop rotation, gave to the expanding world of the sixteenth, seventeenth and eighteenth centuries the assurance of more food. But this was deemed not to be enough. Consequently, with the reappearance of the towns and trade there arose in varying degree an active interest on the part of governments in the food supply.

Very early in England corn laws were passed to check the exportation of grain except in years of great plenty, a system of licenses was employed and the grain producers were required to sell their products in the nearest market towns. Under the Tudors licensing was abolished and for the protection of the native growers importation was regulated. The consumer, however, was not neglected, for laws against engrossing and speculation found a place on the statute books. London was not content to rely entirely on the action of the national government, and for a hundred years in the sixteenth and seventeenth centuries its magistrates had the grain trade of the city under their control. The importation of grain was encouraged by the fixing of a minimum price, non-citizens engaged in the foreign grain trade were given special considerations and a municipal granary was operated. The English corn laws, heavily taxing foreign grains when the domestic price was low, were in effect abolished in 1846; and from 1849 onward England was admitting grain duty free, thus confessing the inability of native agriculture to furnish the food supply required by the country's growing urban population.

In France under the ancien régime the story was much the same: every effort was made by the government to maintain a steady supply. In the words of J. H. Clapham: "Since the traditional rotation of crops... had grain supplies primarily in view... government influence had generally been thrown into the scales in their favor. Any variation in cropping which seemed to threaten the local supplies of cereals had been discouraged. Government regulated not only the rotation of crops but also everything connected

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with grain, from sowing to market. It was not to be hoarded or wasted; its price was carefully supervised" (The Economic Development of France and Germany, 1815-1914, Cambridge, Eng. 1921, p. 10). In France it was the political revolution which ended this system of control and left the peasant free to follow any vagary he pleased.

Thus it may be said that during the nineteenth century for the first time in history governmental concern over the food supply, as far as provision for its adequacy went, was relaxed. Certainly governments did not proceed to leave every operation in the complex round of food supply, from growing to distribution, to chance or individual initiative. It is to be noted, however, that the emphasis of its interest shifted from concern over adequacy to concern over national security and the protection of the growers of foodstuffs as enterprisers. From these motives, the one political, the other economic, have sprung most of the controls over the production and distribution of food supply in existence in the modern world. The agricultural tariffs inaugurated in France and Germany in the 1880's, when world prices were generally declining, were due to the fact that the acceptance of war as an instrument of national policy called for preparation against the time when food imports might be cut off as a result of the control of the seas or the investing of the frontiers by a hostile navy or army. Production bounties and export bounties were probably prompted by the same motive. On the other hand, plans looking toward restrictions on the production of agricultural staples, valorization schemes and the formation of international cartels—all with the assistance or the blessing of governments-have had as their end not the furnishing of the consumer with an adequate supply but the guaranty to the grower of a fair, if not a monopoly, price.

It is to be observed that in one field of

activity, namely, supervision of the quality of food, governmental interest has been extended in modern times. By pure food and drug laws; by providing for the inspection of livestock and of dressed meats; by supervising weights and grading; by penalizing misbranding; by furnishing local inspection services of bakeries, restaurants and the like, governmental agencies have endeavored to protect the consumer from misrepresentation, extortion and unclean or diseased foods. Since the middle of the nineteenth century in every occidental country an increasingly widespread series of such agencies has been set up.

In war time even modern governments have proceeded to assume extraordinary powers over the food supply. In Germany during the World War the food supply became in every particular a government monopoly; every step in the process of production and distribution was under government control. In England by 1918 (except for the rationing of bread) the same condition had been effected. In the United States by the Food Control Law of August, 1917, the president was given dictatorial powers over the entire food supply after it had left the farms. This right was never fully exercised; the federal government resorted only to voluntary agreements with trade groups, a licensing system of all food dealers (except the retailers), and the fixing of basic prices (i.e. prices of foods when entering trade instead of when leaving) for wheat, sugar, meat and rice.

Modern war plays havoc with the food supply of those peoples which are dependent to an extent upon international trade. Up to the World War maritime law had held that food was conditional contraband and liable to seizure only if it was clearly demonstrable that it was destined for the naval or military forces of the enemy; in February, 1915, however, Great Britain made food unconditional contraband of war, justifying her position on the ground that the German rationing scheme had wiped out the distinction be-

WEEKLY CONSUMPTION PER HEAD OF CERTAIN FOODS IN THE UNITED KINGDOM, GERMANY, AND THE NETHERLANDS, 1909–13 AND 1918 (In pounds)

	United Kingdom		GERMANY		Netherlands	
	AVERAGE 1909-13	1918	AVERAGE 1909-13	1918	AVERAGE 1909-13	1918
Bread and flour	6.12	6.57	6.44	4.06	7.25	3.06
Meats	2.50	1.54	2.25	0.49	1.50	0.44
Sugar	1 - 1	0.50	_	0.33		0.52
Fats	0.51	0.45	0.56	0.15	0.70	0.37

Source: Beveridge, W. H., British Food Control, p. 316.

tween the civil and military populations. Beveridge's figures (see table on p. 336) indicate that the Central Powers and many of the neutral nations of Europe, whose local food supplies were inadequate, were feeling real hunger in the fourth year of the World War.

But except in the case of war preoccupation with the food supply is in modern times almost entirely a matter of business and individual activity. Society proceeds on the assumption that the competitive system will furnish the foodstuffs needed, albeit wastefully. It is occasionally shocking to note that in a world whose granaries are filled to bursting with surplus grain large populations still die of starvation, and that active measures are taken from time to time to restrict production when so many peoples are compelled to live on inadequate and poorly balanced diets. Except in the case of Russia food supply generally appears to be unplanned: the consumer tries to purchase what he thinks he needs to sustain life and health, and the producer and distributor grow and market only what they think they can sell at a profit. And the profit motive brings in its train certain evils—waste of food to maintain a high level of prices, attempts at monopoly control, price wars to derange the market, the debasing and misrepresentation of foodstuffs.

Yet under the competitive system the world is fed; occasionally, as in the case of the United States, a whole population is fed well. The process from farm to consumer, the whole of which has been built up by private enterprise, is as intricate as any in modern life. Foodstuffs have to be assembled, stored, carried, graded, financed and sold. Despite the complexity of our modern life, developments in rapid transportation and refrigeration have facilitated a steady flow of foodstuffs toward consumption centers.

One is led to ask how long a modern city could continue to feed itself in the event of complete isolation. Obviously for only a brief interval, if at all, once the stocks on grocers' shelves were exhausted. On April 16, 1923, for example, the New York port possessed in its many warehouses only enough butter and cheese for one day's trade consumption, enough eggs for seventeen days, enough poultry for forty-five days. On October 22, 1927, the 339 carloads of potatoes accumulated on the tracks in the New York City area represented only a seven days' supply. The modern city is increasingly compelled to tap a growing area before adequacy in food supply can be assured. Thus New York City gets its

milk from the whole of New York state and the border counties of western Vermont, northern Pennsylvania and New Jersey; its fresh fruits and vegetables principally from New York state, California and Florida; its dairy products largely from the Great Lakes region; and its dressed meats from Chicago, East St. Louis, Indianapolis, Omaha, St. Paul and Kansas City. The average haul is from 250 miles in the case of milk to 1500 miles for fruits and vegetables.

The question of the future of the world's food supply cannot be answered with certainty, but various trends are becoming increasingly evident. In the first place the rate of population growth is decidedly irregular. In the Balance of Births and Deaths (vol. 1-, New York 1928) Robert R. Kuczynski demonstrates that the countries of northern and western Europe are rapidly approaching a stationary population. Another check on world expansion lies in the fact that comparatively sparsely settled areas like the United States, Canada, Australia and South Africa have raised the bars against continued immigration. Vital statisticians agree that a stationary population will soon be reached in the United States, certainly before the twentieth century closes. At the same time students are hopeful concerning agriculture's continued advance. O. E. Baker enumerates the following six resources as being available for the increase of agricultural production: expansion of acreage, changes in the yield per acre of both crops and field grasses (aided by the use of fertilizers, the rotation of crops and the reduction of losses due to insect pests and plant diseases), shifts in the source of power (i.e. from horses and mules to automobiles and tractors), increase in the production of milk and meat per unit of feed consumed by livestock, shifts from less productive to more productive classes of livestock (e.g. from beef cattle to dairy cattle and swine) and finally shifts from less to more productive crops per acre. In brief the danger of fulfilment of the Malthusian prediction seems increasingly remote, and for the modern world the problem of the food supply becomes more and more completely one of effective distribution.

Louis M. Hacker

See: AGRICULTURE; DRY FARMING; IRRIGATION; POPULATION; NUTRITION; FAMINE; STORAGE; GRAINS; FISHERIES; DAIRY INDUSTRY; LIVESTOCK INDUSTRY; MEAT PACKING AND SLAUGHTERING; FRUIT AND VEGETABLE INDUSTRY; CANNING INDUSTRY; FOOD INDUSTRIES; MILK SUPPLY; WATER SUPPLY; AGRICULTURAL MARKETING; GRAIN ELEVATORS; COMMODITY EX-

WAREHOUSING; INSPECTION; FOOD AND DRUG REGULA-TION; ADULTERATION; AGRICULTURAL POLICY; TARIFF. Consult: Smith, J. Russell, The World's Food Resources (New York 1919); Starling, E. H., The Oliver-Sharpey Lectures on the Feeding of Nations (London 1919); Pearl. R., The Nation's Food (Philadelphia 1920); Nasu, Shiroshi, "Population and the Food Supply" in Gini, Corrado, and others, Population (Chicago 1930) ch. ii; Vinci, F., "Statement of the Position Concerning Cereals" in League of Nations, Provisional Economic and Financial Committee, Report on Certain Aspects of the Raw Materials Problem, 2 vols. (Geneva 1921-22) vol. ii, p. 5-26; Baker, O. E., "Population, Food Supply and American Agriculture" in Geographical Review, vol. xviii (1928) 353-73, also in Far Eastern Review, vol. xxiv (1928) 407-19; Chew, A. P., "Population, Food and Imperialism" in New Republic, vol. lvii (1928-29) 85-89; Erman, Adolf, Acgypten und aegyptisches Leben im Altertum, ed. by Hermann Ranke (new ed. Tubingen 1923), tr. by H. M. Tirard as Life in Ancient Egypt (London 1894) ch. xvii; Glotz, Gustave, Le travail dans la Grèce ancienne (Paris 1920), tr. by M. R. Dobie as Ancient Greece at Work (London 1926); Abbott, F. F., The Common People of Ancient Rome (New York 1911) ch. v; Gras, N. S. B., A History of Agriculture in Europe and America (New York 1925), and Evolution of the English Corn Market from the Twelfth to the Eighteenth Century (Cambridge, Mass. 1915); Häpke, Rudolf, "Das Ernährungsproblem in der Geschichte" in Schmollers Jahrbuch, vol. xlv (1921) pt. ii, 203-27; Lacy, M. G., "Food Control during Forty-six Centuries" in Scientific Monthly, vol. xvi (1923) 623-37; Beveridge, W. II., British Food Control (London 1928); Litman, Simon, Prices and Price Control in Great Britain and the United States during the World War (New York 1920); Hedrick, W. O., The Economics of a Food Supply (New York 1924); Hedden, W. P., How Great Cities Are Fed (Boston 1929); American Academy of Political and Social Science, Annals, vol. lxxiv (1917) and vol. cxlii (1929) 1-479.

CHANGES; REFRIGERATION; MUNICIPAL MARKETS;

FORBONNAIS, FRANÇOIS VÉRON DU-VERGER DE (1722-1800), French economist. Forbonnais came of a merchant family and was himself an industrialist. In 1756 he was appointed general inspector of currency. Forbonnais was a leading representative of neomercantilism in the eighteenth century. Of the two fundamental ideas of mercantilism, bullionism and striving for independent nationhood, he particularly emphasized the latter, deeming money to be only a secondary means to national power. He advocated the theory of a favorable balance of trade, which in his opinion insures the welfare of the people only when it increases not merely the supply of money but also the opportunities for employment. Forbonnais held to the quantity theory of money; the increase of money is harmless if it keeps exact pace with the increase in consumption. A rising cost of living he sought

to remedy from the "commodity side" of the equation, primarily by a decrease in the population and consequent decline in consumption. High prices of commodities and a high rate of interest diminish the foreign trade of a state and are consequently undesirable. A rise in the interest rate he considered advantageous only to the foreign creditor. Forbonnais discussed the problem of foreign exchange rates and believed that disturbances of state credit and abundance or scarcity of foreign bills of exchange are the main factors causing a deviation from parity. Forbonnais' theories of money and credit were influenced by Law, yet he accepted the mercantilist emphasis on precious metals. By consistent advocacy of mercantilist ideas Forbonnais in common with Melon and Dutot, his like minded contemporaries, retarded considerably the spread of the physiocratic movement.

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Works: Élémens du commerce, 2 vols. (Leyden 1754; 3rd ed. Paris 1767); Considérations sur les finances de l'Espagne (Paris 1753; 2nd ed. with title Reflevions sur la nécessité de comprendre l'étude du commerce et des finances dans celle de la politique, Paris 1755); Recherches et comidérations sur les finances de France depuis l'année 1595 jusqu'à l'année 1721, 2 vols. (Basel 1758; 2nd ed., 6 vols., Liége 1758). Forbonnais also translated (Dresden 1753) a series of English pamphlets in connection with the Treaty of Utrecht, The British Merchant, and published (Paris 1753) a free translation of Gerónimo de Uztariz' Teórica y práctica del comercio.

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FORCE, POLITICAL. The concept of political force requires differentiation from other forms of compulsion, either physical or moral, in two respects: it must be limited to force which is dependent upon will and is employed in imposing an order of relationships in human society; and it must be limited to uses of force which are aimed at securing power or at deciding contested issues within a structure which claims the character of a regime of law. Under this conception force need not be timited to physical coercion. Any form of willed compulsion, whether it uses economic means or even moral pressure, may become political force if it is used to accomplish political ends. But this rules out the ordinary relations of force between states, whether

relations of war or of economic measures of policy short of war, since they do not aim at the establishment of a definite legal order. On the other hand, such relations of force when undertaken by a concert of powers against a state or a group of states to enforce or to secure an international regime of law might properly be included within the definition. The existence of a League of Nations and a network of security treaties will possibly make such a use of political force characteristic of the immediate future. Relations between states which involve direct imperialistic domination fall within the definition, since they aim at creating a legal system.

Some sociological thought has been unwilling to limit the concept of the political to the legal regime of the state. According to this view the character of political action inheres in any relationship dependent upon will in which subordination is implied, and is to be found in the activity of men in any association, such as the trade union or the church. If so broad a definition be accepted, it would not be necessary to relate political action only to a system of government which attempts to legitimize and to limit force, or to monopolize its more overt and physical application as sanctions of law. It may be admitted that the character of political action in the state is in form and even in psychological content very similar to the struggle for control within other groups. But the difference lies in the scope and finality of government action. Even where purely customary law lays down the standards of behavior of communities, it claims a character of universality and inclusiveness that becomes constantly more explicit as the state's institutional development progresses. Political behavior achieves an increasingly definite focus on government under legal forms which control the monopoly of physical compulsion claimed by the state. It is with this focus, given to it originally by Plato and Aristotle, that political thought has attempted to explain, to justify or to criticize the claim of the state to a monopoly of force under a system of law.

Force itself may be limited to acts of compulsion employed to overcome resistance. Constitutional measures and constitutional methods of attempting to secure changes of government do not normally rely upon force, but upon the acceptance of symbolic substitutes, such as voting, which command general consent. Force, although it is a latent sanction of all law, is employed only where legal settlement is resisted or where constitutional measures of change are

deemed inadequate. Force may include forms of compulsion other than the purely physical. It may include pressures of all extralegal types—a fact which is today as well recognized by the suppressive methods of dictatorships toward critical speech or hostile propaganda as it ever was in antiquity.

Political theory in the Chinese and Hindu civilizations, together with what there was of political thought in the Near East and Egypt, accentuated in the early periods the theocratic nature of the state as the basis of the legitimate use of compulsion. The development of political ideas in the surviving civilizations of China and India, as in the Hellenic and Roman periods of western civilization, shows all the characteristic later shift of emphasis to "the things which are Caesar's." In the narrowly political context the simplest form of the theory of the state as founded on force alone is given by Thrasymachus in Plato's *Republic* (bk. ii), when that downright apologist of the right of might maintains that justice is only what the strongest chooses to call by that name. Socrates has small difficulty in showing not only that this is not justice but that the conception of political superiority as dependent on the fear of force is not adequate even as a description of the facts of habitual obedience. The ethical plane of Greek thought, aside from some of the sophists, never permitted an identification of justice with Faustrecht. But Thrasymachus represents accurately enough the large outlines of the oriental habit of mind, against which Greek thought reacted.

A more sophisticated use of force as an explanation of the source of political authority occurs in Polybius: in the origins of political society or in the recurrent recoveries from barbarism and natural catastrophes men submit like other animals to the natural rule of the strongest; but this despotism soon learns to cloak itself with legality in order to meet the growth of reason. There is in Polybius, however, an attitude toward the importance of finding the right type of balanced government that is quite unlike the indifference of the Epicureans to legitimacy, which so curiously anticipates Hobbes in all his fundamental points, including the social contract as an escape from the original and arbitrary force of the state of nature. The stoics, for their part, pushed the ethical concepts of the universality of justice and law to a point that forgot the essential truths of the determinate physical and psychological forces which Polybius had noted as conditioning political behavior.

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CHANGES; REFRIGERATION; MUNICIPAL MARKETS;

FORBONNAIS, FRANÇOIS VÉRON DU-VERGER DE (1722-1800), French economist. Forbonnais came of a merchant family and was himself an industrialist. In 1756 he was appointed general inspector of currency. Forbonnais was a leading representative of neomercantilism in the eighteenth century. Of the two fundamental ideas of mercantilism, bullionism and striving for independent nationhood, he particularly emphasized the latter, deeming money to be only a secondary means to national power. He advocated the theory of a favorable balance of trade, which in his opinion insures the welfare of the people only when it increases not merely the supply of money but also the opportunities for employment. Forbonnais held to the quantity theory of money; the increase of money is harmless if it keeps exact pace with the increase in consumption. A rising cost of living he sought

to remedy from the "commodity side" of the equation, primarily by a decrease in the population and consequent decline in consumption. High prices of commodities and a high rate of interest diminish the foreign trade of a state and are consequently undesirable. A rise in the interest rate he considered advantageous only to the foreign creditor. Forbonnais discussed the problem of foreign exchange rates and believed that disturbances of state credit and abundance or scarcity of foreign bills of exchange are the main factors causing a deviation from parity. Forbonnais' theories of money and credit were influenced by Law, yet he accepted the mercantilist emphasis on precious metals. By consistent advocacy of mercantilist ideas Forbonnais in common with Melon and Dutot, his like minded contemporaries, retarded considerably the spread of the physiocratic movement.

Louise Sommer

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FORCE, POLITICAL. The concept of political force requires differentiation from other forms of compulsion, either physical or moral, in two respects: it must be limited to force which is dependent upon will and is employed in imposing an order of relationships in human society; and it must be limited to uses of force which are aimed at securing power or at deciding contested issues within a structure which claims the character of a regime of law. Under this conception force need not be limited to physical coercion. Any form of willed compulsion, whether it uses economic means or even moral pressure, may become political force if it is used to accomplish political ends. But this rules out the ordinary relations of force between states, whether

relations of war or of economic measures of policy short of war, since they do not aim at the establishment of a definite legal order. On the other hand, such relations of force when undertaken by a concert of powers against a state or a group of states to enforce or to secure an international regime of law might properly be included within the definition. The existence of a League of Nations and a network of security treaties will possibly make such a use of political force characteristic of the immediate future. Relations between states which involve direct imperialistic domination fall within the definition, since they aim at creating a legal system.

Some sociological thought has been unwilling to limit the concept of the political to the legal regime of the state. According to this view the character of political action inheres in any relationship dependent upon will in which subordination is implied, and is to be found in the activity of men in any association, such as the trade union or the church. If so broad a definition be accepted, it would not be necessary to relate political action only to a system of government which attempts to legitimize and to limit force, or to monopolize its more overt and physical application as sanctions of law. It may be admitted that the character of political action in the state is in form and even in psychological content very similar to the struggle for control within other groups. But the difference lies in the scope and finality of government action. Even where purely customary law lays down the standards of behavior of communities, it claims a character of universality and inclusiveness that becomes constantly more explicit as the state's institutional development progresses. Political behavior achieves an increasingly definite focus on government under legal forms which control the monopoly of physical compulsion claimed by the state. It is with this focus, given to it originally by Plato and Aristotle, that political thought has attempted to explain, to justify or to criticize the claim of the state to a monopoly of force under a system of law.

Force itself may be limited to acts of compulsion employed to overcome resistance. Constitutional measures and constitutional methods of attempting to secure changes of government do not normally rely upon force, but upon the acceptance of symbolic substitutes, such as voting, which command general consent. Force, although it is a latent sanction of all law, is employed only where legal settlement is resisted or where constitutional measures of change are

deemed inadequate. Force may include forms of compulsion other than the purely physical. It may include pressures of all extralegal types—a fact which is today as well recognized by the suppressive methods of dictatorships toward critical speech or hostile propaganda as it ever was in antiquity.

Political theory in the Chinese and Hindu civilizations, together with what there was of political thought in the Near East and Egypt, accentuated in the early periods the theocratic nature of the state as the basis of the legitimate use of compulsion. The development of political ideas in the surviving civilizations of China and India, as in the Hellenic and Roman periods of western civilization, shows all the characteristic later shift of emphasis to "the things which are Caesar's." In the narrowly political context the simplest form of the theory of the state as founded on force alone is given by Thrasymachus in Plato's *Republic* (bk. ii), when that downright apologist of the right of might maintains that justice is only what the strongest chooses to call by that name. Socrates has small difficulty in showing not only that this is not justice but that the conception of political superiority as dependent on the fear of force is not adequate even as a description of the facts of habitual obedience. The ethical plane of Greek thought, aside from some of the sophists, never permitted an identification of justice with Faustrecht. But Thrasymachus represents accurately enough the large outlines of the oriental habit of mind, against which Greek thought reacted.

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The concept of Roman law which centered about the potestas in its relation to the imperium and the majestas implied a truer understanding of the character of political force in an established legal order: force or the power to command it as a sanction was an essential attribute of a government claiming the support of law. It must be able to impose commands even where willing obedience was absent. A great part of the speculative mediaeval theory, which revolved about the relations between a universal church and a state which attained even as little universality as the Holy Roman Empire, dealt with the refinement of this Roman law conception and with its limitation in terms of a higher moral order than that of the state considered as the embodiment of force. Even as an order of pure fact (and not as a moral ideal for human society or for St. Augustine's De civitate Dei) the limits of arbitrary force in practise show government to be a resolution of forces rather than a simple dominance, in any order of society. In terms of political and moral ideals, Dante's division of the two orders of church and state into their respective moral spheres represents perhaps the summit of mediaeval thought.

It has been called the characteristic contribution of Machiavelli that he restored political thought from its theocentric mediaevalism to a realistic and "scientific" basis in terms of force. More recent research has shown, however, that in his emphasis upon political power as derivative from military force and cunning statecraft he was not the revolutionary and original figure among his contemporaries that he has sometimes been held to be. But prior to Hobbes he is the outstanding exponent of the force theory of the state, even allowing for the larger view of the Discorsi when compared with Il principe, the work on which his fame largely rests. Hobbes also reduced the political order, by his version of the social contract, to a consent basis that none the less rests on superior force as its sole claim to legitimacy. The intimate relationship of his logic to the need for a secure national order has been sufficiently commented upon. It has often been remarked as well that his premises must be criticized in the light of the universality of the type of human nature and human society which both he and Machiavelli saw about them.

The moral claim for the need of the legitimacy of force was not to be stifled by the mere reiteration of these views of human nature in a contract theory. The persistent need for moral sanction ran through the works of both the defenders of divine right and the monarchomachs. As nationalism drew on to its democratic phase, Locke and Rousseau restated the case for consent. The latter summed up finally a judgment of historical fact as well as of ethical value in the statement: "The strongest is never strong enough to remain forever master unless he transforms force into law and obedience into duty." Rousseau's own transformation of the force of law into consent by the apparatus of the "general will" still underlies most of the democratic philosophies of the state.

Nineteenth century liberalism produced the emphasis on moral consent which took its most finished form in the writings of J. S. Mill and T. H. Green. But it produced from its utilitarian origins also the analytical theory of legal sovereignty of Bentham and John Austin. Purely formal in character, this lawyer's theory rested its weight upon the command of a determinate superior. But it was not dependent simply upon force in spite of its emphasis on sanctions. It specifically rested upon "the habitual obedience of the bulk of the community" without troubling further to analyze the sources of that obedience. This duty the historical school of jurists undertook, putting force in its due relationship to the other factors in political obedience—custom, consent to divine right or to representative legislation, and social beliefs. Under the influence of the Hegelian theory English idealism reverted to a revised version of the "general will" to explain and justify the sovereignty of the state and its monopoly of force. Juristic thought elaborated the Rechtsstaat both as an explanation and as a defense of the state's limitations in the use of this force.

The idea that von Treitschke ever talked of the Machtstaat as if it were a pure antithesis to the Rechtsstaat originated in wartime distortion. German theory, particularly that of military historians like von Delbrück and Bernhardi, did, however, talk of law and the state primarily in terms of force. Karl Marx and the socialist and communist theorists who followed him, with the possible exception of the revisionists, tended also to simplify in the direction of making political force the mere handmaid of economic force. They drew heavily upon the conquest theory of the origin of the state, deriving from Gumplowicz and finding its final expression in Oppenheimer, who held that the state came into existence and continued merely as an instrument of class exploitation.

In the contemporary critique of all these the-

ories by political pluralism the emphasis of one school falls on the moral individualism of ethical theory. This individualism has been transferred by Figgis and by Laski (at least in his carlier works) to the group, under the influence of Maitland's doctrine of corporate moral personality. By another school of pluralism, represented by the positivistic realism of Duguit, stress is laid upon fear and force as the facts of government, but the assurance of the total complex of public services is proclaimed as a norm of legitimacy. Political pluralism does not necessarily deny force to the state; but it usually appeals to the existence of conflicting forces to deny to the state an exclusive or an effective monopoly over the use of force.

Both Fascism and Bolshevism unhesitatingly repudiate the democratic dogma which justifies the state's monopoly of force on the grounds of constitutional consent, secured by the expression of a popular will through some form of the majority principle. Each alike rests finally upon a monopoly of force, which requires a suppression of all free association and criticism. Each accomplishes openly a falsification of the representative principle by means of oligarchical dictatorship through control of the sole party having legal status. But it is significant that each has had a stubborn struggle with the church and that each justifies its unstinted use of force by what Plato would have called "a royal lie." The social myth of Bolshevism holds up as its ideal the realization of a communist and international utopia through the transitional dictatorship for rather than of the proletariat, in accordance with Marx and Lenin. Mussolini's Fascist apologists rely upon the older myth of Machiavelli—a revived Italian nationalism reminiscent of Roman imperial grandeur—for the indoctrination of the coming generations. Each has a pattern of ideal justice which forces conformity with its dogma; and in the realization of this pattern each employs a machinery which is imitative of Plato. Georges Sorel's apology for revolutionary syndicalist violence against the bourgeois and democratic state perhaps introduced a refinement in terminology which need hardly be considered a necessary one: violence, he thought, could be considered as that aspect of political activity which attempted the overthrow of the existing order by any means, including sabotage, general strike or vi et armis; political force, on the contrary, might be limited to the repressive activity on the part of those commanding for the time being the machinery of the state.

If the present era of wars, revolutions and distatorships has seemed to argue a trend toward a greater emphasis on force as the final source of authority, it must be remembered that, as Sorel has suggested, each important movement usually rests upon a social myth commanding wide acceptance. There is another order of phenomena also to be considered-the "soul force," or ahimsa, of Gandhi in his political, although nonviolent, non-cooperative revolution against the British raj in India. Despite elements of traditional force in such a program there is a purely moral force also which is compulsive in its effects. The evolution of the self-governing dominions of Great Britain to statehood through consent and the attempt to preserve a British Commonwealth of Nations by methods of consultation and conference essentially like those of the League of Nations may in yet another way show a realm in which moral consensus, not force, is gaining ground as the basis of the legal order.

W. Y. ELLIOTT

Sec: Coekcion; Authority; Power, Political; Obedience, Political; Violence; State; Liberty; Anarchism; Absolutism; Dictatorship; Fascism; Bolshevism; Class Struggle; Passive Resistance.

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FORCED LABOR. To maintain life a minimum of labor is necessary, and whether or not this is considered "forced" or "compulsory" depends very much on one's philosophy. Even though an individual is obliged to labor in order to live, he has a considerable choice in determining the nature and the extent of his efforts. But under forced labor as the term is customarily employed this element of choice is usually absent.

Over and above the labor imposed by the burden of human existence almost every government has obliged its citizens at one time or another to perform certain services. Subjects of the Roman state were compelled to labor on public works. Herodotus tells of the use of forced labor by Persian rulers for transport and dispatch services (angarevo) and by Pharaoh for the construction of the Great Pyramid. Forced labor was from early times the chief means of maintaining the Egyptian irrigation canals. Most of the population of mediaeval Europe was subject to legally defined forced labor, for example, road work (corvée), transport service (angaria) and other feudal servile obligations.

One of the earliest systems of forced labor for private purposes was established in America in 1499. Under this repartmiento or encomienda system the Indians, theoretically vassals of Spain, were divided up among the Spanish settlers and compelled to work for them in order to encourage colonization. The Egyptian government provided forced labor for the construction of the Suez Canal, until an outburst of humanitarian agitation, stimulated by British opposition to French interests in the Suez, led the sultan to stop the practise in 1863. Forced labor has sometimes been employed as a transitional measure between slavery and free labor. Thus the emancipated Roman slave was obliged to perform some services for his master, and the Jamaica Emancipation Act of 1833 freed the Negro slaves but allowed the white planters to hold former slaves for seven years as compulsory apprentices.

Today the majority of governments utilize forced labor in the form of military conscription, and many public authorities, including some in the United States, still require able bodied men to work a certain number of days a year upon the roads, an obligation usually commutable by a money payment. Many governments compel convicts to labor either in prison shops, on public works or for private enterprises which pay the state for the labor.

Within recent years certain governments have imposed more sweeping obligations. A Bulgarian law of June, 1920, amended in 1921 after protests from Entente powers that it violated the military provisions of the Treaty of Neuilly, requires young men to work for eight months and young women for four, only 30 percent of any age class being liable at any given time. In 1930 more than 16,000 young men were enrolled in the Bulgarian labor army. The constitution of the Union of Soviet Socialist Republics (ar-

ticle IX) "recognizes labor as the duty of all citizens of the Republic," and section 11 of the Soviet Labor Code of 1922 provides that "in exceptional cases [fighting the elements or lack of workers to carry out important state work] all citizens of the R. S. F. S. R. with certain exceptions [children, aged, disabled, ill or women during the eight weeks preceding and following the birth of a child] may be called up for work in the form of compulsory labor service." Compulsory labor may also be imposed as a penalty for the commission of certain offenses. This type of forced labor, given theoretical expression in the principle of "no work, no bread," has been justified on the grounds that it is a normal civic obligation which benefits the community as a whole and that as such it meets the approval of public opinion. The unique elements involved here are that the compulsion is explicitly stated, given full legal sanction and made universal.

More extreme forms of "forced" or "compulsory" labor are found in backward and colonial regions. In most tropical areas the white man is unable or unwilling to perform manual labor, and in order to carry on its activities outside enterprise must rely either upon the local population or upon imported coolie labor. Since the material wants of primitive peoples are few and they are unfamiliar with a money economy and unaccustomed to arduous and continuous toil, they are usually unwilling to work for European entrepreneurs. Out of the conflict between native indifference and the desires of outside governments and industrialists forced labor has arisen in many areas. Many of the chief tropical railways and roads have been constructed by forced labor. Indeed, it is doubtful whether the tropics could have been held and developed to their present extent by outside forces had not this practise been employed.

In most tropical colonies today, including all of central Africa, forced labor, paid or unpaid, is still imposed for the maintenance or construction of public works, for porterage (still one of the chief means of transport in the tropics) and the like. In the French colonies natives may be required to work without pay (prestation) for annual periods ranging from three days in Algeria to sixteen days in Indo-China. Many British colonies authorize unpaid communal labor for four weeks a year. The corvée is still found to some extent in British India, and in many native states the veth and begar systems of forced labor prevail. Under a labor tax, the Heeren-dienst, imposed by the central government and

native states of the Dutch East Indies for the construction and maintenance of public works, all able bodied men with certain exceptions may be called upon to provide unpaid labor up to a maximum of forty days a year. In 1927 the government exacted 31,427,001 workdays of forced labor. In the Belgian Congo unpaid labor is exacted for communal purposes. In British East Africa the government may conscript natives for not more than sixty days a year. In Kenya and Uganda the prior consent of the secretary of state for colonies is necessary except for government porterage. Under the system of military conscription followed in Madagascar and French West Africa natives were divided before 1926 into two contingents, one obliged to perform three years' military service, the other exempt. French decrees of 1926 made those in the second contingent liable to draft service in a manual labor army. In Liberia both unpaid government porterage and local road work are performed by forced labor. From Liberia Kroo boys have been shipped to Fernando Po to do forced labor for the Spanish planters, who pay high Liberian officials for their services.

Compulsory labor has also been imposed in backward areas for the benefit of private employers such as mine operators or plantation owners. Until 1926 the authorities of the Portuguese colonies might legally hand over to private employers any natives who declined to work, and certain *prazo* holders in Portuguese West Africa may still collect labor taxes from natives. In parts of Dutch Java, where under the culture system from 1830 to 1871 forced labor was the rule, landowners retain a traditional right to exact fifty-two days of labor annually. With these exceptions there does not seem to be any government today which legally exacts forced labor for private purposes.

In some colonies, however, for example parts of British South and East Africa, the native having been deprived of land adequate enough for independent economic existence is literally compelled to labor for European mine or plantation owners. Natives may also be indirectly induced to accept European employment by being subjected to heavy cash taxes which they cannot pay except out of wages. Under the concession system followed at one time in the French Congo and the Congo Free State natives were often obliged to pay heavy taxes in the form of raw produce at prices fixed by European officials. These prices were often below those in the open market.

Today forced labor also indirectly arises out of the so-called vagrancy and pass laws, under which it is possible for local officials to force unemployed persons or those without credentials to work at tasks and for wages set by state agencies. A form of labor complex in origin but plainly involving non-voluntary elements was early English factory labor; the laborers were recruited from a class of peasants made landless by the enclosure movements and compelled to seek a livelihood in the new factories. Likewise many colonial governments, while becoming sensitive to charges of forced labor, still insist upon the "moral obligation" of a native to work.

From the administrative standpoint it is difficult to secure the abolition of forced labor by treaty because instead of resting on the sanction of legislation forced labor is usually imposed by administrative regulation, and the men are usually obtained from native chiefs rather than directly drafted. Although there may be no law requiring the chief to fill the quota or compelling men to labor, the chief, realizing that his position depends upon the administrator's good will, usually fulfils the request. In fact, the practise of *isibalo*, or forced labor for the government, begun in South Africa around 1850 was based on the Bantu system which recognized the individual's obligation to labor for the chief.

Forced labor for public purposes has frequently been defended on the ground that the results will benefit the native population or that the only alternative to forced labor for public works, increased taxation, would force the natives into uncontrolled European employment that would do more social damage than the direct imposition of forced labor. Many business men and some colonial officials also defend forced labor for private enterprises on the ground that primitive peoples will not progress until they learn how to work and that the wealth of the tropics cannot be exploited for the benefit of the outside world unless forced labor is employed. Nevertheless, the fact undoubtedling is that although forced labor is frequently declared to "do good" to native peoples, its chief service is to the interests of outside governments and industrialists. Experience has demonstrated that in many cases the social results of forced labor. which is applied in the tropics much more ruthlessly than in a European country because of the absence of restraints from public opinion, are disastrous. Moreover, from the economic standpoint compulsory labor as a rule is less efficient than voluntary labor, especially as some

employers of conscripts are likely to be wasteful of labor. Furthermore, the association of labor with oppression, like slavery, tends to discourage the development of habits of industry and initiative.

Frequently natives have been forced to travel long distances to a strange scene of employment, where they have been subjected to a new climate and exotic food. Although many governments now take every precaution concerning housing, food and medical care, the mortality rate of conscript labor is still excessive. When the native is suddenly and forcibly thrown into contact with industrial civilization his psychological resistance to diseases such as tuberculosis is lowered. Because of the compulsory methods used in the construction of the Congo-Ocean Railway in French Equatorial Africa and the failure of the administration to take adequate precautions 17,000 native laborers engaged on the enterprise died between 1925 and 1929. When concentrated in labor camps natives tend to lose their moral standards and their respect for their native chiefs and native customs generally. Moreover, the absence of men at European labor centers has created havoc with family and tribal organization. In order to avert a condition of social anarchy, which was threatened as a result of excessive recruiting of labor, the government of the Belgian Congo in 1925 issued instructions to the effect that no more than 10 percent of the male population could be taken from a native community to a labor center, although an additional 15 percent could be employed on plantations in the vicinity of their homes.

For economic and humanitarian reasons international protests against forced labor have been frequently made. Before the World War atrocities were exposed in the Congo Free State, the French Congo, the "cocoa islands" of Portugal and the Putumayo district lying between Colombia and Peru. Public knowledge of the horrible character of these atrocities and of the general social consequences of forced labor led the old antislavery societies to devote themselves to agitation against forced labor and to a humanitarian demand for its abolition or limitation. The report on Liberian conditions made in 1930 by an international commission of inquiry also stimulated this sentiment.

The first international restrictions were imposed on forced labor in the African and Pacific mandates of the League of Nations, by which labor may be imposed only for essential public services. The mandates do not prohibit com-

pulsory labor of women and children or state that compulsory labor may be imposed only after recourse to voluntary labor has failed, nor do they fix the term for which forced labor may be imposed. In 1924 the League established a Temporary Slavery Commission, and largely as a result of its studies a Slavery Convention was opened for signature at the Seventh Assembly in September, 1926. This convention recognizes (article v) "that recourse to compulsory or forced labor may have grave consequences" and makes obligatory "all necessary measures to prevent compulsory or forced labor from developing into conditions analogous to slavery." But while it requires "adequate remuneration" and forbids the removal of laborers from their usual place of residence, it permits compulsory or forced labor for both public and private purposes, providing that "the High Contracting Parties shall endeavor progressively and as soon as possible to put an end to the practice" of forced labor for private purposes. This convention was signed by thirty-six governments and adhered to with a reservation by the United States.

Believing that the Slavery Convention was not sufficiently comprehensive, the governing body of the International Labour Office in 1926 established a Native Labour Section and appointed a Committee of Experts on Native Labour. Upon the basis of this committee's exhaustive report on the law and practise relating to forced labor the convention of June 28, 1930, was drafted by the fourteenth session of the International Labour Conference, providing for the suppression "within the shortest possible period" of all forms of work or service "exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily." It exempts from its definition of forced labor any work exacted in case of emergency, in virtue of military conscription or as a consequence of a conviction in a court of law or which forms part "of the normal civic obligations of the citizens of a fully self-governing country" and minor communal services, provided that the members of the community have the right to be consulted as to the need for such services. The convention provides that compulsory labor for private purposes must be completely suppressed and that compulsion for public purposes may be employed during a transitional period only. Before forced labor may be exacted for public purposes the competent authority must satisfy itself that the work to be done is of present or imminent necessity and of

important direct interest to the community, that it has been impossible to obtain voluntary labor and that the work will not lay too heavy a burden upon the present population. Forced labor exacted as a tax shall be progressively abolished. Only adult able bodied males between eighteen and forty-five may be called upon for forced labor. Whenever possible a medical officer shall determine physical fitness. School teachers, pupils and school officials shall be exempt. At no time shall the proportion of able bodied males taken exceed 25 percent. The maximum period for which any person may be taken shall not exceed sixty days a year. Normal working hours and wages shall be the same as for voluntary labor and a weekly day of rest shall be provided. Except in cases of special necessity persons from whom forced or compulsory labor is exacted shall not be transferred to districts where exotic tood and climate will endanger their health. In no case shall workers be transported unless all measures relating to hygiene and accommodation necessary to adapt them to the new conditions can be strictly applied. Signatories undertake to make an annual report on the measures taken to carry out the convention. At the end of five years the governing board of the International Labour Office shall report to the General Conference on the working of the convention and the desirability of revision. By June, 1931, Great Britain, the Irish Free State and Liberia were the only governments to have ratified this convention.

The United States tariff act of 1930 (section 307) prohibited the entrance of "all goods, wares, articles, and merchandise produced or manufactured wholly or in part in any foreign country by convict labor or/and forced labor or/and indentured labor under penal sanctions" except when such goods are needed to meet the consumptive demands of the United States. Thus this measure serves to protect American industry rather than to discourage forced labor as such. This fact, considered along with the political difficulties facing a government which attempts to determine whether or not forced labor exists in foreign countries, would indicate that the imposition of sanctions against forced labor in a foreign country should be applied, if at all, by the instrumentality of international organization.

RAYMOND LESLIE BUELL

See: Labor; Public Works; Corvée; Indenture; Contract Labor; Prison Labor; Fines; Peonage; Serfdom; Slavery; Native Policy; Imperialism; COLONIAL ECONOMIC POLICY; CONCESSIONS; BACK-WARD COUNTRIES.

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FORCED LOANS are loans in name only. They are imposed upon the citizens by state authority and consequently lack the contractual basis which is an essential feature in the ordinary credit transaction. Forced loans differ, however, from ordinary taxes in that they carry a promise of repayment of principal as well as the payment of some rate of interest. Gaston Jèze distinguishes between forced loans in countries without accumulations of wealth in liquid form and with no organized capital market ready to lend large sums to public debtors, and forced loans in countries with fully developed capitalism. In the former forced loans seem to have been the only effective way of raising large sums quickly; in the latter they may be justified only as an extraordinary fiscal measure to meet exceptional needs.

Forced loans were widely resorted to in the Middle Ages and in modern times up to the eighteenth century. There was, however, a great difference between sporadic loans extorted by monarchs from great vassals, wealthy citizens, high functionaries, rich tax farmers and Jews and forced loans regularly demanded by the selfgoverning and highly developed Italian cities. In the former countries forced loans reflected the primitive ideas on credit and were looked upon as an assertion and often abuse of absolutist power. The people were exasperated not only by the brutality with which the loans were often extorted but still more by the suspicion that the constitutional rights of the three estates might be endangered by such loans. Such were the forced loans in France until 1715 and those of the British kings until the middle of the seventeenth century. While the York and Tudor kings understood how to secure money by "benevolences" in an apparently semivoluntary way, the Stuarts did not always avoid brutality in raising money. Their methods were so offensive to the people that Charles I was obliged as a concession forced by the Petition of Right to agree "that no man hereafter be compelled to make or yield any gift, loan, benevolence, tax, or such like charge, without common consent by Act of Parliament." Nevertheless, in 1640, after having seized £,130,ooo which had been deposited in the Tower by the merchants, Charles refused to give back the money before he received a loan of £40,000.

The self-governing citizens of mediaeval Venice, Florence and Genoa regarded forced loans as a very effective and generally not disputed fiscal policy. The origin of forced loans in the Italian cities is hard to determine. It is known that forced loans were made in Venice in 1171 and 1172 and that in 1228 citizens were obliged to declare themselves by oath as ready to lend money to the republic in case of need. There were several factors which favored the widespread use of forced loans. The modern democratized system of credit, the issue of bonds payable to bearer in small amounts to be subscribed by the middle class out of savings and suitable for sale in capital markets, was as yet unknown; voluntary credit was given only for short periods and secured by a general bond in the name of the creditor. These creditors were a few capitalists of great political influence who not only demanded high rates of interest but generally insisted upon the control of specific sources of revenue as a pledge for their loans. Thus cities ran the risk of losing the control of their revenue system by resorting to voluntary credit. The direct taxes, most of them in the form of a general property tax, were nowhere exactly assessed and the yield was hardly sufficient to meet all fiscal needs of the time. The ruling classes, when called upon to contribute larger sums to meet fiscal needs in critical times, preferred to do it in the form of a forced loan, which assured them the return of the capital and a modest money rent. Interest charges on forced loans were covered by import and export duties, the salt monopoly and other taxes which in the main were paid by the lower classes. Finally, the institution of forced credit offered an escape from the operations of anti-usury laws; ecclesiastical authorities regarded the receiving of interest as less sinful when the creditor was forced to lend the money.

The city republics regarded forced loans as a special debt to be repaid as early as possible. The loans were paid on the basis of property as assessed for purposes of taxation. The assessments for the property tax were periodically renewed. Declarations were made under oath and scrutinized by experts. Nevertheless, property was assessed at a value much lower than its real value. Small fortunes were exempt, and property invested in forced loans was to be deducted in the assessments of property. According to Luzzatto interest on the forced loans—generally 5 percent—was with small interruptions regularly paid by Venice in the years between 1262

and 1381 and also for some decades after. The repayment of capital was not regular, but periodically attempted with energy. People who had no liquid sums at their disposal often saw no other way of raising the money demanded for loans than by selling their older claims at a discount. Notwithstanding the difficulties involved in the transfer of claims booked in the name of each creditor there was nearly always a lively commerce and much speculation in forced loans. As long as the interest was paid regularly and without deductions many rich people from other cities trusted the honesty of the republic and were ready to acquire Venetian loans. In the long run, however, the financial situation of Venice became endangered by the burden of the increasing debts. Occasionally, when the often repeated forced loans seemed no longer a sufficient source of revenue, desperate expedients such as reduction of interest on the debt and of the salaries of functionaries, loans from the revolving fund of the autonomous grain administration and sales of public real property were attempted.

In modern times the mediaeval practise of forced loans was replaced by the system of voluntary credit which, developed in the middle of the seventeenth century in the Netherlands, was widely adopted in England at the end of the eighteenth century and in most other civilized countries in the nineteenth. Only France after the revolution reverted for a brief period to the forced loan policy, but with less success than the mediaeval Italian republics. From 1815 to 1914 all well governed countries relied almost exclusively on voluntary loans in their credit transactions. The period of the World War and the years following it witnessed a temporary reversion to the practise of forced loans, although in the somewhat disguised form of placing treasury bills with the note issuing central banks and the consequent suspension of specie payment for banknotes. Generally, however, the belligerent states preferred the use of voluntary credit, although the enormous pressure of patriotic propaganda and public opinion under which the loans were obtained impaired their voluntary nature. Forced funded loans were decided upon in Holland in 1914, in New Zealand in 1917, in the Australian commonwealth in 1918—generally with the effect that the mere decision was sufficient to bring forth a flow of voluntary subscriptions. After the war Norway announced a forced loan in 1920 but was able to find subscribers at easy terms for a voluntary loan; likewise Italy avoided realizing the plan of a forced loan agreed on in 1919. Germany during the most critical political and financial situation of 1922 risked the experiment of a forced loan with little success: the interest has not been paid nor the principal refunded. Likewise Poland, Czechoslovakia and Greece tried the expedient of forced loans, on the whole unsuccessfully.

Experience has proved that voluntary funded debts in the form of interest bearing bonds which are placed with investors at home and abroad are in normal times for well administered states a much more effective method than forced loans.

Gaston Jèze's argument that forced loans may be justified in highly civilized countries as an emergency measure may be correct if citizens are to be obliged not only to die but also to pay for their country. But only when all obligations of the debt service are without exception scrupulously fulfilled may forced credit be justified as the lesser evil in a complicated situation. Very often, however, forced loans are only a symptom of inefficient credit policy or of a careless budget policy of governments. They may be easy expedients at the time and may enable the most incapable government to subsist for a short time, but no state can in the long run arrive at satisfying results by continued use of such means. It is only by one method of forced credit that great sums may be quickly raised in modern times—by issuing inconvertible paper currency, a method correctly defined by Adolf Wagner as a forced loan on the metallic money circulation. But the fatal social, economic and financial consequences of such a policy of inflation are well known.

W. Lotz

See: Public Finance; Public Debt; War Finance; Capital Levy.

Consult: Jèze, Gaston, Cours de science des finances et de législation financière française, 2 vols. (6th ed. Paris 1922) vol. ii, p. 467-502; Luzzatto, Gino, "Introduzione storica" in R. Accademia dei Lincei, Commissione per gli Atti delle Assemblee Costituzionali Italiane, I prestiti della Repubblica di Venezia (Sec. xiii-xv) (Padua 1929) p. iii-cclxxv; "Prestiti forzosi" in Italy, Commissione Reale per la Pubblicazione dei Documenti Finanziari della Repubblica di Venezia, Bilanci generali della Repubblica di Venezia, vols. i-iii (Venice 1903-12) vol. i, p. clxxxiii-cxcii; Sieveking, Heinrich, Genueser Finanzwesen mit besonderer Berücksichtigung der Casa di S. Giorgio, Volkswirtschaftliche Abhandlungen der Badischen Hochschulen, vol. i, no. 3, vol. iii, no. 3 (Freiburg i.Br. 1898-99); Barbadoro, Bernardino, Le finanze della repubblica Fiorentina, Biblioteca Storica Toscana, no. v (Florence 1929); Wellhoff, Edmond, L'emprunt forcé (Rheims 1923).

FORD, HENRY JONES (1851-1925), American journalist, historian and political scientist. His journalistic career, which identified him with newspapers in Baltimore, New York and Pittsburgh, began soon after his graduation from college and lasted until 1906, when he became a lecturer in politics at the Johns Hopkins University. In 1908 he was appointed professor of politics at Princeton University, where he was thrown into close contact with Woodrow Wilson. During Wilson's governorship Ford was appointed state commissioner of banking and insurance of New Jersey and early in Wilson's first presidential administration was sent on a mission to the Philippines. As a member of the Interstate Commerce Commission during 1920-21 he conducted several important investigations and prepared one noteworthy decision concerning the commission's authority to fix intrastate railroad rates.

In The Natural History of the State (Princeton 1915) Ford presents a moderate defense of the organic theory of the state without, however, upholding the metaphysical or idealistic point of view. His theory of the state shows the influence of Darwinism more than it does of Hegelianism. During the latter years of his life his work in politics centered more and more on the problems of representative government, in which field he may be considered to have continued the work of John Stuart Mill. In Representative Government (New York 1924) he rejects the Teutonic theory of the origin of representative institutions, contending that the real model of the British Parliament was the representative system worked out in the Dominican order. In reference to modern government his chief contention is that in order to secure effective representation the representative must be made responsible and that any devices such as direct legislation which enable the representative to avoid responsibility tend to defeat the true nature of representative government.

Francis G. Wilson

Other important works: The Rise and Growth of American Politics (New York 1898); The Cost of Our National Government (New York 1910); The Scotch-Irish in America (Princeton 1915); Woodrow Wilson, the Man and His Work (New York 1916); Washington and His Colleagues, Chronicles of America series, vol. xiv (New Haven 1918); The Cleveland Era, Chronicles of America series, vol. xliv (New Haven 1919); Alexander Hamilton (New York 1920).

Consult: Corwin, E. S., "Henry Jones Ford" in American Political Science Review, vol. xix (1925) 813-16.

FORECASTING, BUSINESS. Prediction is an integral part of any scientific generalization as to the relationship between two or more factors: if properly established the generalization must hold not only with regard to observations made in the past but also in all future observations of the same phenomena. Prediction is even more organically related to those generalizations which establish a definite time sequence in the occurrence of certain factors. Indeed generalizations of this type form the essential logical basis of all types of forecasting whether they concern the weather or the stock market. On a different level the same is true of so-called evolutionary laws, or laws of development. For this case, however, an important qualification must be made: since such laws involve complicated combinations of simple relationships of coexistence and sequence, unforesceable changes in the combination may invalidate at least in part forecasts implied in generalizations regarding trends of development. In so far as economic theorists have attempted to formulate evolutionary laws, they have also indulged in long range economic forecasts; witness, for example, the law of diminishing returns in its earlier versions, Ricardo's generalizations regarding long time trends in the distribution of income or the Marxian formula as to concentration of wealth and proletarization of the masses. Such predictions, based upon a theoretical analysis of structural changes in the economic system, are quite different from business forecasting. The problem of the business forecaster is a more limited one: whether he is concerned with a single branch of business activity or with general business conditions he aims to anticipate only those changes which may be expected to occur within a few months. Even "intermediate forecasting" for a period from one to five years is commonly regarded as too ambitious an undertaking for a business forecaster. Because of their greater concreteness and immediacy business forecasts are more dependent upon accurate and prompt measurement of the current situation than upon a theoretical interpretation of the forces at work.

It is obvious from the nature of the business system that prediction has always been a function of enterprise, but business forecasting as a specialized activity is almost entirely a development of the twentieth century. Specialization in forecasting has grown out of the work of gathering and summarizing information about general business conditions and has received great impetus from the recent rapid accumula-

tion of economic statistics, the development of statistical technique, the study of business cycles and the urgent need of men of affairs to make prompt and appropriate adjustments to the increasingly frequent changes in business conditions.

Before the close of the sixteenth century there had developed in Venice and a few other trading centers specialized information gathering services which provided merchants and other subscribers with political and trade news. During the same century the Fuggers of Augsburg developed and maintained an extensive international information service for their own private use. The phenomenal rise of the house of Rothschild in the early years of the nineteenth century was based in no small part upon the efficiency of its private news service, which enabled the firm to receive in advance of its competitors information of vital import to its financial interests.

As the activities of the peoples of western Europe and America became increasingly organized on the basis of a business economy, the sources of information concerning business gradually became more numerous and more reliable. Since the middle of the nineteenth century in the United States and England a growing number of financial, commercial and trade periodicals have been established which provide monthly or weekly reports of business conditions and developments. Yearbooks and other publications of various government departments, consular reports and bank letters on business conditions have also increased in number and content. Reports on the condition of national banks in the United States were made four times a year or oftener beginning with 1863. Data at monthly or more frequent intervals were available on such items as foreign trade, bank clearings and interest rates. In 1884 the Dow-Jones daily letter was first issued, containing an average of daily prices of certain stocks on the New York Stock Exchange. In 1897 Bradstreet's, which had for some years published quarterly the price quotations for about 100 commodities, began the monthly publication of a composite index of these prices; in 1899 the London Economist began publishing a monthly price index. About 1900 monthly data for such important items as building permits in large cities and pig iron production for the entire country became available in the United States. Elsewhere current business reporting on a systematic basis has developed more recently, but it is growing rapidly in all industrialized countries and is becoming increasingly quantitative in character.

It is not surprising that the United States, with its increasing variety of currently available economic statistics, its business subject to wider fluctuations than those found in Europe and its people largely absorbed in business pursuits, should have been the first country to develop organizations specializing in the forecasting of general business conditions. In 1904 R. W. Babson established a commercial service to provide clients with both business reports and business predictions. For several years he experimented with the construction of charts of economic time series and finally with the computation of a composite barometer. The Babsonchart, which was destined to become widely known in the business world, was first published in its familiar form in 1910. By novel means its author had combined into a single weighted index of general business a large number of time series representing agricultural and industrial production, interest rates and commodity prices. For most of these series he used a unique type of adjustment for seasonal variation, and he represented the long time trend of the composite by an adjusted index of bank clearings. There also appeared upon the chart separate indices for stock prices, commodity prices and bond yields. In so far as Babson's forecasts were based upon this chart they were said to be inferred primarily from the relation of the composite index of business to the line representing normal.

Almost simultaneously with the beginning of regular publication of the Babsonchart, J. H. Brookmire, who had for several years been providing a group of clients with business forecasts, formally established another forecasting service. Brookmire was a pioneer in forecasting on the basis of cyclical sequence. His chart portrayed three indices representing respectively credit supply, stock prices and volume of business. He held that a persistent rise of an index of the potential supply of bank credit was typically followed in a few months by a similar rise in security prices and that the latter in turn was followed by an expansion of general business and a rise in commodity prices; the declines of the three factors, which completed the cycle, followed in the same order.

Crude as were the statistical methods employed by these pioneer organizations in the early years of their work they performed valuable service in forcing upon the attention of the business man the importance of analyzing funda-

mental series of economic statistics. Certain early services specializing in security market forecasts have also done work of educational value. The oldest of these, that of Thomas Gibson, was begun in 1907.

While practical men were grappling directly with the problem of prediction, the groundwork was being laid for the making of fundamental contributions by scientific workers. During the second half of the nineteenth century European investigators, unable longer to dismiss the recurring economic crises as manifestations of fortuitous maladjustments in the economic system, attempted more careful explanations of the periodicity of business fluctuations. Nearly all of them buttressed their analyses with some reference to historical data and to such statistics as were available. The first to make considerable use of statistics was Clement Juglar in his monumental work, Des crises commerciales et de leur retour périodique (1862). A notable advance in this type of statistical investigation was marked by the publication in 1913 of Wesley C. Mitchell's Business Cycles, which is a statistical study of annual economic data for the United States, England and France from 1890 to 1911 combined with a historical and theoretical analysis. At the same time considerable progress was also made in the methods of statistical analysis. New techniques which were evolved first in the field of biometry were soon applied to social and economic statistics. Outstanding examples of their application to economic time series were found in Henry L. Moore's *Economic* Cycles (1914) and Forecasting the Yield and the Price of Cotton (1917).

About 1915 attention was attracted to the attempts of Warren M. Persons to improve upon the statistical technique of forecasting general business conditions. Largely on the basis of his preliminary results he was appointed statistician of the Harvard University Committee on Economic Research upon its formation in 1917 and there carried forward the first work in business forecasting to win general recognition from statisticians and economists. Persons subjected to cyclical analysis every appropriate time series available for the United States; the results announced in 1919 covered the pre-war period from 1903 to 1913; later the investigation was extended to the years 1875 to 1902. Each series was corrected for seasonal variation and for secular trend and, since the result was held to represent a combination of cyclical and random fluctuations, those series which appeared to be

largely affected by factors independent of the cyclical movement of business activity were not used. Then in order to measure as precisely as possible the average relationship with reference to time between the movements of the various series the coefficient of correlation for each pair of series was computed for different amounts of lag. The computations showed that the series fall naturally into three groups representing (a) stock speculation, (b) the condition of industry and trade and (c) the supply of funds. While the series in each group tend to fluctuate synchronously, the sequence in the movements of the different groups is speculation-businessmoney. The series in each group were then merged into a kind of average and the forecasting system based on a study of the movements of the three composite curves. The original results obtained by the Harvard group confirmed the earlier three-curve barometer of Brookmire, but the methods by which the Harvard barometer had been derived and the care with which the interrelations among the movements of the curves were interpreted represented important advances over Brookmire's pioneer work.

Several years later the Harvard system of forecasting was considerably modified. It was held that beginning with 1923 the United States entered an era of the "regulated business cycle," the principal manifestation of which is a fairly even course of the general level of business activity accompanied by brief fluctuations of an "intermediate character" in security and commodity speculation and in the production of basic materials. To predict these intermediate movements and the associated shifts in credit the study of a number of series not included in the three composite curves was found necessary.

Harvard was probably the most important single factor in American forecasting in the postwar period. It has exercised a considerable and almost immediate influence upon the statistical methods of the other forecasting services and stimulated the establishment by a number of university bureaus of business research of forecasting services for local regions. It has also influenced the forecasting work of the rapidly growing number of large private business concerns that employ economic statisticians to assist them in shaping their business policy in conformity with the business outlook.

Another major influence in this field has been the work of Henry L. Moore. It has been important in the forecasting of priceand production of individual commodities, particularly agricultural products, to which increasing attention has been given both by government departments and private bodies. In this branch of forecasting a highly refined statistical technique has been employed: lines of regression obtained by multiple correlation are used as bases for prediction.

The development of forecasting in the United States has proved internationally contagious. Since 1921 at least one institute for business cycle research and forecasting has been established in practically every country in Europe, most of them affiliated in some way with universities and some of them having official connections with statistical departments of governments and trade associations. The London and Cambridge Economic Service, established in 1923; the section on economic indices of the statistical institute of the University of Paris, which began functioning in 1923; and the committee on economic indices of the universities of Padua and Rome, created in 1926, cooperate with the Harvard group and among themselves in the interpretation of business conditions, special emphasis being placed upon developments in their respective countries. Nearly all of the European forecasting services and the Canadian Economic Service affiliated with McMaster University have adopted much of the technique of analysis employed by the Harvard service. They have stressed the importance of the accumulation and interpretation of data rather than the development of statistical technique. Many of them do not regard forecasting as a major line of activity and have not gone beyond predicting fluctuations of a seasonal character. The conditions in these countries are in certain respects quite different from those obtaining in the United States: in some of them the importance of agriculture as a factor in the national economy is much greater, virtually all of them are more affected by the "irregular" disturbances characteristic of the period of post-war readjustment, and in a number of countries reliable and promptly available data are scarce.

An exceptional place among these institutions is occupied by the Institut für Konjunkturforschung established in Berlin in 1925, which through official connection with the central statistical office of the Reich and other important organizations both public and private is unusually fortunate in the matter of access to significant data. It compiles and publishes a number of indices which measure: (1) conditions in the field of production—orders, raw material imports, output, export of finished products; (2) the utili-

zation of available capacity in the manufacture of producers' and consumers' goods; (3) movements of stocks of commodities; (4) the turnover in foreign trade as an indication of the functioning of domestic markets; (5) future business prospects—extension of long term credits, flow of orders, unused capacity; (6) the circulation of money and credit; (7) the dynamics of capital, money and commodity markets in their interrelation; (8) price movements. It is intended that these indices in combination should present a balance sheet of the national economy and give warning of future strains and stresses which may be caused by a growing disequilibrium between the interrelated parts of the economic system.

The development of forecasting has been paralleled by a multiplication of currently maintained time series. There are now about thirty countries for which commodity price indices have been established, most of them since the World War. In a number of them current data concerning wages, employment and production of basic commodities are now being collected and reported. In the United States the current compilation of the great majority of time series now available was not begun until after 1918. Except for a few fields, of which employment is possibly the most important, the United States leads in the quantity of currently available data which are needed for economic forecasting.

In spite of the recent rapid multiplication of economic statistics theorists need further data. Some of the leading theories of business cycles cannot be tested until there are made available over a period of years reliable and comprehensive data concerning such items as incomes, savings, investments, margins of profit, stocks of goods and prices at different stages in the productive and distributive process. At present improvement in forecasting practise depends largely upon the further development of theory and upon the elaboration of its application to statistical data. There is need for clarification of the relations between cyclical oscillations, other periodical fluctuations and structural changes, and for the adaptation of the general pattern of cyclical movements to the specific conditions obtaining in each country and region.

All methods of business forecasting necessarily rest upon the assumption that there is order in the course of economic events. There are, however, significant differences of opinion as to the nature of this order. Some forecasters rely primarily upon the view that certain important phases of business activity have conformed and

will in large measure continue to conform to discoverable patterns. At the other extreme are those who believe that the forces making for disruption of previous relationships are likely to be more powerful than the forces making for their recurrence and who prefer therefore to begin by assuming that important factors in the current situation differ individually or in combination from those which have obtained in the past.

Those who are strongly impressed with the regularities among past events forecast primarily by what may be called the method of historical comparison. A simple subtype of this method of prediction which was common before the statistical age in economics and which still frequently occurs may be characterized as that of analogy. The present is thought to be like a certain previous period and the outcome of the current situation is therefore expected to be like that which occurred in the earlier instance. Examples of such reasoning in the literature of business forecasting are abundant but the analogies are typically confined so largely to surface resemblances as to disqualify the inferences from serious consideration.

A more significant form of forecasting by historical comparison is that based upon carefully delineated patterns derived by the application of the new statistical techniques. The Brookmire-Persons sequence in the major fluctuations of curves representing stock prices, business activity and credit supply is a good illustration of this method of forecasting. The principal inadequacies of this particular pattern as a basis of prediction have been those inherent in some degree in every correlation yet discovered in the field of general business. First, the regularity of the relationships for the test period itself is insufficient to make the pattern an altogether satisfactory forecaster for current use. Second, it is not certain that even such regularity of relationship as has obtained for the test period will recur in the near future. The fact that on the basis of a given lag an extremely high correlation is found between important time series does not afford a convincing basis for prediction unless the observed relation is buttressed by a rational explanation, and substantial grounds exist for the belief that this relation is not likely to be seriously disturbed during the period covered by the forecast. It is quite possible for high correlation to occur between series where the relationship is only nominal or for such correlation to be procured by unjustifiable manipulative treatment of the data. Even patterns which are known

to represent significant relations have often betrayed the forecaster at a critical moment because of the sudden injection of new elements into the situation. This is true of projected secular trends for individual industries, concerns and commodities as well as of cyclical sequences.

In contrast with those who forecast by pattern are individuals who have been so strongly impressed by the unique aspects of successive periods that they reject altogether the use of economic barometers and attempt to forecast by what may be termed the method of crosscut analysis. This method requires that each forecast represent a sort of balanced judgment based on a careful evaluation of the forces making for expansion and those making for recession. The process by which thoughtful men of affairs arrived at important forecasts in the prestatistical period must have been largely of this character. Even now the method has certain points in its favor. It is adapted to take account of factors which may be important but are not susceptible of quantitative treatment. Furthermore, it is the very nature of this method to inquire into the processes by which impulses are transmitted from one element in the business situation to another, and it may thus lead its user to avoid the pitfall of forecasting from empirical regularities unsupported by rational explanations. The forecaster by pattern may be satisfied with a superficial relationship, and the inferences he draws concerning the future may easily prove less satisfactory than those of an experienced user of crosscut analysis.

The weaknesses of the latter method, however, are as obvious as its advantages. At every step the process is essentially subjective, and there is no current objective check upon inferences so derived except the carefully measured relations that have obtained in the past. In fact, all forecasters of standing use both historical comparison and crosscut analysis; they differ only in the emphasis placed upon the one as against the other. The complexity of the flow of interrelated events compels statistical research for patterns, while the construction and use of the latter call for judgment at every step from the statement of the problem to the interpretation of the final result.

There are difficulties in the path of the business forecaster that are not likely to be overcome even by the most skilful combination of the two methods. The greater and more widespread the attention to forecasting, the greater the probable effect of the prediction upon the time and intensity and possibly even the direction of business changes. Allowance can be made in advance for these probable effects, but it will be inherently difficult to estimate them accurately. The value of a forecast to one who desires it for private gain depends upon the fact that it is not generally acted upon or at least not promptly. If the reactions to a series of forecasts from a given source were general and in accord with one another. that fact itself would result in a change in the net response to predictions from that source. Since the value of a business forecast to the individual consists in part in its enabling him to anticipate his competitors in a given line of action, it is difficult to imagine the attainment of a very high degree of accuracy in forecasting competitive business activity.

Another limitation is the impossibility of eliminating the effect of human emotion upon the judgments rendered by forecasters. There is a strong tendency for the analyst to let his desires influence what he expects. This may lead him to anticipations more nearly in conformity with his wishes than are warranted by the facts; a conscious attempt on his part to resist this tendency may result in the opposite course. Those who publish their predictions may become too much concerned with their reputations for correctness and thus saddle themselves with an emotional handicap. Facts most in conflict with the prediction are likely to be minimized and those most in accord with it magnified; the situation can no longer be appraised with the required degree of objectivity, and the correctness of the forecast may thus be vitally impaired. Those who stand to gain from favorable developments are subjected to the temptation of being unduly optimistic in their predictions. Forecasting agencies eager to please their clients are under pressure to emphasize the hopeful aspects of the situation. The records of forecasting services commonly show an optimistic bias.

The soundness of predictions has an important bearing on the usefulness of forecasting for stabilizing business activity. Economically unsound forecasts may serve to prolong and intensify maladjustments rather than to accomplish their prompt correction. Whether the net effect of forecasting proves to be disruptive or stabilizing would seem to depend in the first place upon the soundness of the theory, the adequacy of the data and the effectiveness of the analytical technique which the forecasters command. In the second place, the effectiveness of forecasting in mitigating threatening economic

disequilibria depends upon the response of the business community to forecasts. In a quasicompetitive regime of the present day there is no assurance that the intensity of the response will correspond to the need for business adjustments. Nevertheless, forecasting may prove to be an effective stabilizing influence in the hands of public bodies which have the requisite power to undertake definite action designed to influence business developments; an outstanding example is the central bank, which shapes its policy of credit control on the basis of its own forecast.

The serious use of husiness forecasting by business executives as an aid in management is not yet general even in the United States but it is growing, particularly among the larger corporations. Certain public utilities make careful predictions both of the secular trend of their own business by regions and of the cyclical fluctuations of general activity. Railroads use short term forecasts for industries and for regions as a basis for allocating cars. A number of large industrial and commercial concerns employ economic statisticians primarily for forecasting and a great many subscribe to one or more of the general business forecasting services. In 1931 there were in the United States about thirty such services not counting government bulletins, bank and brokerage house letters and business journals which contain predictions. A few of these services attempt in their forecasts to cover every important field of economic activity; their publications are as highly valued for the information they contain as for the forecasts they present.

GARFIELD V. COX

See: Business Cycles; Conjuncture; Time Series; Curve Fitting; Index Numbers; Demand, section on Statistical Demand Curves; Crop and Livestock Reporting; Statistics; Stabilization, Business.

Consult: Hardy, C. O., and Cox, G. V., Forecasting Business Conditions (Chicago 1927); Jordan, D. F., Practical Business Forecasting (New York 1927); Persons, Warren M., Forecasting Business Cycles (New York 1931); Hancy, Lewis II., Business Forecasting (Boston 1931); The Problem of Business Forecasting, ed. by Warren M. Persons and others (Boston 1924); Persons, Warren M., "Construction of a Business Barometer Based upon Annual Data" in American Economic Review, vol. vi (1916) 739-69; Smith, Bradford B., "A Forecasting Index for Business" in American Statistical Association, Journal, vol. xxvi (1931) 115-27; International Labour Office, Economic Barometers, Studies and Reports, ser. N, no. 5 (Geneva 1924); Lacombe, E., La prévision en matière de crises économiques (Paris 1926); Wagemann, Ernst, Konjunkturlehre (Berlin 1928), tr. by D. H. Blelloch as Economic Rhythm (New York 1930) chs. xii-xiv; Bowley,

A. L., Breisky, W., Gini, C., March, I., Persons, W. M., Wagemann, E., and Lipiński, Ed., in Institut International de Statistique, Bulletin, vol. xxiv, pt. ii (1930) 219-347, 458-65; Wagenfuhr, Rolf, Die Konjunkturtheorie in Russland (Jena 1929); Bresciani-Turroni, C., "Considerazioni sui 'barometri' economici" in Giornale degli economisti, 4th ser., vol. lxviii (1928) 1-26, 361-93, 579-619; Kondratieff, N. D., "Das Problem der Prognose, in Sonderheit der sozialwirtschaftlichen" in Annalen der Betriebswirtschaft, vol. i (1927) 41-64, 221-52; Morgenstern, Oskar, Wirtschaftsprognose, eine Untersuchung ihrer Voraussetzungen und Möglichkeiten (Vienna 1928); Cox, Garfield V., An Appraisal of American Business Forecasts (2nd ed. Chicago 1930); Working, Elmer J., "Evaluation of Methods Used in Commodity Price Forecasting" with discussion by E. Waterman and A. W. Marget, and Cowan, Donald R. G., "The Commercial Application of Forecasting Methods" in Journal of Farm Economics, vol. xii (1930) 119-63. See also publications of forecasting services, particularly the Review of Economic Statistics of the Harvard Economic Society and the Vierteljahrshefte of the Institut für Konjunkturforschung.

FOREIGN CORPORATIONS. The law of every modern state distinguishes certain corporations which are called domestic from others which are called foreign and commonly treats corporations of each class differently, at least in certain respects. But the content of the terms is not the same in all states. In common law states, undoubtedly in large part because of the influence of the theory that a corporation is a creation or fiction of the law from which its charter is derived, a corporation is held to be domestic with respect to the incorporating state, and foreign with respect to other states. In civil law states, where the concession and fiction theories are less generally accepted, various tests of domesticity are applied—where the corporation was chartered or authorized, where the acts resulting in incorporation were performed, where the center of its business operations or of administration is or where its seat is fixed by its constituting document. Different tests of domesticity may be applied to different types of corporations. Civil law states commonly treat a corporation which has received express authorization from a state as domestic with respect to such state; whereas if the authorization is not express, the corporation is treated as domestic with respect to the state in which its administrative center is located.

The conception of a corporation as a fictitious entity was welcomed in the early American common law because it was perceived to be an excellent weapon to restrain these entities, then unpopular. It was easy to deduce from the fic-

tion theory that a corporation could have no existence outside the state incorporating it. As each state of the United States has plenary incorporating power, a corporation incorporated in one state was early and still is held to be foreign with respect to all others.

Unlike the state legislatures Congress has no general incorporating power. The constitution, however, does confer on Congress exclusive power to legislate for the District of Columbia and for the territories. When Congress incorporates in the exercise of such power, the corporation is held to be domestic with respect to that legal unit of which Congress was at the time acting as a legislature. In addition it was early held that Congress could exercise the incorporating power when acting as what may be called a national legislature, in instances where such action was a necessary or proper means for carrying into execution any power conferred by the constitution upon the government of the United States. Except for the incorporation of national banks exercise by Congress of this power has been relatively infrequent and no general federal incorporation statute exists. The domesticity of corporations incorporated pursuant to this power, commonly called federal constitutional corporations, is not wholly clear, but they are undoubtedly foreign with respect to all states in which they neither carry on business nor have their administrative center.

The right of a corporation to sue outside the state incorporating it was apparently never seriously contested in the United States, but when exterritorial corporate activity involved other action it was urged that since a corporation could not exist outside its charter state it could not act outside such state. Such a contention could not prevail in view of the demands of expanding business, and in the leading case of Bank of Augusta v. Earle [38 U. S. 519 (1839)] Chief Justice Taney squarely met this contention and established the orthodox American theory that although a corporation could not exist outside the incorporating state it could effectively act elsewhere by agents with the permission of the state in which the act was done. To find permission Tancy resorted to the doctrine of comity, holding that in the absence of legislation to the contrary states permit acts on behalf of foreign corporations "not contrary to local policy." This has since been construed to mean acts which corporations as such are permitted to do in these states.

While this decision established the possibility

of exterritorial corporate activity it preserved for non-charter states a wide field of control, since it made clear that legislation could withhold or condition such permission. Legislation imposing conditions upon the exercise of all or at least of certain kinds of corporate activity by foreign corporations soon became common in the states. Today many states have statutory provisions requiring a foreign corporation, even though incorporated in another state of the United States, before doing business to file a copy of its charter and a financial statement, to appoint an agent upon whom process may be served in actions against it and to pay a tax.

The effect of non-compliance with such legislation, assuming its constitutionality, is a matter of interpretation. Sometimes it is held to be merely a bar to maintaining in the courts of the state suits arising from corporate action within the state. Sometimes such legislation purports to make or is construed as making such action unlawful, with varying consequences. Ordinarily, however, non-compliance does not prevent the recognition of the fact of incorporation.

Early state legislation often dealt harshly with foreign corporations. It was argued that since permission of the state was required for activity therein any condition might be imposed on the granting of such permission. Business needs, however, required some limitation on this view and the courts soon found it in the United States constitution.

In the case of the relatively small number of federal constitutional corporations, grounds for constitutional protection are obvious. Describing these corporations as instrumentalities of the federal government the courts have held unconstitutional any attempt by states to limit or condition their exterritorial activity. The problem of protecting corporations incorporated by the individual states has been more serious.

Prior to 1868 it had generally been thought that the commerce clause of the United States constitution applied only to navigation. This assumption was dispelled in that year by the decision in Paul v. Virginia [75 U. S. 168 (1868)]. In addition the court said that a state legislature could not refuse to permit the performance within the state by a foreign corporation of acts in the course of interstate or foreign commerce. Since then it has been clearly established that a state legislature can neither withhold nor condition such permission.

Since many forms of business enterprise of national scope and importance, such as insur-

ance, are held not to constitute interstate commerce, some further limitation on the power to impose conditions was needed. The extent of possible constitutional protection was limited because courts hostile to corporate activity had early decided that a corporation was not a "citizen" of any state and, before doing business or owning property in a state, not a person within its jurisdiction, in the constitutional meaning of those terms. Certain palliative doctrines have been worked out, however. The doctrine of unconstitutional conditions has been devised by the United States Supreme Court to the effect that state legislatures cannot impose conditions "violative of rights secured by the United States Constitution." Under this doctrine the Supreme Court has held unconstitutional attempts by the states to prevent the removal of suits to the federal courts and attempts to legislate in connection with the intrastate business of corporations engaged in interstate commerce, in such a way as to burden unduly the interstate business. The doctrine of unconstitutional conditions has not as yet been fully developed but it is certain that in view thereof the Supreme Court can, if it will, do much to vitiate arbitrary and unreasonable legislation. While the full extent of the protection afforded by the contract clause of the constitution is not yet clear, it is certain that a foreign corporation is entitled to protection against state legislation impairing the obligation of contracts. Furthermore, it is now established that a foreign corporation can, under some circumstances at least, be "a person within the jurisdiction" of a state and as such be entitled to protection under the Fourteenth Amendment.

Arbitrary legislation by one state with respect to corporations of other states is today probably the exception rather than the rule. This has led to another problem, that of charter mongering. It is established common law in the United States that the law of the incorporating state governs such questions as the purposes for which a corporation may be formed, the classes of stock which it may issue, the consideration for which stock may be issued, the rights and obligations of shareholders and the duties of directors. It is also established that the charter state may impose an excise tax for the privilege of incorporation and of continued existence, and, what is most important, it is at present held immaterial for all these purposes that the corporation carries on no business and has no operating headquarters within the charter state. It is not uncommon

for states to yield to the temptation to attract by lax corporate legislation incorporators of enterprises intended to be carried on in other communities and thus secure added revenue. The effect upon security holders and creditors has frequently been disastrous. An appeal to state self-respect probably cannot completely succeed; the danger remains until all states cooperate, and some states yield but little to such an appeal.

Federal incorporation has been suggested as affording relief from arbitrary legislation and unreasonable conditions on the one hand and from lax incorporation provisions on the other. Such relief could be secured only by exclusive congressional power over incorporation or control of at least such businesses as are not of purely local scope and significance. Such drastic extension of congressional power would have distinct advantages. Incorporation under federal law has proved successful in Germany and Austria and is now generally approved in the Union of South Africa. Federal legislation could protect the states' financial interests. But the dangers of centralization although often overemphasized are an important consideration. And for a complete solution it would be necessary to amend the constitution, generally a very difficult process, especially when the need for change is not obvious to the layman. An extension of existing constitutional conceptions can undoubtedly give substantial relief from arbitrary state legislation, while difficulties arising from lax corporate legislation by certain states can probably be lessened considerably through blue sky legislation, federal legislation as to interstate commerce corporations and state legislation as to foreign corporations not engaged in interstate or foreign commerce.

The position in other federal countries of a corporation domestic with respect to one constituent state and acting in another affords interesting comparison. In the Dominion of Canada the provincial legislatures have plenary power to incorporate companies "with provincial objects." Power to incorporate companies with other objects lies with the dominion Parliament, and a Dominion Companies Act is in force. A corporation incorporated under the legislature of one province is foreign with respect to all others. It may act in other provinces only with their permission, and this permission may be withheld or conditioned by legislation. Charter mongering does not seem to have caused trouble in Canada. A corporation formed under dominion law may not be excluded from the provinces but is subject to such provincial laws as do not "sterilize, or affect the destruction of, the capacities and powers which the Dominion has validly conferred."

In the Commonwealth of Australia the division of incorporating power between the federal and state governments is largely the same as in the United States. The constitution (art. 51, sect. xx) gives the commonwealth the power to legislate with regard to "foreign corporations and trading and financial corporations formed within the limits of the Commonwealth," but the judges of the High Court disagree as to the meaning of the section [Huddart Parker and Co. Prop., Ltd. v. Moorehead, 8 Commonwealth Law Reports 330 (1908)]. As in Canada, charter mongering does not appear to be a source of trouble, but there has been agitation for a general and exclusive incorporating power in the commonwealth.

Incorporation in the Union of South Africa has been under federal control since the Companies Act of 1926. A company formed under this act cannot be excluded or its activity hampered by the legislation of any state in the union. Similarly a corporation formed under German or Austrian federal legislation may not be excluded by any of the federated states.

In the United States the common law doctrine of comity applies with equal force to corporations incorporated outside the United States. So also does the doctrine that a state can by legislation (except as limited by constitutional provision) withhold or condition such permission. The protection afforded to corporations incorporated outside the United States is, under present constitutional interpretation, the same as for corporations incorporated by the states. No legislation of any state of the United States distinguishes between corporations of other states of the union and those of foreign countries.

In England the doctrine of comity is in force in substantially the same form as in the United States. Legislation provides that foreign corporations establishing a place of business in Great Britain must file papers somewhat similar to those required by the states of the United States of foreign corporations carrying on business therein. Failure to comply involves a money penalty.

The doctrine of comity was disregarded by Belgium when, in 1844, it excluded French insurance companies from the country. In 1849 the Belgian Court of Cassation refused to recognize

the civil personality of French sociétés anonymes. Retaliations were threatened in France, and the dispute known as l'affaire des sociétés anonymes lasted until the Belgian law of March 14, 1855, and the French law of May 30, 1857, provided among other things that the sociétés anonymes of each nation should enjoy civil rights before the tribunals of the other. In France and certain other civil law states even today a foreign corporation can act therein only with express legislative or executive permission. More commonly civil law states distinguish between the exercise of civil and functional corporate capacities; the former may be exercised without legislative or executive permission (on a theory of comity) but the latter may not. Most civil law states through legislation, executive action or otherwise now authorize foreign business corporations to carry on activities therein. Often this legislation purports to impose conditions on the exercise of functional capacities similar to those imposed by legislation in common law jurisdictions concerning the doing of business. But the modern tendency is to treat foreign corporations differently from domestic corporations only to the extent that the different factual elements call for such treatment. The prevailing tendency of civil law states to treat a corporation as domestic with respect to the state wherein its administrative center is located minimizes the difficulties arising from charter mongering.

Constitutional protection of corporations of other countries is rare outside the United States. The only protection which such corporations have against arbitrary legislation arises from treaties and international law. Treaties between states are increasingly common; they provide for recognition of business and commercial entities incorporated in or connected in some way with one of the parties, and they permit such corporations to carry on business in the territory of the other party or parties, although generally only upon compliance with the laws of that state. They also commonly provide against discriminatory tax regulations and legislation.

International law affords very limited protection. The question of whether international law ever considers a corporation a national of any country is disputed. Most writers and judges urge that a corporation can have a nationality. Most commonly it is said to be a national either of the state in which it is incorporated or of the state in which its administrative center is located. But other tests are also advanced and in view of the lack of agreement it cannot be said

that international law treats a corporation as a national of a state or even that it treats its property as subject to a state's protection unless the corporation has been founded under the laws of the state, its administrative center is located therein, the control and enjoyment of its property are exclusively in the hands of nationals of the state, and the state has assumed permanent sovereignty over it or its property. But even though a corporation be a national of a certain state or its property be entitled to a state's protection, such state cannot insist that another state recognize the corporation or permit it to act or acquire property or rights therein. Where, however, a foreign state permits such corporation to acquire property or rights therein, it probably must allow the corporation to protect such property or rights.

In 1927 the Committee of Experts for the Progressive Codification of International Law appointed by the League of Nations adopted draft conventions to establish by international agreement rules concerning the recognition of the legal personality of foreign commercial associations and concerning their nationality and the determination of the question of their diplomatic protection.

The draft convention concerning the recognition of legal personality provided that "commercial companies validly constituted under the law of one of the Contracting States and having their actual seat in that state shall, as of right, be recognized as such in the other Contracting States" and that foreign commercial companies thus recognized should "in the territories of the signatory States be entitled to enjoy the rights resulting from such recognition and be parties to actions at law either as plaintiffs or defendants, provided they comply with the laws of the country in question." Such recognition would not imply that the companies would "be entitled to establish themselves and transact business in the territory of the other Contracting Parties or, in general, to carry on permanently the activities contemplated by their statutes."

The draft convention concerning nationality and diplomatic protection provided among other things that the signatory states should agree "that the nationality of a commercial company shall be determined by the law of the contracting party under whose law it was formed and by the situation of the actual seat of the company which may only be established in the territory of the State in which the company was formed," but that "the determination of nationality in the

above sense shall in no way affect the full right of the Contracting States to make rules as to the formal and material conditions governing the formation of commercial companies: such rules depend entirely upon the municipal law." This draft further provided that "the right of diplomatic protection and intervention on behalf of commercial companies shall belong to the State of which they are nationals under the provisions of the present convention."

HENRY E. FOLEY

See: Corporation; Conflict of Laws; Jurisdiction; Domicile; Comity; Commercial Treaties; Uniform Legislation; Federation; Centralization; Interstate Commerce.

Consult: Young, E. II., Foreign Companies (Cambridge, Eng. 1912); Henderson, Gerald C., The Position of Foreign Corporations in American Constitutional Law (Cambridge, Mass. 1918); Beale, Joseph H., The Law of Foreign Corporations (Boston 1904); Lepaulle, Pierre, De la condition des sociétés étrangères aux États-Unis (Paris 1923); Leven, Maurice, De la nationalité des sociétés et du régime des sociétés étrangères en France (Paris 1926); Feilchenfeld, E. II., "Foreign Corporations in International Public Law" in Journal of Comparative Legislation and International Law, 3rd ser., vol. viii (1926) 81-106, 260-74; League of Nations, Committee of Experts for the Progressive Codification of International Law, Recognition of the Legal Personality of Foreign Commercial Corporations, 1927, V. 11 and 12 (Geneva 1927).

FOREIGN EXCHANGE. In the language of the market foreign exchange signifies written or telegraphed orders to pay money, which are issued by merchants or bankers at one geographical point upon merchants or bankers at points having a different currency system. Taken more broadly foreign exchange designates the entire mechanism by which payments between any two points or areas operating under different currency systems are effected without the passing of actual money or of articles having an intrinsic value. The foreign exchange process is, like bank clearings in domestic finance, fundamentally an exchange or clearing of debts payable on demand or at relatively short maturity. Its distinction from domestic exchange lies in the fact that the payments cleared involve different currency systems.

The ways in which payments can be effected between two financial centers and the types of documents originated in the process are reflected in the classes of foreign exchange rates quoted. These rates state the price of a unit of one currency in terms of another currency. The principal classes of buying rates in New York for exchange on London may be illustrated as

follows: bankers' demand drafts ("sight"), \$4.86 per pound sterling; bankers' long bills, \$4.84; commercial long bills, \$4.835; cables, \$4.8625 (values arbitrarily assumed). The sight rate is generally regarded as the basis from which the others are calculated. The quotation for long bills is below the sight rate by the amount of the discount charge in London plus commissions and other charges; and commercial bills are subject to a further discount because of the additional risk. Cables command a premium, primarily because the New York seller must establish a balance in London before he can sell sterling cables. In the present illustration the premium is based on the interest charge for the six or seven days required to mail a sight draft from New York to London, although the premium may drop if New York bankers are anxious to sell off their London balances. Cables are now so commonly used between the leading centers that exchange bankers frequently use the cable rather than the sight rate as their base for calculating long rates; and it is true that the cable rate may itself react on the sight rate. But logically the price of sight documents must be regarded as the controlling factor in the rate structure, since only this class of documents is subject to neither a variable premium nor a variable discount. This rate structure moves up and down as a unit, the spread between the several rates in New York varying, other things equal, with changes in the London discount rate, except for the spread between cables and sight, which varies roughly with the New York dis-

The level of the sight rate itself on a given day is the product of a number of factors. Under ordinary gold standard conditions the fluctuations of the sight rate between any two centers are confined within the so-called "gold points." The numerical ratio between the physical weights of the respective currency units in fine gold or of their gold equivalents is the mint par of exchange; and the gold export or import points are determined by adding to or subtracting from this mint par the cost of shipping actual gold from one center to the other. The gold points are slightly variable, drawing together as freight, insurance and interest charges diminish and spreading apart as they increase. If the sight rate rises above the gold export point, it is cheaper to make foreign payments by shipping gold than by buying exchange; if the sight rate is below the gold import point foreign obligations will be paid by the import of gold. The

mint par has no normative influence over the sight rate; any sight rate lying within the gold point is as "normal" as any other.

Within the gold points the principal determinant of the sight rate is the demand and supply of bills originating in the exchange between countries of commodities, services and securities. In many countries the exchange of commodities is subject to strong seasonal influences, and this usually imparts a pronounced seasonal movement to the sight rates involved. A second important determinant is the relative state of the discount rates in the leading centers. A marked difference in discount rates usually induces a movement of short term funds to the high rate centers and thus brings pressure to bear on the foreign exchanges. A certain minimum differential varying in specific cases from 0.25 percent to over 1 percent is, however, necessary to produce any movement at all. Such movements of funds and exchange rates are in the nature of the case more or less self-correcting and eventually reverse themselves. The third and last important determinant is the speculative movement of funds to take advantage of anticipated changes in the exchange rates or in other money market factors; these movements are also largely self-correcting.

In addition to spot rates, or rates for the immediate delivery of the type of foreign exchange in question, the leading money markets now quote forward rates, or rates for foreign exchange of specified kinds to be delivered at a specified future date, usually one or three months ahead. The device of the forward contract enables a person who must make payments abroad at a known future date to hedge against the risk of exchange rate fluctuations in the interval. Forward transactions make commercial operations more certain and cheaper and at the same time diminish the fluctuations of the spot rates themselves by spreading out the effective demand more evenly; they also reduce the influence of genuine speculation in exchange. It is regrettable that the world's central banks as a whole have hitherto made comparatively little use of the forward markets since they offer a powerful tool of control (see HEDGING).

In addition to dealing in forward exchange many central and private banks quote "arrival" rates. These are the rates at which bills drawn in the local currency and mailed in foreign centers on the given day will be discounted by the quoting bank on arrival. The practise of quoting such rates protects the original buyers of the

bills from the effects of unforeseen changes in discount rates and thereby makes the relevant foreign exchange operations as a whole more certain and cheaper.

The foreign exchange market is simply one division of the general money market in each financial center. The oldest and most highly organized exchange market is that in London because of the preeminence of that city in the short term financing of the foreign trade of the world. For the same reason the exchange market there constitutes a far more important part of the money market as a whole than in any other center. Three principal groups of institutions participate in the London exchange market: the commercial banks, including the London offices of foreign banks, through which most of the bills come into the market; the bill brokers, who buy bills primarily in order to sell them again, and the discount houses, which buy bills primarily to hold them as investments; and the Bank of England, which under normal conditions operates much like an ordinary commercial bank. Through its control over internal credit conditions and discount rates the Bank exercises, however, a substantial control over the foreign exchanges and gold flows. Particularly before the war the appearance of gold drains was regarded as a conclusive proof that the internal financial situation was unhealthy and that contraction was required. In consequence of operations by the Bank for the purpose of bringing the market under control there would occur a rise in discount rates which if at all pronounced would attract short term funds from other centers; cause long bills originating abroad to be sent to cheaper markets than London for discount or, when the bills were drawn on London, to be kept by the original foreign buying bank as an investment; cause previous English finance bill loans to be closed out by the purchase of sterling sight; and in these and other ways would both increase the demand for sterling and postpone the presentation of claims against London. These changes relieve the pressure on the sterling exchanges and usually induce a favorable movement of exchange rates, and if the discount rate remains high for any length of time an inflow of gold also usually follows. The Bank has also found it possible to control specie movements to some extent by paying out light weight coins within the limit of tolerance, thus moving the specie export point farther away from the mint par; and by granting interest free loans to gold importers, thus moving the specie import point closer to the mint par. These devices, however, are of comparatively minor importance.

On the continent the foreign exchange markets have been much less highly developed and much less easily controlled than the English, although in most cases their position has improved since the post-war stabilizations. In some countries, especially in the pre-war period, this was due to the absence of a continuously free gold market. In others, where gold convertibility at a fixed maximum price was assured, it was due to the lack of a domestic acceptance market sufficiently broad and stable to support large international operations. Moreover, since in the leading continental countries the volume of foreign trade was and is much smaller than in England, both absolutely and in comparison with the volume of domestic trade, there has been no large and steady inflow of foreign bills for discount or payment. Finally, in none of the leading continental countries before the war was the commercial banking system tightly knit and sensitive; and in none of them except Germany was the central bank able or willing to control internal credit conditions with any degree of consistency. For control over the foreign exchanges and specie flows, the central banks and governments concerned were therefore unable to rely solely on the quasi-automatic methods that had been so successful in England. They had to make extensive use of more or less stop gap devices; notably, the building up of portfolios of foreign exchange, which could be thrown into the market when the exchange rates fell too low, and the actual although unstated suspension of specie payments, a device not infrequently resorted to by France, Austria-Hungary and Russia. In the period of post-war monetary stabilization the exchange markets have been better developed and more adequately controlled, again chiefly through the use of reserves of foreign bills and balances, but it is still too soon to see clear lines of development that are likely to be permanent.

In the United States during the era of the national banking system most of the financing of foreign trade was done in sterling. There was no centralized money market adequately equipped to become an international financial center; bankers' acceptances were almost unknown, and indeed most banks were forbidden by law to make them; there was no open market for foreign bills of exchange and no central agency for rediscounting; and few American banks had foreign branches, while legal restrictions were placed

on the New York branches of foreign banks. The setting up of the Federal Reserve system changed all this and the foreign exchange division has now become one of the most important parts of the New York money market. This growth was enormously stimulated by London's wartime losses and by the diminution in the prestige of the pound sterling in the post-war years. Although New York still does not equal London as a world center for short term finance, its importance is growing steadily and with it the use of dollar exchange to finance the world's trade. In addition to the New York market small exchange markets exist in other American centers, notably Boston, Chicago and San Francisco.

The New York exchange market is less highly organized than that in London. The sellers of bills are chiefly the commercial banks and trust companies together with a few finance houses which do little but accept bills. The buyers comprise all those who wish to invest their funds in the short term money market, including the Federal Reserve Banks. Such investors may put their surplus funds either into bills or into stock exchange collateral loans. In more or less "normal" times, when the call loan market is not distorted by inordinate stock speculation, the call loan rate and the bill rate are thus tied fairly closely together, although usually with a differential against call loans. As long as the stock exchange can share command over liquid bank funds with the bill market—that is, presumably, as long as daily settlements on the stock exchange remain in force—the bill market can therefore never achieve the central position which it occupies in London. As in the case of the Bank of England, the principal means by which the Federal Reserve Banks can control the foreign exchanges is through the prior control of discount rates and general internal credit conditions. But international trade and finance and hence the movements of specie and the exchange rates play a much smaller part in American economic life than they do in the English. In consequence control of the foreign exchanges as such has been a much less important objective in Federal Reserve policy than in that of the Bank of England, and it is broadly correct to say that except during the war such control as has been secured has been a rather incidental byproduct of the endeavor to control general internal conditions.

The mechanism of the foreign exchanges attracted the attention of economic writers at an

early date. The essence of the so-called specie point mechanism—namely, that a movement of the exchange rates beyond the specie points will cause an outflow or an inflow of specie-was recognized in England as long ago as the end of the seventeenth century, for example by S. Clement in A Discourse of the General Notions of Money, Trade and Exchanges (London 1695). But although many of the mercantilist writers were familiar with both the operation of this mechanism and the fact that there is some connection between the quantity of money and the level of internal prices, it remained for the first great English critic of mercantilism, David Hume, to weave these and other elements of doctrine into a self-consistent whole. In substance Hume declared that if a country exports more than it imports the foreign exchanges will move favorably, specie will flow in, prices will rise, exports will be checked and imports stimulated, and these changes will continue until some sort of balance or equilibrium is restored. A similar process, he held, serves to restore international equilibrium if it is disturbed by a large initial price change in any one country. This doctrine, which for the first time provided an explanation of the maintenance of equilibrium between the price systems and in the international commerce of the countries using the same metallic currency standard, became one of the corner stones of the classical English theory of international trade. Ricardo fitted it into his theory of international values and J. S. Mill elaborated it, but neither changed its essential character.

Under modern conditions, however, the acceptance of this theory presents a number of difficulties, so that in recent years few writers have been willing to subscribe to it without fairly extensive qualifications. At present disequilibrium in international payments reacts of course on the exchange rates, but it is not clear that the correction of the situation takes place in quite the way that the classical theory postulates. In the first place, commodities are no longer the only important element in international exchange: the movements of capital and services are both playing steadily larger parts. In the second place, when international disequilibrium does occur, gold is by no means the first thing to move in settlement of the adverse payment balance. Short term funds, securities and even certain standardized commodities are more sensitive to exchange rate fluctuations than gold, and their movements alone may suffice to restore equilibrium. Moreover, in recent decades the interna-

tional movements of gold have frequently been too small, and sometimes too clearly at variance in their direction with the current international payment pressure, to make it entirely plausible to regard them as the main pivot of the process of international adjustment. In a number of cases gold flows have apparently taken place as a result of prior changes in general prices and have operated merely to support a higher level that was already established. In the third place, the connection between an inflow of foreign gold or short term capital, on the one hand, and the correction of the underlying situation which produced the original international disequilibrium, on the other, no longer seems as clear and positive as the classical writers thought it to be. Under present day conditions incoming gold usually goes directly into central bank reserves, and it then may or may not produce the postulated increase in currency and credit and the postulated rise in commodity prices. Moreover, if foreign short term capital alone comes in, no effect on commodity prices need follow at all. Indeed Goschen writing as far back as 1861 explained the process of international adjustment principally in terms of the effects of exchange rate fluctuations and gold flows on the respective money markets alone, assigning to commodity prices and the balance of trade only a comparatively minor role.

As yet there is no agreement on any one doctrine that can be substituted with confidence for the strict form of the price-specie-flow theory, but the general lines which such a doctrine will take seem fairly clear. It will run in terms of the effects which an excess of international debits or credits as such and the resulting exchange rate pressure have on the volume of purchasing power currently available in the countries concerned, regardless of whether actual gold flows take place or not. Commodity price changes may be found to ensue from this condition of strain. But in many cases the mere expansion or contraction of grants of commercial bank credit, especially to borrowers who are engaged in international business, will suffice to alter the current volume of the country's international credit and debit transactions in the necessary degree and thus to restore equilibrium. If an equilibrium is not established fairly accurately and continuously between each country's international payments currently due and currently receivable, an unmanageable accumulation of demand and short term obligations on one side or the other will soon result. Either of two things may then

happen. The debtor country or the individual debtors may in effect declare a moratorium on the foreign obligations, trusting that a subsequent favorable turn will permit repayment later. This happened on a large scale in both belligerent and neutral countries at the outbreak of the World War, again in 1921-22 and once more in 1931. Or the exchange rates may be allowed to collapse in consequence of the competition of the individual debtors for media of foreign payment. When the exchange rates have moved substantially beyond the gold export point without inducing a flow of gold, the country has evidently abandoned the gold standard, at least for international payment purposes, and is entering on a regime of what is in effect inconvertible paper—even though there may still be large but unused gold reserves.

The traditional foreign exchange policy of the leading countries has been that of insuring foreign exchange stability; that is, it has been aimed at keeping the exchange rates within the gold points, while internal prices in each country have been left to adjust themselves to the successive impacts of changes in domestic and foreign conditions. An alternative policy, the possibility of which was not clearly realized until recently, is that the internal price level in each country be kept stable and the foreign exchanges left to fluctuate beyond the limits usually imposed by the gold points. While the second alternative, at one time strongly advocated by J. M. Keynes, has been rejected by most students and bankers for practical reasons, the first system also has grave practical defects. Under present day conditions exchange rate movements and gold flows can no longer be relied upon to correct financial conditions and price levels in the countries concerned, so that grave disequilibrium in current international payments is always a possibility. Even under the most favorable circumstances no central bank can always be sure of gaining control of the situation, because the requisite economic power is not continuously available; and some central banks are legally handicapped as well. Moreover, the greater the success of the central bank in stabilizing the foreign exchanges, the more surely will it find itself stimulating internal price fluctuations. For the economic rhythms of the several countries are dissimilar; and if the foreign exchanges, which are a principal connecting link, are held rigid, then the dissimilarities must work out in the form of changes in the value of money within the several countries.

It is impossible for any one country to solve this dilemma alone, for no one country has sufficient economic power to force all the others into its path. The solution, so far as one can be found, probably lies in that continuous cooperation between central banks which is at last beginning to find favor. If each leading central bank works constantly not only to stabilize conditions at home but also to harmonize domestic developments with those abroad, then indeed fluctuations in exchange rates, internal prices and internal business activity will not be avoided, but the acuteness of the present international differences can probably be lessened and the amplitudes of the fluctuations themselves be reduced. To accomplish these ends, however, the central banks will have to adopt far more aggressive and self-conscious policies of general control than most of them have hitherto been willing or able to subscribe to; and they will have to become seriously concerned with the welfare of the world as a whole, themselves included, not merely with their own immediately perceptible national interests.

What has been said up to this point applies primarily to foreign exchange between countries on a common and full metallic standard. When the currency standards are dissimilar, foreign exchange involves a quite different range of problems. Three main types of relations are of practical importance: the gold-exchange standard, gold-silver exchanges and gold-paper exchanges.

The essence of the gold-exchange standard is that the country concerned, too poor in gold or silver to trust itself to a full convertible metallic standard or for other reasons, ties or "pegs" its currency and its foreign exchanges to a foreign currency, usually gold. The exchanges are allowed to fluctuate within narrow limits, which correspond to the usual gold points. At the "export" point the controlling authority will sell foreign exchange in unlimited quantities; at the "import" point it will buy. A purchase of foreign exchange by the controlling authority expands the local currency, while a sale contracts it, so that the local currency is tied to the movements of foreign trade much as under a full gold standard, although often with less sensitivity and less accuracy. The great advantage of this arrangement is its cheapness. It makes largely or entirely unnecessary the movements of gold to and from the country concerned, thus eliminating gold shipment charges; and it enables the central authority to keep all of its

foreign exchange reserves in the form of interest bearing assets. But the successful operation of this system requires the maintenance of a large fund in the foreign center against which the controlling authority can sell. If a protracted adverse balance of payments exhausts this fund, then unless more money can be borrowed abroad the system breaks down and the exchanges suddenly collapse.

Since the war a modified form of gold-exchange standard has been adopted by a large number of countries, especially in Europe. These countries have maintained at least nominal gold convertibility for their currencies, but because of their own financial weakness and the uneven post-war distribution of gold stocks they have been unable to keep all of their minimum central bank and currency reserves in the form of gold. The remainder has been kept in the form of foreign bills and balances with central banks payable in gold currencies. This procedure can easily result in a dangerous multiplication of central bank claims against given stocks of gold; in a consequent shrinkage in percentage terms of the ultimate gold base underlying the aggregate of the central bank obligations and the international exchanges involved; and in the exposure of the countries holding central bank reserves for others to severe and largely uncontrollable drains of gold to the rest of the world. This latter danger arises from the fact that financial conditions in the country whose currency is used as the base are not influenced by changes in conditions in the pegging country in the same way or to the same extent that they would be under a full gold standard. In the one case if the relative change in conditions is large the base country loses or gains gold; in the second case all that need happen is that the volume of foreign claims on the base country is increased or decreased. If the pegging countries chance to be important or fairly numerous, a serious international disequilibrium in price relations and business movements may develop without bringing corrective forces into play. What can then happen has recently been demonstrated with convincing force. In the last few years, England especially has been the depository for foreign central bank reserves of this sort. The sudden withdrawal of a large part of these and other demand or short term balances held by foreigners in the summer of 1931 and the simultaneous freezing of many of England's own balances and short credits abroad were the proximate cause which forced England off

the gold standard again in September of that year. The resulting fuller appreciation of its dangers may well lead to an extensive liquidation of the post-war form of gold-exchange standard in the more important countries which had resorted to it.

Exchanges between two countries one of which is on a gold standard and the other on a full value silver standard operate much like ordinary gold exchanges as long as the market ratio between gold and silver does not change. The chief difference is that gold cannot enter directly into the currency of the silver country but must be sold in the market there for currency; and vice versa with respect to silver. When the market ratio between gold and silver changes, however, the exchange rate shifts to correspond with the new market parity. If the change is large, general prices and the variable classes of money incomes must also alter in one or both countries, with a resulting painful period of readjustment and with undeserved profits or losses to exporters or importers during this period. In the case of an unrestricted bimetallic standard the changes just outlined take place whenever the market value of silver is below the mint value and the country is actually on a silver standard. The case of an arbitrarily overvalued silver standard is governed by the arrangements in force at the time. If the government successfully controls the exchanges, the case is analogous to that of the gold-exchange standard. If it does not, the case is more nearly like that of an inconvertible and uncontrolled paper currency, except that the exchange rate cannot fall below levels corresponding to the market value of the actual silver in the currency unit itself.

In the case of exchanges between two countries, one or both of which are on an inconvertible and uncontrolled paper standard, there ceases to exist any necessary limit on the fluctuations of the exchange rate. It has occasionally happened that an uncontrolled inconvertible paper currency remains stable, but in the great majority of cases the currency eventually fluctuates and depreciates to a greater or less extent. This happened in the case of nearly all the leading countries which went on an inconvertible basis during the war, with the exception of the Swedish currency, which was for a time at a premium not only in terms of foreign exchange but also in terms of gold. When depreciation takes place, the phenomena encountered vary with the degree and the rapidity of the depreciation, and it is impossible to find any one formula that fits all cases. The exchange rates usually move before internal prices and thus place a bounty on exportation as the depreciation progresses or a penalty when improvement is taking place. But even this relation does not hold in the case of the more extreme and chaotic depreciations.

During the war the Swedish economist Gustav Cassel revived a doctrine probably first formulated by John Wheatley in Remarks on Currency and Commerce (London 1803) and offered it as an explanation of the phenomena of depreciation. Summarily stated, this theory, which is called the purchasing power parity doctrine, declares that the rates of foreign exchange are governed by the relative purchasing powers of the currencies of the countries concerned, these purchasing powers being measured primarily in terms of internal commodity prices; and that the levels of prices themselves are governed primarily by the quantities of currency and credit in circulation. The corollary conclusion then is that the prime mover in the process of inflation and deflation is the variation in the quantity of the circulating medium. But this doctrine failed when applied to the more extreme cases of depreciation. It also ran foul of serious logical difficulties in statistical application. Such difficulties occurred in establishing comparability in the commodity groups selected as the basis of measurement, in insuring an intelligible representativeness of the selected groups and in allowing for changes in the composition of international trade in the interval elapsing between the base period and the period selected for making the comparisons.

Other theories developed during and after the war stressed other factors as determinants. In France Bertrand Nogaro developed a view opposite to that of Cassel: he held that the foreign exchange rates govern the domestic price level and that the latter governs the amount of currency and credit required. This doctrine too failed, however, to fit the apparent facts in a number of actual cases. Charles Rist, concerned more with the general causes at work than with specific sequences, placed his chief emphasis on budgetary equilibrium and disequilibrium as the ultimate controlling factor. In the United States Allyn Young emphasized the importance of speculation in the broad meaning of the term.

The truth of the matter appears to be that neither prices nor the exchanges can properly be regarded as the causes of general movements of the types here under consideration, nor can the levels of either be regarded as the result of the other's fluctuations. Rather, the fluctuations of both are products of common antecedent conditions: sometimes of movements in private commercial and banking operations alone, more commonly of movements in governmental finance. When the depreciation becomes extreme, however, the determining factor is simply the growing general loss of confidence at home and abroad, and the resulting flight from the currency affected. If the flight assumes panic proportions, as it did in Germany, the old currency is simply abandoned and a new one is eventually put in its place.

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See: Acceptance; Arbitrage; Balance of Trade; Bill of Exchange; Central Banking; Credit Control; Foreign Investments; Gold; Inflation and Deflation; International Trade; Monetary Stabilization; Money; Money Market; Price Stabilization; Silver.

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FOREIGN INVESTMENT. Foreign investment is the export of capital to a region or regions under a political authority different from that ruling the country in which the owner of capital resides. In the vocabulary of business as well as in theoretical discussions the term foreign investments is used just as loosely as foreign trade; the former includes not only every form of capital migration across the political boundary but also every form of credit extension by the mother country to a colony. Like capital invested at home, capital exported abroad may be invested in a variety of ways. They comprise short term trade and finance credits; long term

credits at fixed interest granted by private investors and investment companies or by public bodies including the government; investment in foreign enterprises through the purchase of shares; the establishment or acquisition of plants abroad to serve as foreign branches of a domestic enterprise or to function as an independent business on foreign soil.

The form which foreign investments assume finds no direct reflection in the country's balance of international payments; in this balance export of capital and the payment of interest appear as debit items, and import of capital and the the receipt of interest from abroad as credit items. The differences among the various forms are important, however, in many other ways. They determine the duration of creditor-debtor relations; they throw light on the use made of the capital received and indirectly also on the ability of the debtor to repay his obligations; their influence on the national economies of the parties involved and on the international economic situation as well as their possible political repercussions are quite different.

The political factor is of course most prominent in intergovernmental loans. Yet even where the public authority is involved only as debtor or only as creditor it is subject to many forms of political pressure, with the result that foreign loans to or by a government have in the past produced many international complications. The political aspects of capital export are more attenuated in purely business transactions, whether they assume the form of direct investments or of credit extension by one private party to another. The prominence of the political aspect in transactions of this sort depends less upon the form of the investment than upon the political relations obtaining between the countries concerned. The intrusion of extra-economic factors is most likely where investments are made in countries suitable for colonial exploitation or annexation and where considerable amounts of capital move between countries in which questions of political and commercial alliance play an important role.

The difference between public and private credits is not so important in judging the economic significance of foreign investments. The essential criterion in this connection is the purpose—production or consumption—for which the credits are used. In the case of commercial credits and direct investments the use for production is always at least contemplated, while with public credits it is only too often a question

of finding means to cover ten porary deficits in the budget or of getting long term loans for investments which are on the whole non-productive, such as the manufacture of armaments, the construction of military railways, public buildings and the like. Another important difference is that between the purchase of securities of foreign business enterprises and direct participation in foreign business through the establishment of plants abroad; this difference has a vital bearing upon the liquidity of the foreign investment.

International capital movements are closely linked to international commodity movements. Theoretically the net export or import of capital must be accompanied by an export or import balance in the movement of goods, services and bullion. It is not so easy, however, to determine in each specific case whether the causal relation runs from the movement of capital to that of commodities or in the opposite direction. Several conceivable relationships should be clearly distinguished. The movement of capital may be the direct consequence of commodity movements. The export or import of commodities gives rise to financing through banks, which ordinarily takes the form of short term documentary credits. Financing of this type enhances the volume of international trade, since it makes possible a number of commercial transactions which would not take place without such assistance. New countries poor in capital and in the post-war period many industrial European countries have been regularly dependent upon the financing of their foreign trade by foreign institutions. The volume of international short term credits employed in financing foreign trade is very large—it amounts at present to from \$4,000,000,000 to \$5,000,-000,000. Occasionally foreign trade may be supported also by intermediate and long term credits extended directly or indirectly by the government.

Commodity movements may also result in long term advances to foreign countries. One instance of this is the so-called tied investment, when the loan is granted on condition that its proceeds be spent in the lending country. The volume of such loans, however, is relatively insignificant, for the conditions attached to them raise the price of credit to the borrower.

Even where there are no formal restrictions of this type long term loans may be very intimately linked to commodity movements when credits are granted for the purpose of enabling

the foreign purchaser to pay for his past commitments or future orders of equipment and raw materials. In the era of railway building, when English capital was exported to the continent and overscas, loans were generally issued in anticipation of orders or after orders had been given or promised to English manufacturers, aithough the contractor or the manufacturer of rails, engines and other equipment usually was not closely allied to the institutions exporting capital. This relationship is illustrated in a particularly striking fashion by the English loans to India in the fifties and sixties; it may also be clearly traced in the financing of the railway building of the same period in France, Italy, South America and elsewhere. Moreover, it is clear that the export of capital from England to the continent and the United States in the last quarter of the nineteenth century and to Canada and Australia in the nineties was possible on so large a scale only because the provision of capital generally went hand in hand with the export of commodities needed by the borrowing countries and not obtainable elsewhere on equally advantageous terms. During that period England was the leading industrial country, if not the only one, in the world; railway construction and similar fixed investments of capital in the new countries were therefore dependent upon the supply of capital goods by English manufacturers. Thus the two types of export—of capital goods and of capital funds—were closely interrelated even in those cases where the sale of goods for export did not precede the granting of loans or was not anticipated at the time. In addition, English exporters of commodities frequently paved the way for the flotation of foreign issues on the London market. Consciously or unconsciously the English banker and the English manufacturer supported one another, for the movements of capital funds and of capital goods were interdependent.

For other reasons the movement of funds and the export of commodities are similarly interrelated in the young countries of a predominantly agricultural character, in which the payment of charges on foreign debts is taken care of by the export surplus of raw materials to the extent that it is not covered by new loans. In this case too it is difficult to determine which is the cause and which the effect: the country supplies raw materials for the world market and is thus put in possession of foreign exchange necessary to pay interest on, and the amortization instalments of, loans contracted abroad.

The situation is quite different in a country

whose net balance of capital imports and exports is not directly and naturally related to compensating surpluses or deficits on the visible or invisible items of the balance of trade. If such excess or deficiency in the movement of funds is not caused by the anticipation of movements in the opposite direction in the near future, its very existence is prima facie evidence of the presence of extraneous factors. In such cases the movement of capital is the primary fact and the movement of commodities its consequence. The relationship between the two is the sum and substance of the "transfer problem," the solution of which according to the classical theory of the balance of payments as developed since the time of Hume and Thornton consists of certain adjustments in the price levels of the countries concerned, these adjustments being brought about by the movement of specie or its anticipation and the corresponding expansion or contraction of credit.

A net balance in the capital account of a country is apt to induce a compensating movement of commodities only if this balance is too large or persists for too long a time to be offset by the shipment of gold or of substitutes for gold, such as paper currency accepted as the equivalent of gold, or by foreign finance credits. Even in the long run a favorable balance on the capital account is likely to determine commodity movements only in a comparatively narrow range of cases. At present a considerable part, perhaps much the greater part, of international movements of long term capital, is balanced by interest payments. The export of capital, for example, from England, France and the United States now means to a considerable extent the reinvestment of interest payments received from abroad in the sense that the proceeds of these payments offset new foreign investments in the country's balance of international payments. Furthermore, the various forms of capital movements may be reciprocally compensated; thus in Engnald and the United States the export surplus of long term capital is offset by an import surplus of short term funds. Even where a net surplus or deficit in the capital account affects the country's balance of trade it does not necessarily lead to an increase in the volume of its foreign trade, since a needed readjustment in the trade balance may be brought about not only by an increase of exports but also by a reduction of imports. Nevertheless, because of the close relation between the movement of capital and that of commodities it is an expansion in exports rather than

a decrease in imports that is usually effected.

The history of international capital migrations may be properly begun with the mediaeval period, when foreign short term credits were granted at the fairs of Champagne, the influx of Peter's pence to the papal fisc was financed by Florentine bankers, and foreign moneys were occasionally involved in credits to governments or crowned rulers. In the sixteenth century the Fuggers of Augsburg functioned as a great international investment house which financed not only copper mines in northern and central Germany but also silver mines in Hungary and the military activities of the Hapsburgs throughout Europe. Numerous instances of similar international finance are scattered through the history of Europe in the seventeenth and eighteenth centuries. The war needs of rulers furnished the typical occasion for the movement of capital from one country to another. Intermittent at first, this type of financing ripened in the second half of the eighteenth century into a continuous activity, monopolized for the most part by Dutch bankers. Antwerp and Amsterdam were then the leading international credit markets of the world; they absorbed, for example, the major share of British government obligations. After the Napoleonic wars leadership in finance, as in industry and commerce, passed to Great Britain, which retained it for nearly a century. Other countries reached the status of large net capital exporters much later: France in the sixties, Germany by the beginning of the nineties and the United States, which is now challenging British supremacy in this field, only in the twentieth century. The Netherlands, Belgium, Switzerland and occasionally Sweden appear in the world market as exporters of capital on a smaller scale.

The growth of English foreign investments, the volume of which practically doubled in the thirty years preceding the World War, is indicative of the rapid expansion of capital export since the industrial revolution. The volume of such investments more than doubled in the thirty years preceding the World War; in 1914 they were valued at \$20,000,000,000 and constituted about one fourth of the national wealth of Great Britain. The absolute increase of English income derived from such investments was greater than that from domestic investments, and the rate of its growth exceeded that of all the other portions of the national income. This enormous stream of capital, which enhanced the productivity of the world economy in many ways, was marked for its rather uneven flow: periods of intensive export

of capital were followed by periods of slower capital movements in a cyclical sequence. As seen over longer periods of time, however, the process was fairly continuous: the export of capital by the "rich" nations furnished in other countries the basis for capitalist development and in this sense raised their economic status. More specifically, it was foreign capital that made possible the extension of modern transportation facilities. England is the only country which has built its railways with its own capital; elsewhere foreign aid has been indispensable. Dependence upon foreign capital was equally great, although not as clearly marked, in the whole process of colonial expansion, in the opening up of new agricultural regions and in the stimulation of a great variety of industrial developments, particularly where the latter required relatively large amounts of fixed capital.

In the nineteenth century and in the twentieth until the outbreak of the World War capital export served for the most part the purposes of industrial and commercial expansion. The interest of the capitalist was focussed on each new country as soon as it was prepared to receive capital needed for its economic development. Even the large credits which were apparently motivated by purely political considerations, such as those intended to promote a policy of alliances, were also calculated to yield handsome profits and were in most cases accompanied by the economic upbuilding of the capital importing countries. Yet certain specific features and variations from time to time may be noted in the geographical distribution and the character of foreign investments of every important creditor country.

Great Britain is perhaps the most striking example of a creditor country whose investments in foreign fields were activated almost entirely by the search for greater returns. The distinguished history of British foreign investments began after the Napoleonic wars with the financing of the French war indemnity and the extension of credits to other continental states; this was the period of the first painful experiences with Greek, Spanish, Portuguese and similar foreign loans. At the same time came the first attempts to finance on a large scale mining enterprises in South America. Later British capital turned to the colonies and to the United States. The crisis of 1825 and particularly that of 1837 and that of 1847 were, in so far as the City was involved, caused by the defaulting of certain of the United States and of certain South American countries or by the collapse of great mining and plantation enterprises. Beginning in the forties the foreign investments of Great Britain comprised over a half of the annual additions to its capital. From the forties until the nineties British capital abroad addressed itself primarily to railway building: first on the European continent from France and Belgium to Russia; then in North and South America, India and elsewhere. To this was soon added investment in other enterprises, among which mines and plantations of all sorts appeared particularly attractive to the English capitalist; iron and textiles were the principal fields of industrial investments. As compared with these investments, loans to foreign governments played a rather minor part.

With the stupendous rise of capital export the English investor tended increasingly to neglect domestic securities. As new countries and continents were opened to capitalist development the capital of England, practically the only country with a surplus of capital at the time, was naturally attracted by the enormous new opportunities for profit making. Investment abroad was further stimulated by Great Britain's unchallenged domination of the seas, which was assumed to provide political "security," and by the adoption of a free trade policy, which furnished the economic and psychological prerequisites for broadening the international outlook of the British. At the same time domestic industry, which had already passed the stage of rapid development characteristic of its early phases, could finance its further progress, even when it involved the transition to large scale production, through the time honored private channels of capital supply. Domestic securities therefore competed with foreign only in the bond market, while in the expanding stock market foreign dividend issues experienced little competition from English industrials.

In the same period London became increasingly important as the capital market of the world. Among the factors responsible for this development not the least important was the location in London of a highly developed banking system specializing in the financing of international trade. The "merchant bankers," originally export and import houses which had specialized since the end of the eighteenth century in the international acceptance business, have won for London a well nigh monopolistic position in this field. Long term foreign loans were soon added to the short term credits and in the course of the century the apparatus for underwriting and

distributing large security issues was both enlarged and perfected. A number of London houses specialized in the risky but lucrative business of underwriting foreign issues, while the distribution of the securities was in part delegated to another system of specialized firms with extensive connections for placing them with the ultimate investor. The fact that since the nineties investment trusts and similar organizations, which make a business of investing the savings of the general public, were not averse to the purchase of foreign securities also helped to build up the London market. It is even more important that the highly organized London Stock Exchange has been open to all issues providing they are large enough and command sufficient interest to promise a sizeable turnover to stock jobbers and brokers. There was no government and no enterprise whose need for capital could not be met to some extent in London and there was no type of security to which the London market would be entirely closed. Combining a well developed and articulated financial organization with skill based on long experience and intimate knowledge of the finances of foreign governments and private enterprises, London assumed before the World War the position of a central world market for both short term money loans and long term capital investments.

Since the English investor in foreign securities was actuated primarily by considerations of gain, he tended to employ his capital where it would be most productive—in the opening up of new areas, in the exploitation of untouched natural resources, in the building of new channels for international economic intercourse and the like. Safety of principal and the prospect of a fixed income yield which would lead to investment in government obligations played a minor role. Securities of the rentier type became, however, more important since the nineties, when the small investor came to be an important factor. Thus by 1914 about 30 percent of British foreign investments consisted of government and municipal issues. There was also an increase in the proportion of investments represented by fixed interest obligations of British dominions and colonies, which by 1900 attained the rank of gilt edged securities. It was important in this connection that by the Colonial Stocks Act as revised in 1900 the issues of colonial and dominion governments which were duly registered in the United Kingdom and observed the applicable Treasury orders were made eligible for in clusion among "trustee" securities. After 1900

and particularly in the five years preceding the war the annual export of capital to dominions and colonies exceeded 40 percent of the total amount of new foreign investments. On the whole the export of capital from Great Britain was little influenced by political considerations and was not accompanied by the imposition of political limitations upon the borrowers. Only during one period was the outflow of considerable amounts of capital stimulated by political means; during the third quarter of the nineteenth century the home government guaranteed the payment of interest on the securities of railways and other public utilities in the British colonies, thus burdening the colonial taxpayer for the benefit of the British contractor and investor.

If the export of capital from Great Britain was guided solely by business considerations, it was natural that the growth of British foreign investments and commercial expansion into foreign lands went hand in hand. At least until the seventies the British exporter and manufacturer paved the way for the flotation of foreign securities in the London market, directly by providing the initial subscription for new issues in order to assure the investor, and indirectly by creating the need for short term financing and thus helping to develop and maintain the necessary banking apparatus. Even where the British industrialist and merchant were not directly involved there was always an intimate connection between a piece of foreign long term financing and the commercial interests of the island. After the seventies the situation remained essentially unchanged, although with the increase in importance of foreign and colonial government obligations and with the influx of British capital into the industries of the United States British investments abroad were at least in part emancipated from a direct connection with commercial expansion.

French foreign investments began in the middle of the nineteenth century, reached a respectable volume in the sixties and, after a recession caused by the payment of the war indemnity to Germany between 1871 and 1875, increased rapidly since 1885. They had doubled in the twenty years preceding the World War. In 1914 France occupied second place among the capital exporting countries. About 15 percent of its national wealth was in the form of foreign investments, which were valued at \$8,700,000,000. Paris was then the cheapest of the international money markets, since the capital requirements of France, limited by the comparatively slow rate of

industrial development and by the predominance of small scale production, lagged appreciably behind the growth of savings of this industrious and thrifty nation. The bulk of French foreign investments was composed of securities of two types: government or government guaranteed issues, which appeal to the typical rentier, and to a considerably smaller extent securities of enterprises in politically disturbed or financially unstable countries, paper with a high speculative risk, appealing to the imagination of the faiseurs. The numerous class of small French investors was and still is influenced to an extraordinary extent by apprehensions of war and is intent upon "safe" forms of investment easy to turn into ready cash. The French export capital, which in the years immediately preceding the World War averaged about \$250,000,000 per annum, was thus interested less in investments of an entrepreneurial type than in securities with a fixed yield. This striking difference between the French and the English may, however, be easily exaggerated, for a considerable fraction of French foreign assets consisted of shares in all sorts of business undertakings in Russia, the Near East and Latin America, and even the foreign government bonds or private obligations with government guaranty held by French capitalists represented in many cases productive investment. Of the \$2,200,000,000 that France had invested in Russia certainly more than half was tied up in "productive" enterprises.

Paris was the largest market in the world for foreign government securities. The continuous dependence of the French government on large long term loans and the consequent stimulation of investment in government bonds naturally redounded to the advantage also of foreign government issues. The organization of French banking assisted in the same direction. The failures of the earlier institutions of the Crédit Mobilier type, which combined commercial banking with the long term financing of industry, have educated both the public and the banks in prudence and caution. The large commercial and savings banks distribute only those securities which may be classed as marketable and especially as "safe" government issues. The issue and placing of shares of industrial enterprises are therefore concentrated in the hands of investment banks (banques d'affaires); their distribution facilities, however, are not so comprehensive as they might be for they have no contact with the numerous class of depositors in the commercial

banks. Thus while bonds are placed predominantly through the commercial banks, the placement of shares and stocks is largely dependent on the Paris and provincial exchanges, which represent a very much smaller market. The predilection of the French market for government securities is reenforced by the conservatism of the small French investor, who hardly knows what shares are and to whom a government guaranty seems the best warrant of economic safety. Conservative and cautious, with a strongly marked liking for some nations and an equally pronounced aversion to others, the French investor is extremely susceptible to the propaganda of the banks, the press and the government, an opportunity which has been exploited with considerable skill. Since the eighties Paris has thus become the favorite market for the issue of national and municipal securities of those countries which have enjoyed intermittently or continuously the favor of the French public—the Latin countries in Europe and South America, Russia, the Balkan States, Turkey, occasionally also Austria-Hungary. Consequently about half of the foreign investment of France was active in countries which either were France's allies during the World War or had been expected to be; and about a third of the total foreign investments that this thrifty nation had built up in two generations were lost as a result of the war.

Since French holdings abroad have consisted for the most part of safe and politically desirable issues, the connection between capital export and commercial expansion so characteristic of British foreign investment is important only for a minor portion of the French. Although one of the arguments for the acquisition of new colonies propounded by the imperialist minister Ferry was the opportunity they would afford French capitalists for profitable investment, comparatively little capital went to the French colonies. Despite the guaranty by the home government of colonial government issues, the prohibition of investment by foreigners in the mines and railways of the colonies, and the propaganda in the press scarcely one eleventh of France's capital holdings abroad represented in 1914 investments in its colonies. Except for Algeria and Tunis their commercial and industrial development under capitalist auspices proceeded very slowly.

Export of capital from Germany began in the eighties and later grew at a higher rate than that from France. By the end of the pre-war period

German foreign investments amounted approximately to \$6,000,000,000. As compared with the French the German investor in foreign securities was less easily swayed by political considerations or by prospects of a fixed return; similarly the proportion of German foreign holdings represented by direct investments was much larger than the French. As distinguished from the English the expansion of the German capital export was more closely linked to the activities of the domestic banking system. Since the eighties German commercial banks, which functioned also as investment houses in the domestic capital market, were active in the promotion of foreign investments. They placed a part of their own funds in foreign enterprises, such, for instance, as the Bagdad Railway or the Banca Commerciale; they financed the industrial and commercial expansion of German enterprise in foreign lands; and they participated in international banking syndicates in floating large issues. The financing of foreign undertakings was often done indirectly through subsidiary banking institutions in foreign countries (Auslandsbanken) which handled financing of all kinds along with the international acceptance business. The export of capital appealed to the German banks for two reasons: they were attracted by the profits that were to be made in the underwriting and distribution of large international issues, or they took on foreign business in order to assist the affiliated industrial concerns in securing foreign markets for their products or reliable sources of raw material supply. The Berlin, Frankfort and Hamburg banks floated on the local markets state and other public obligations as well as real estate securities and placed them with the ultimate investors through their branch offices or the affiliated smaller banks. The mainstay of this enormous expansion in the last analysis was the German saving public, which the securities reached by way of the exchanges and the widespread nets of bank branches; unlike the French, it included a considerable percentage of buyers interested primarily in the speculative value of the securities. The pre-war German market for foreign securities was for the most part free from direct political pressure. The influence of the banks was vastly more important than that of the government, since they controlled most of the capital export.

In addition to Great Britain, France and Germany, the principal exporters of capital before the war, mention must be made of Belgium,

whose banking and investment houses pursued a policy similar to that of the German institutions, and of the Netherlands, whose foreign investments were largely concentrated in the Dutch colonies. Appreciable amounts of capital were also exported from the debtor countries, i.e. those which borrowed abroad more than they lent, such as Russia, Austria-Hungary and particularly the United States. While at the outbreak of the World War the United States owed abroad something like \$6,000,000,000, the American foreign investments, placed for the most part in Canada and Central America and to a smaller extent in South America and China, amounted to \$2,500,000,000.

During the World War and the subsequent period of inflation the magnitude of foreign investments, their distribution between the creditor and debtor countries and the direction of the international movements of capital were radically changed. Except for reparations and interallied debts, international indebtedness was considerably reduced, partly because of debt repudiation, failure of the debtors or liquidation of the property of enemy aliens and partly because of debt repayment and the depreciation of foreign balances. English ownership of capital abroad was reduced by about a quarter, mainly through the repatriation of American securities. The French have lost about a third of their property in foreign investments by the state bankruptcies of Russia, Austria-Hungary and Turkey. Most of Germany's foreign investments were either lost or repatriated.

After the restoration of normal international economic relations in the post-war period the export of long term capital was resumed, but on a much smaller scale than before the war. While in the years immediately preceding the war the net export of long term capital, excluding interest payments, averaged some \$2,000,000,000 or \$2,500,000,000, the corresponding average for the period from 1924 to 1930 can scarcely have exceeded \$1,500,000,000. The status of Germany changed from a creditor to a debtor nation. It had to rely in part on foreign financial assistance for economic reconstruction, the reorganization of its currency and banking system and the payment of reparations and interest on the post-war foreign loans. To a certain extent also it financed its post-war investments abroad through loans from other foreign countries. In the balance Germany borrowed abroad from 1924 to the middle of 1931 about \$1,200,000,000 on short term and about \$1,900,000,000 on long

term; at the same time it paid more than \$2,400,-000,000 in reparations. The export of French long term capital was resumed only with the stabilization of its currency in 1928 and has since then fluctuated between one half and two thirds of the pre-war level. The export of English capital averaged about \$500,000,000 per annum, which is slightly more than half of the amount exported in the last pre-war years. The United States has become a creditor nation on a large scale with an annual net capital export averaging about \$600,000,000. Russia has for all practical purposes ceased to be a debtor nation, and since the war no foreign nation has placed a new investment of any magnitude in China. On the other hand, there has been an increase in the capital requirements of the new countries and colonial regions, particularly of Canada and the Latin American states.

The decline in the international movements of long term capital was probably compensated by an expansion in the volume of short term funds. These two types of capital often move in opposite directions: countries exporting long term capital receive short term funds from abroad and vice versa. Thus while the long term foreign investments of the United States reached by the end of 1930 about \$15,400,000,000 gross, approximately \$3,000,000,000 in foreign short term credits has been fairly steadily invested in the New York money market; of this amount only from one half to two thirds is offset by American short term credits abroad. While the aggregate foreign holdings of Great Britain have in this period risen to the pre-war level of \$20,-000,000,000 in round numbers, the English market in the early part of 1931 used something like \$1,200,000,000 in short term credits from abroad, particularly from France, to finance international trade and to assist banks in Germany, central Europe and elsewhere. Most of the continental countries are in the balance debtor nations for short term credits. France, however, is estimated to have from \$3,000,000,000 to \$4,-000,000,000 net in short term investments abroad. Switzerland, the Netherlands, Belgium and to a smaller extent Sweden and Czechoslovakia also appear as creditors in the international money market.

Both the decline in long term capital investments and the increase in the movement of short term credits in the post-war period are due to the same economic and political causes. The primary factor in this context is not the cyclical movement of business conditions—although the

net result is affected to some extent by cyclical factors-but rather the uncertainty of the political situation throughout the world, especially in Europe and in China and of late also in South America. The consequent increase in the cost of capital to the debtor countries has not, however, affected the demand for it to any considerable extent; such clearly marked inelasticity of the demand for capital, which is partly responsible for the growth of short term indebtedness, is another typical post-war phenomenon, since it is caused by factors peculiar to this period. Among them should be mentioned reconstruction and restoration of a "normal" capital equipment in most of the belligerent countries, paper money and gold inflation, exaggerated protectionism and finally the unusually pronounced speculative activity which between 1926 and 1929 culminated in a boom of extraordinary intensity in practically every important country.

Before the war capital was exported in order to open up new and develop backward regions; to a considerable extent such international movements of capital constituted one of the important prerequisites for the settlement of entire continents. After the war a good deal of the exported capital ceased to perform such functions. Old countries, quite densely settled and well supplied with modern industrial and transportation equipment, of which Germany is the archetype, became important borrowers in the international markets; by paying higher interest rates they competed successfully with debtor countries of the pre-war type for the available supply of capital. Interest rates in the world market for the best bonds of the principal debtor countries have been increased thereby from the pre-war level of 5 percent to from 7 to 9 percent and occasionally to an even higher figure. In addition to the development of new capitalist economies international capital has thus assumed the function of reconstructing old capitalist countries. Under this head may also be considered the import of capital in order to increase the monetary gold stock of the country, a device upon which most of the European and South American states had to rely in rebuilding their shattered currency systems. A considerable increase in direct participation in foreign undertakings was indicative of a change on a somewhat different level. Many new and even most of the old states, obeying a quickened impulse toward economic selfsufficiency, raised their tariff walls far above the pre-war level. Under these conditions the drive for economic expansion led to the formation of

many international combinations, which in the aggregate constitute for the European peoples an embryonic system of "superstate" organizations. During this period international capital movements were also favored by the policy of bounties of various types, such as export credit (q.v.)and government subventioned insurance of foreign credits (see Credit Insurance), and by the competitive struggle for raw material supplies. which led on occasion to intensified capital investments in foreign jurisdictions. Also of considerable significance during this period were the sudden changes in the volume and direction of international movement of short term funds. They were due to the peculiar abnormalities of the post-war era: the flight of capital under conditions of political or monetary instability; the transfer of funds to foreign markets in order to escape "confiscatory" taxation or impending "socialization," and in order to profit by the increase in the value of foreign currency due to its stabilization or by the unusual opportunities for security speculation. Such movements were purely temporary and their direction was apt to be reversed overnight.

Capital export from France in the post-war period developed very slowly. Until 1929 it was checked by special taxation of foreign issues on the Paris exchange. The depression which developed in the autumn of that year and spread rapidly throughout the world, the critical condition of the public finances of most debtor nations and general uncertainty in foreign countries caused a decline in the supply of capital for export. In the field of long term investment only those foreign issues which for political reasons were regarded by the French government with special favor were successfully placed in the French market; for example, the Young loan of 1930, which effected the commercialization of a portion of German reparations. The outflow of French short term funds to foreign markets suffered a similar decline with the repatriation of a certain part of them after the stabilization of the franc and with the precautionary withdrawal of credits by French banks during the depression. The French have also substituted short term credits for a considerable proportion of the long term foreign investments of the pre-war period; these are placed for the most part in the English and American money markets.

The constitution of British foreign investments has not changed since the war so radically as that of the French. In the new capital issues on the London market domestic securities have

risen from 20 percent in 1908 to 65 percent in 1020-27; similarly, participation of British colonies increased at the expense of foreign countries. Although this may be taken as evidence of a trend toward imperial self-sufficiency in the investment of British capital accumulations, it was not produced by planned regulation or government intervention. The tendency to place more emphasis on bond issues, already apparent before the war, has continued to operate in favor of the dominions; and at the same time the investment in railway and mining securities has decreased substantially. Thus the proportion of bonds in the aggregate of British foreign investments has grown considerably and the connection between commercial expansion abroad and the export of British capital, which was originally very pronounced, has been further weakened. The geographical distribution of new capital exports has been strikingly changed since Germany has become a heavy borrower, and the importance of investments in the United States has radically declined. Thus in 1929 the British owned about \$1,560,000,000 in American securities as compared with \$3,300,000,000 in 1913. Under the leadership of the Bank of England the City played a decisive role in floating the stabilization and reconstruction loans of the continental European states, which have consequently suffered more than others from the decline in British long term investments since the depression of 1929. A comparatively new development has also been the absorption by the London money market of a large volume of foreign short term funds.

After the war the United States became one of the leading creditor nations of the world. American capital export rested in part on a surplus in the balance of international payments resulting not only from an excess of commodity exports over imports and the payments on account of interallied debts but also from an inflow of short term funds from abroad. The important factors, however, were the large stock of monetary gold, increased enormously during and after the war, and the huge expansion of credit based upon it. The volume of bank deposits was doubled, interest rates were kept low and there was a noticeable tendency to force capital export. Bond houses, which during the Liberty bond campaigns learned to reach even the small investor and accustomed the rank and file of the population to invest in securities, and investment banks, which before the war were engaged in importing capital from Europe, now made an easy adjustment to the changed situation and undertook with the support of commercial banks and investment trusts the distribution of foreign securities in the home market. A large proportion of foreign issues, however, was not placed with the ultimate investors and remained in the portfolios of these institutions. It is thus that the American capital market, of purely national importance before the war, was transformed within a short time into an international money center; in experience and established tradition, however, Wall Street still lags behind the City in London.

The export of capital from the United States has proved particularly sensitive to market conditions, the amount exported exhibiting unusually large fluctuations from year to year. In 1924 and 1925 the net balance of capital movements represented an export surplus of \$500,000,000 to \$600,000,000; it fell to scarcely \$200,000,000 in 1926 and rose in 1928 to a record figure of over \$900,000,000 only to decline again in 1929 to less than \$400,000,000. In the years 1925 to 1928 a half of the long term credits went to Europe, but in 1929 the share of Europe fell to a quarter of the net export. On the other hand, the capital going to Canada represented only 14 percent of the total in 1925, but it increased to 42 percent in 1929. At the beginning of 1931 the foreign investments of the United States were distributed as follows: \$5,600,000,000 was in Europe, Germany alone being indebted to the extent of nearly \$1,500,000,000; \$4,000,000,000 in Canada; \$3,000,000,000 in Central America; and an equal amount in South America. Over a half of the capital placed in various American countries was represented by direct investments, while at least three fourths of the capital exported to Europe was represented by American investments in bonds. As a result of the rapid expansion of capital export from the United States the financial control of many Canadian enterprises was transferred within a few years from English to American hands and American enterprise was placed in a commanding position in certain South American states, such as Bolivia, as well as throughout Central America. Although this development began before the war, the assertion of the economic hegemony of the United States in the American tropics has proceeded successfully only in the last fifteen years. The most important branches of production in these countries, particularly plantations and mines, are entirely or in large part in the hands of American capitalists or entrepreneurs. Along with capitalistic penetration went the military and

diplomatic advancement of American interests, with the resulting subordination of a number of small countries on the Caribbean and the Pacific to the direct or indirect political control of the United States. Even so large a state as Mexico was involved in a mesh of diplomatic and military conflicts which developed out of the opposition between the interests of American controlled enterprises and the alleged or true interests of the debtor country. On the other hand, it has become an established practise if not a recognized doctrine of foreign policy on the part of the United States to protect by military force or at least by all available diplomatic means "endangered" investments in Central America, while similar intervention by European government is vigorously opposed on the basis of the Monroe Doctrine. The penetration of American capital into these regions has not only been protected by the United States government but in many cases definitely encouraged in advance. Investment opportunities, particularly in railroads, banks and the like, were brought by American officials to the attention of interested citizens, apparently with an assurance of government protection in case of need. The holders of bonds or stocks in Canadian and European enterprises were obviously without benefit of such protection; but the American government, following the example of France, reserved for itself the right of vetoing the public flotation of foreign issues, a right which had been exercised only in rare cases, such as the German potash loan or the loan of the Brazilian state of São Paulo. Promotion of capital export as well as benevolent neutrality toward it was part and parcel of the official policy of protectionism and was in accord with the promotion of commodity export. It was supported by the policy of the Federal Reserve Banks, which have several times, notably in 1924 and 1927, stimulated capital export by lowering interest rates.

Practically every modern country was for some time in the position of a debtor nation before it began to acquire a net export balance in its capital account. Although there have been cases in which emancipation from foreign indebtedness has been achieved by defaulting on such obligations (e.g. Portugal), the change in the status of a country from debtor to creditor is typically the result of an increase in capital accumulation from domestic sources and an intensification in the amortization of previously contracted obligations. In a certain sense such a development is inevitable with an increase

in the national wealth, which carries with it not only the possibility of establishing balances and investments abroad but also an interest in so doing which is similar to that of the capital importing countries. The development is connected with the promotion of foreign trade and the reduction of risks of capital investment through diversification. These stimuli to invest capital abroad become stronger with the expansion in production and the increase in the size of enterprises and plants. For technical and commercial reasons the optimum volume of output cannot be achieved if the producer is restricted to the markets of his own country; eventually he comes therefore to favor capital export since it would facilitate his penetration into foreign markets and assure for him the availablity of foreign raw materials needed in continuously increasing quantities. The growth of English industry, for example, could not have proceeded at so rapid a rate without a continuous expansion of its sources of raw materials and of its markets. Similarly the post-war "industrial revolution" in the United States was connected with commodity export resting on the export of capital, although not so closely and not in the same way as in nineteenth century England. As soon as a country reaches a point at which its need for capital is not very acute, the export of capital abroad appears advantageous also to the private investor: foreign investments with the same risk yield as a rule a higher return than domestic securities and they offer at the same time important opportunities for diversifying risks.

The diversification of risks is also an important consideration from the point of view of the national economy as a whole. Other things being equal, investment abroad operates as a stabilizing factor in so far as it retards the development of booms and mitigates the effects of slumps in domestic markets. Against this must be set the losses in foreign investments. They were very considerable in the periods before 1890 and after 1914 but were comparatively small in the quarter century preceding the war. It is also important that interest rates in the creditor country are at a higher level than they would have been were no capital exported; consequently the distribution of the national income is altered in favor of the properties and entrepreneurial groups and income inequalities are accentuated. On the other hand, the export of capital insures better export markets for the sale of the nation's output and better terms on imports and effects in the long run an improvement

in the barter terms of trade with foreign countries.

Upon the attainment of a strong creditor position a country usually reinvests abroad a part or the whole of the interest on its foreign investments. This practise, which serves to strengthen the creditor position of the country, was followed by the Netherlands, Great Britain and France. For generations an income which generally increases more rapidly than the rest of the national income of the creditor country is thus obtained from the social product of foreign peoples. It is easy to conclude therefrom that creditor countries eventually develop into rentier nations, that their own production and enterprise languish while they live on the labor and produce of the soil of debtor countries. Actually this evolution into a rentier country is a purely statistical fact, which need not radially affect the social structure of the creditor country. Since the interest on foreign investments is in large part reinvested abroad and losses are suffered from time to time in foreign investments, the productive system of the creditor country and the volume of its output do not necessarily undergo any essential change; and no clear cut evolution is observable in the direction of a rentier cconomy based on investments abroad.

The regulation of capital export by political authority is not in the long run inspired by fears or hopes of this kind. In the mercantilist period capital export was retarded by restrictions upon the export of specie and upon the emigration of industrial enterprises and skilled craftsmen. During the following period of liberal economic policy there was complete freedom of capital export. In England as early as the first half of the nineteenth century even conservative governments refused repeated demands for intervention to impede the export of capital and actively to protect investments abroad. The fact that the house of Barings could float a Russian loan in London during the Crimean War is quite indicative of the spirit of the time. In the last third of the nineteenth century neomercantilist tendencies caused a revival of protectionism also in the capital markets. The export of capital was encouraged in order to stimulate commodity export or in order to facilitate the achievement of imperialistic aims and the establishment of secure economic and political positions in areas in which there was a rivalry between several national interests, such as colonial regions, China, Persia and so on. At the same time the reinvigorated tendency toward economic self-

sufficiency caused the appearance in Germany and France even before the war of strong movements for the prevention of capital export. The argument generally ran in terms of preserving the productive forces of the nation for the fatherland and of lending no aid to the industrial development of present or potential competitors. Although these pre-war movements remained more or less unsuccessful, the governments of the leading creditor countries on the continent displayed a tendency to intervene in order to regulate the direction of capital export. Such intervention was in the main discriminatory, directed against certain debtor countries rather than against capital export as such; its underlying purpose varied from the promotion of political alliances, colonial expansion schemes and the like to the protection of the investor against speculative excesses. In France such regulation was particularly effective since by the exclusion of foreign issues from the Paris exchange the minister of finance could practically eliminate unwanted foreign investments; there was in addition the direct influence exercised on the banks and the press. Similar methods were used to a much smaller extent in Germany. Whereas in France since 1900 virtually every large foreign issue involved government action, in Germany between 1870 and 1914 there were scarcely more than ten cases of governmental intervention of this type. The significance of such regulation should not be exaggerated; government action in this field is in the main of a negative sort, i.e. it amounts to a prohibition of certain issues which may frequently be evaded.

Apart from such undisguised and openly avowed regulation there exists in almost every creditor country a certain form of unofficial cooperation between the political administration of foreign policy and the banking leadership of the investment market; and no foreign loan of any importance is undertaken without sounding out the responsible diplomatic circles. In France and the United States such collaboration is encouraged by the government or the parliament, although in the latter country it is limited merely to warnings by the government, direct government interference in the capital market being virtually unknown. In pre-war Germany it had become established as a traditional practise without legal sanction, while in England it is effected through the channels of social intercourse in elusive contacts between government officials and bankers.

A third type of government action with re-

spect to foreign investments is as a rule closely linked to specific imperialistic policies. In international politics particular importance has attached to intervention by creditor nations in the interest of protecting the investments of their citizens in a foreign country. The legality of such interventions from the point of view of international law is questionable, and even the attitude of the great powers—the only countries resorting to such measures—is a vacillating one. Some acts of intervention are intended to open the door for investment by the country's nationals or to secure for them a monopolistic position; the China consortium, the Anglo-Russian conflict over the spheres of influence in Persia, the American policy in the Caribbean and similar examples illustrate active governmental promotion of private investments in disputed areas. Other types of intervention which have in the past led to grave international complication are those designed to protect supposedly endangered investments. Since the Palmerston circular of 1849 Great Britain has definitely felt entitled to utilize the full force of its power for the protection of the legitimate interests of its subjects in foreign countries. In practise the apparatus of diplomacy has been frequently used on behalf of British creditors, but the employment of armed forces or even the threat of such action has been very rare. The French, on the other hand, have repeatedly resorted to naval demonstrations and military occupation in the Ottoman Empire and Santo Domingo, as has the United States in Haiti and Nicaragua.

The import of capital involves serious political problems for the debtor countries as well. It is not true, as has recently been commonly believed, that the mere fact of being indebted to a foreign creditor leads or threatens to lead to political dependence. Debtor-creditor relations which cross political frontiers need in the nature of the case have no more political consequences than purely domestic relationships of this type. Even the indebtedness of a government to a foreign creditor is as such a purely private relationship. In fact, however, borrowing from foreign governments or from private creditors in a country whose government identifies itself with the capitalist interests of its citizens does involve the danger of political consequences. This danger is naturally greater for those politically weak countries which even apart from the need for capital import generally form the object of colonial exploitation, if their foreign indebtedness

is used as an opportunity for the creditor countries to intervene for purposes of "protection." Weak states run the risk of being subjected to a financial control which may mean anything from foreign financial advisers to a comprehensive system of concessions; from the mortgaging of certain revenue sources to the complete transfer of the financial administration to the representatives of the creditors, as in the case of the Dette Ottomane; from occasional military or naval demonstrations to complete annexation. Egypt, Algeria, Tunis, Turkey, Persia, China, Mexico, the Central American states, the Boer republics and other states have had to submit temporarily to such control because of their foreign indebtedness, and some of them still are in that status of submission to the great powers. The probability of the institution of such controls depends on the terms under which foreign indebtedness is contracted and the care taken to invest productively the proceeds of such loans.

The danger of financial and political control is not present or is present to a much smaller extent in the case of borrowing by a state in a strong political position. This holds true not only for great powers which still retain the status of debtor countries but also for lesser powers and smaller states, if by virtue of their geographic position or the rivalry of interested powers they are not suited to serve the purpose of political expansion. Such conditions, however, do not preclude a certain measure of foreign financial control in the event of complete default, particularly if new foreign loans are necessary before the debtor country achieves an economic recovery and settles with its old creditors. Thus even a strong debtor country which has been too reckless in borrowing and has fallen into difficulties may be in danger of having its sovereignty impaired through the instrumentality of financial control. Such difficulties may appear in a particularly striking form where foreign short term credits play a large part; the danger of a sudden withdrawal of such funds and of the resulting disruption of the banking mechanism operates so continuously and pervasively that it easily leads to the establishment of financial dependence upon foreign countries. Even without financial control the foreign policy of a nation with a foreign indebtedness or in need of foreign loans may be strongly influenced by the interests of the creditor countries. Thus certain political conditions, which did not necessarily coincide with the interests of the borrowing countries, were attached to the foreign loans of

Italy and Russia in the decades preceding the World War.

The economic incidence of capital imports on the debtor country is not limited to an expansion in production, an increase in wealth and a heightening of commodity imports and of labor immigration. Capital imports mean also a temporary improvement in the barter terms of trade in international transactions. Also of considerable importance is the fact that the debtor country must adapt its currency standard, at least temporarily, to that of its creditor. The widespread adoption of the gold standard has been and still continues to be largely the consequence of the demand for foreign capital; accordingly, when the international capital market is in a state of collapse the gold standard suffers a setback. Similarly the adoption of the financial and commercial traditions of the older countries by the business communities of backward regions and new countries goes hand in hand with the import of capital from abroad. Preservation of normal liquidity by the banks, the maintenance of a balanced budget and to a certain extent even the development of a modern system of courts and of other law enforcement agencies are often parts of the same process of adaptation of debtor to creditor.

The international movements of capital for short and long term investment constitute a most important factor in the development and integration of that system of economic relationships which is called the world economy. With respect to long periods of time this integration is achieved by an increasing uniformity in the direction and tempo of the capitalist development of all countries; for shorter periods it is expressed through an increased parallelism in the cyclical movement of business. International economic interdependence is especially marked at the turning points of the cycles. Thus in the nineteenth century periods of prosperity were for Great Britain also periods of intensified export of capital, while during depressions capital export declined. Consequently for the United States, South America and the non-European countries within the orbit of British influence prosperity in Great Britain was accompanied by enhanced capital imports and consequent speculative expansion; during depressions in England the volume of capital imports suddenly declined or vanished altogether, with the resulting reverses in business, depreciation of investments and intensification of social unrest to the point of revolution. Just as the United States and Australia in 1873 and from 1890 to 1892, so the debtor countries in Europe in 1930-31 were forced by these shifts in capital movements to readjust their foreign trade balances and thus further to aggravate the depression.

Since the beginning of the nineteenth century the competitive struggle of important national groups of investment interests has often decisively influenced international economic and political relations. This struggle has gone hand in hand with the conflicts growing out of the colonial expansion of the great powers and with the commercial rivalries over important markets and sources of raw materials. Thus in the prewar period vast amounts of foreign capital were poured into South America in connection with the financing of exports of industrialized countries. After the war the attempts to monopolize raw material supplies under foreign jurisdiction became more important: much diplomatic discussion has centered about the oil fields of Sumatra, Irak and Asia Minor, and important international settlements, involving the formation of combines for common exploitation by the interested powers, were arrived at. France, the United States, Japan and other countries have repeatedly sought to reserve colonial or other regions for the investment of their own capital and either to exclude directly or to obstruct by indirect methods the competition of other interests. Such methods of disregarding or dodging the open door policy have produced the Morocco problem and the grave conflicts involved in it; they have also played a large part in the struggle to open the West Indies and other backward regions to competitive foreign investment. International settlements between interested powers have in part eliminated threatening conflicts, but they have also erected new monopolies in the form of separate spheres of interest and the like. An effective method for the elimination of such dangers to international peace as well as for the economic and social progress of the weaker debtor countries seems to be offered by the mandate system of the League of Nations; this represents an essentially new development in so far as it involves, at least in principle, control by the League of the backward regions dominated by individual states. The further effective development of this system and above all the restoration or preservation of the principle of the open door-as Great Britain has consistently maintained it during the greater part of her recent history-might well offer the best guaranty of normal development of capital migration. The

elimination of political and certainly of imperialistic factors should also serve to limit poor investments, particularly in colonial regions, and to facilitate the restoration of a normally functioning system of international financial relationships. The latter should be made strong enough to withstand periods of depression, for its breakdown in such times has always led, and would in the future inevitably lead, to an aggravation of critical conditions.

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See: Investment; Investment Banking; International Trade; Money Market; Balance of Trade; Forlign Exchange; International Finance; Public Debt; Loans, Intergovernmental; Imperialism; Colonies; Colonial Economic Policy; Concessions; Raw Materials; International Relations; Intervention; Diplomatic Profection.

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FOREIGN LANGUAGE PRESS. The common type of foreign language press serves communities of immigrants settled permanently in a land where the vernacular is unfamiliar to the bulk of the immigrant group. Such a press may be found in any country receiving immigrants. It is most conspicuous in the United States, where in 1931 there were published 884 periodicals in 36 foreign languages with a total circulation of almost 8,000,000. Of these 165 were in German, 125 in Italian, 89 in Spanish, 82 in Polish, 75 in the Scandinavian tongues, 71 in Czech or Slovakian, 43 in Hungarian, 41 in French and 34 in Yiddish. Many papers of this type are also to be found in various Latin American countries; in 1931 there were more than a score in half a dozen countries, published in Italian, German, Chinese and Arabic. The presses of Chinese settlers in the Straits Settlements and Burma, Indian settlers in British Africa and Japanese settlers in Hawaii are in some respects similar in character. The papers of permanent, indigenous minorities like the French in Canada, the Germans in Czechoslovakia or the Jews in Poland have so different a status and face such different problems that they do not belong in the category of foreign language press.

The immigrant press performs simultaneously the opposing functions of promoting assimilation and maintaining separatism. It is the principal medium by which an immigrant group comes to understand its environment, and before the advent of the motion picture it was

probably the greatest single source of information concerning the new country. At the same time, the perpetuation of the inherited language and the publication of news of the home country and of the local immigrant group tend strongly to perpetuate a consciousness of difference. The very presence of the foreign language press makes it more or less unnecessary for the immigrant to subject himself to the assimilating influence of the native press. The degree to which any individual paper serves each of these ends depends less upon any consciously set editorial policy than upon the composition of the immigrant group it serves. The age of the group, the extent and regularity of an influx of new and a loss of old members, the attitude of the native element toward the immigrant and the action of other agencies for assimilation or separatism to which the group is subjected all unite to condition the function of such papers.

Foreign language papers vary in quality from the rudimentary sheets which are among the early evidences of an immigrant community's self-conscious life to papers which rank among the high grade journals of the country. In the early stages of a community a simple sheet providing news of the home country may be made up with the aid of scissors and paste from clippings from other papers. Such sheets, which are under slight pressure of competition, expend little money or skill for the purpose of delivering news promptly or presenting it attractively. The editor is usually engaged in some other occupation and carries on his editorial duties on the side. Such papers are commonly weekly publications, advertising only the merchants and professional men of the small community and having a local circulation and often a fairly short life. Their assimilative influence is slight; they serve primarily to precerve old associations and viewpoints among the immigrants and to mitigate their sense of strangeness in their new home. They tend to be politically partisan and to perpetuate in an alien environment differences which kept groups apart at home.

As soon as the characteristic mutual benefit societies have been formed, they begin to publish newspapers which depend for support upon membership subscriptions and furnish chiefly organization news. Some organizations, such as the German Workmen's Sick and Death Benefit Fund of the United States, publish sheets of high literary merit. If there is a controversy within the organization the post of editor is coveted. Where there is active leadership the organ

furnishes guidance in meeting the new environment, carrying articles on such subjects as the legal status of aliens, the ideals of the new country or problems of child rearing. Later such papers add juvenile sections in the local language and become partially, sometimes wholly, transformed from one language to the other.

In well established communities papers of a more pretentious sort appear. Foreign language dailies in American cities where large immigrant groups are located resemble essentially the ordinary commercial press of the city. Italians in New York secure their general news through Il progresso italo-americano and the Corriere d'America, while many Jews with sufficient command of English to read the American press prefer the Day, the Jewish Morning Journal or the Forward. Whereas these papers bear some resemblance to the simpler type of immigrant paper in giving great prominence to Italian or Jewish news and to the gossip of their respective communities, the principal matter, especially in the Jewish group, is general news so presented as to interest the foreign language readers. This type of paper in offering to the immigrant the news of his new environment in his own language and with the emphasis which he understands works directly and effectively toward assimilation. Its separatist influence is incidental and operates through preserving group consciousness rather than old world stereotypes and differences.

Between these two extremes are many papers which serve both to sustain old interests and to interpret new or which are in transition from one extreme to the other. The transition involves an important shift in their reading public and in their type of journalism. The rudimentary sheet, addressed to the literate few, presents its news with an admixture of opinion and considerable editorial comment. The commercial papers, however, cannot develop mass appeal through the expression of opinion; they must rely on news and so tend to develop an enlarged news service—to copy, in fact, the American commercial press with its mass circulation. They adopt a similar format with headlines and introduce such popular features as comic strips.

Mortality among the foreign language papers is high, and their near or complete extinction inevitable, because of a gradual loss of subscribers as the local language becomes the language of the immigrant group and as the new generation grows up with little interest in the news and affairs of the ancestral country. Foreign language papers inevitably face the problem whether or

not to introduce sections in English in an effort to hold their subscribers; if they decide to do so, they thereby risk the loss of advertisers who prefer to reach the English reading public through the English press and of subscribers whose knowledge of English they themselves improve. Only rarely does a paper become bilingual, like the weekly Greek Star in Chicago. Some of the early German language papers in the middle west gradually transformed themselves into English language papers. This response has been rare, however, with the exception of the Spanish papers along the Mexican border, where the community is permanently bilingual. Most editors rely on language necessity to hold their readers rather than on their prestige or the superior character of their journalism, and they fail when their public abandons the old language. In fact, the more a foreign language paper seeks, by introducing features characteristic of the local press, to hold its readers who are becoming assimilated, the more it hastens its loss of support by furthering the process of assimilation. As a foreign language paper comes to resemble a typical native language paper its reason for existence disappears. On the other hand, if the paper retains its conservative character and fails to fit the local mold, it cannot hold a public whose tastes are being shaped by forces outside its control. The life cycle of the foreign language commercial press thus ends in suicide or obsolescence.

But even where a steady influx of immigrants constantly renews the foreign language reading public the mortality of foreign language papers is high, partly because of the crude character of early sheets and their highly controversial nature and partly because of the loss of potential readers which occurs simultaneously with the influx of new ones. Only a few papers, for example, the New-Yorker Staats-Zeitung, which has served the German public since 1834, have had careers comparable in length with those of the best of the native press.

Still another type of publication is that which represents a cause, usually religious or political. In the United States there are many foreign language religious periodicals, especially among the Scandinavians and Germans, and some radical political sheets. Such papers are supported by national or international organizations, and retain their language differences only as long as these are indispensable to them in reaching their various audiences. If the religious or political group represents an alien point of view, its organ

may be separatist in influence even when the language difference has been lost. On the other hand, proselytizing sheets issued in foreign languages by local religious bodies are definitely assimilative from the start. With the exception of a few groups the propaganda press reaches only a small proportion of the foreign language readers in the United States; all the major groups are served predominantly by the commercial type.

Except for a few large urban dailies foreign language papers are essentially provincial, reflecting the social isolation which makes an ethnic group resemble a geographically isolated community; they also frequently reflect the ideology of an earlier date, since isolation perpetuates the stereotypes of the time of emigration, identifies them with the national character of the old environment and further widens the gulf between the surrounding culture and that of the immigrant group.

The immigrant press is subject to pressure from its home government through diplomatic and consular authority and even through direct subsidy. Such pressure assumes important proportions when the home government seeks to maintain control of its nationals abroad, as is the policy of the Fascist government working through the Italian press in the United States. It is also subject to both pressure and exploitation by representatives of the country in which it is located and by advertisers seeking to take advantage of the ignorance of its readers. Prior to the World War no direct effort was made by the American government to control the foreign language press, but considerable political influence was exercised by party representatives through the placing of political advertisements and control of editorial policy. The greater ability of foreign language editors to deliver votes, their usual need of funds and their lack of fixed political principles make them particularly susceptible to political pressure. During the World War the efforts of the propaganda department of the government to control public opinion brought the foreign language press for the first time under direct governmental supervision. Although only a small proportion of the press was engaged in radical or enemy propaganda, all of it was suspected of such activity; the power to deny the privilege of the mails was evoked and the content of the papers closely scrutinized. The tendency became one not simply of eliminating all enemy and all alien influences but in addition of making the foreign language press

an even more pliable medium for government propaganda than the native language press. At the close of the war renewed interest in problems of assimilation and the realization of the power of the foreign language press toward that end developed into an effort to stimulate the favorable features rather than to suppress the unfavorable features of these papers. Since 1918 the Foreign Language Information Service has furnished editorial, feature and news releases to newspapers in seventeen foreign languages, thus aiding them in linking the old culture and interests with the new.

Another type of foreign language press is that which serves a community of émigrés. Such communities are made up of political exiles, business men, imperialist agents in backward countries or tourists seeking diversion or education. Such papers as the Novy mir, published in New York before the war by radical Russian émigrés, or the Posledniya novosti of Paris, published today by reactionary émigrés from Russia, serve political exiles. Of commercial émigré papers several score published in English, Japanese and French are to be found in the important Chinese commercial centers; half a dozen in Japan; several in India, Egypt, Siam and the Balkans; a few in Latin America; and one, the Moscow News, in Russia. This type of paper tends to merge in colonial countries with the type serving the needs of the community of alien imperialist administrators, who are generally of the same national origin as the large body of commercial émigrés. Papers serving such mixed commercial and official communities are found in Burma, Ceylon, India, Palestine, Straits Settlements, Syria, Indo-China, Hawaii, the Philippines, Porto Rico and Panama. In the more backward of these countries they constitute by far the most important section of the entire national press. The tourist paper is typified by the New York Herald and the Continental Daily Mail of Paris; the English language press of Mexico City and Havana, basically the press of a commercial émigré community, today shares characteristics of the tourist press as well.

The common characteristic of these papers which sets them off from the emigrant press is their attachment to the land of origin of their readers. All represent communities which regard themselves as but temporarily exiled and which on all points of issue take their lead from the home country rather than from the country of residence. Indeed, such communities and hence their press generally show little interest

in the condition of their country of residence as such. All such papers function as definite obstacles to assimilation. The extent of toleration shown such papers by the local population and its government varies. The imperialist press in colonial countries enjoys greater liberty than the native language press. In backward regions foreign language papers, despite their practise of pushing imperialist and even annexationist policies and their not infrequent subsidization by a foreign government, meet no serious difficulty until a growing native nationalism seeks to defend home interests against imperialist invasion. The fate of the political émigré press depends entirely on the relation of its particular political doctrine to the dominant view of the country of publication. The pre-war Russian radical press enjoyed comparative freedom in Switzerland and the United States, where international politics played a small role in the national life, and little liberty in France, where Russian diplomatic pressure was brought to bear on the local police; today the reactionary Russian press enjoys universal freedom.

The political émigré press contains in addition to news of the home country chiefly ideological discussions. Hence it has always more than a local circulation and is disseminated wherever émigrés may be scattered and often smuggled into the home country. The tourist press often avoids taking any definite or outspoken editorial position and thus escapes any difficulties in its relations with the local government. When it does take a position, either as a result of pressure from the home country or from a commercial émigré community in the country of publication, it sometimes incurs local unpopularity; but since it usually has powerful backing it rarely encounters serious difficulties.

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See: Ethnic Communities; Immigration; Segregation; Assimilation, Social; Americanization; Press; Journalism; Propaganda; Machine, Political; Nationalism.

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FOREIGN POLICY. See International Relations.

FOREIGN TRADE. See International Trade.

FOREL, AUGUSTE HENRI (1848–1931), Swiss neurologist and entomologist. Graduated in medicine at Zurich and Vienna, Forel became in 1879 director of the mental hospital and professor of psychiatry at Zurich. From these appointments he retired in comparative poverty in 1898. His prolific and diversified scientific activity began when as a child of seven he first studied ants under the inspiration of his uncle, the naturalist Alexis Forel. His publications in this field, brought together in final form as Mensch und Ameise (Vienna 1922; tr. by C. K. Ogden as The Social World of Ants Compared with That of Man, New York 1929), have all the charm of Fabre's writings on ant life and are

more scientific and philosophical. As a neurologist his authority was internationally recognized. He put forward simultaneously with His, but independently, the theory of the neuronic structure of the nervous system (Gehirn und Seele, Bonn 1894, 13th ed. Leipsic 1922) and contributed to establishing the medical use of hypnotism in Der Hypnotismus (Stuttgart 1889, 12th ed. 1923; tr. from 5th ed. by H. Armit, London 1906). Forel founded and edited the Journal für Psychologie und Neurologie.

Throughout his varied scientific work Forel had in view the philosophical and social implications of science. He was a foe to pedantry and addressed himself to a wider public than that of the specialist. His chief aim as a psychiatrist was to found a science of racial and social hygiene. He stressed perhaps too exclusively the factor of heredity and was an ardent eugenist. He regarded degenerative effects in the germ cells as one of the chief causes of racial decay and vigorously combated the use of narcotics and alcohol in Hygiene der Nerven und des Geistes im gesunden und kranken Zustande (Stuttgart 1903, 7th ed. 1922). His widely translated book on sexual questions, Die sexuelle Frage (Munich 1907, 15th ed. 1923; rev. adaptation by C. F. Marshall, New York 1922), was a pioneer book on sex hygiene. In his later life Forel's interest in socialism overshadowed all others and pervaded his scientific work. During the World War and after he displayed great moral courage in his untiring efforts in the cause of pacifism, which he defended in Les états-unis de la terre (Lausanne 1914) and Assez détruit, rebatissons (Lausanne 1916).

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Consult: Bibliographia forcliana (Vienna 1908); Volkart, Otto, August Forel, eine Shizze zu seinem 76. Geburtstage (Olten 1918); Bertholet, Édouard, Augusta Forel (Lausanne 1918).

FORESTS have played an important part in the history of civilization. They have affected the distribution of mankind over the earth's surface and have influenced the religious life of primitive peoples. Throughout history wood has been one of the most important essentials in the economic development of the human race. The forms in which wood has been used have undergone many changes. The Indians used the bark of trees to make tepees; the settler used the logs to build his cabin. Logs sawed into lumber are now used in the construction of houses, furniture and other commodities of

everyday life. There has been a growing tendency to convert wood into pulp, out of which boards, insulators, artificial silk and leather, ropes, interior woodwork and a thousand other commodities are fabricated. The recent development of the use of wood in the manufacture of news print and book paper has been phenomenal. Fifty years ago cotton and linen rags were the chief sources of paper; now between 80 and 90 percent of the world's paper is made from wood fiber. In the United States alone over 7,000,000 cords of pulpwood are used annually to make pulp and paper. The advances made in the chemistry of cellulose open an extensive field for the use of wood fiber. Liquid fuel (ethyl alcohol) may in the future be derived from wood. Chemists claim that the coming age is the age of cellulose, in which wood and consequently forests must play an important role.

In spite of many substitutes such as steel and concrete wood is one of the few commodities that has shown a steady growth in both volume and value during the last century. In Great Britain the per capita consumption is now almost four times as great as it was in 1851. Even in France with her practically stationary population timber consumption is slowly increasing; that of Germany more than doubled within a century; in the United States at least seven times as much lumber is used now in a year as in 1850, and even the per capita rate of consumption is considerably larger. Judging from the rates of increase in these and other important consuming countries, the world's timber needs may be expected to double within approximately fifty years.

The world's total production of wood (including firewood) is in the neighborhood of 56,000,000,000 cubic feet; of this 26,000,000,000 cubic feet are saw log timber convertible into lumber. Nearly one half of all the saw log timber and two fifths, or about 22,000,000,000 cubic feet, of the world's total wood production are consumed in the United States. The per capita consumption of wood in this country is 228 cubic feet, or about eight times the rate of consumption in western Europe. The total value of forest products in the United States alone is estimated to be about \$3,500,000,000 a year. This does not include the value of forest byproducts, such as naval stores, furs, tannin, berries and nuts.

Perhaps the most important of the indirect services of the forest is that connected with stream flow. Forests equalize the run off of water during the alternate seasons of heavy precipitation and drought. In most of the countries of Europe this recognized influence of the forests has resulted in the enactment of special laws with regard to timber cutting on watersheds, whether publicly or privately owned. Such forests are designated as protection forests. The value of the forest as a place for recreation and aesthetic enjoyment is also becoming increasingly more important.

Forests belong in the category of renewable natural resources. Unlike the mines, which once exhausted are gone forever, forests can be renewed and used indefinitely. In common, however, with other natural resources of the earth, as long as their exploitation was left unrestricted in private hands, forests in almost all ages and in all countries have been squandered by men with a wanton disregard for the future.

The present forest area of the world in round figures is about 7,500,000,000 acres, which is 22 percent of the land area exclusive of the polar regions. The area of actually productive forest, however, is probably only 5,500,000,000 acres, which is 16 percent of the land area and 3.2 acres per capita. Forests occupied a much larger proportion of the earth's surface in former times. As a result of land clearing and forest fires that followed in the wake of forest exploitation, much of the original forest has disappeared. With the possible exception of China the greatest change has taken place in Europe, where of a total land area of nearly 2,500,000,000 acres only one third, or 774,000,000 acres, remains in forest. Almost two thirds of this, or about 500,000,000 acres, are in European Russia and Finland and only 275,000,000 acres in the rest of Europe. In Great Britain 95 percent of the original forest is gone. In France, Spain, Belgium, Italy and Greece from 80 to 90 percent of the original forest has been destroyed; Sweden and Finland are the only countries with half of their forests left. Large areas of forest have been cleared in the more populous regions of South America and Africa, and even in the less developed regions the same process is going on slowly but steadily.

The original forests of the United States are estimated to have covered 822,000,000 acres and to have contained 5,200,000,000,000 board feet of timber. Over two thirds of this area have been culled, cut over or burned; three fifths of the original timber are gone. There are left about 138,000,000 acres of virgin timber, 114,000,000 acres of culled and second growth

timber large enough for sawing, 136,000,000 acres partially stocked with smaller growth and 81,000,000 acres of devastated and practically waste land. These 470,000,000 acres of forest land contain about 2,215,000,000,000 feet of timber of merchantable sizes. The federal government owns approximately 89,000,000 acres and the states, counties and municipalities own 11,000,000 acres, totaling 100,000,000 acres, or 21 percent, held in public ownership. The remaining 370,000,000 acres, or 79 percent, are held in private ownership.

Of the 80,000,000 acres of timbered land owned by the federal government about 81,-000,000 acres are included within national forests definitely dedicated to timber growing. The aggregate area of national forests is about 139,000,000 acres but this includes large areas of grazing and brush land which are not timbered. The remaining 8,000,000 acres are in national parks, national monuments, Indian and military reservations and unappropriated public domain. In addition there are some 21,000,000 acres of national forests in Alaska. The national forests represent the most stable forest ownership in the country and that most favorable to the continuous production of timber crops. Of the 370,000,000 acres in private ownership approximately 127,000,000 acres are farm wood lots and the remaining 243,000,000 acres represent the holdings of land and lumber companies, mining companies, railroads, and other owners who have in the vast majority of cases no permanent interests in the land except for the merchantable standing timber on it.

One half of the privately owned commercial timberlands in the United States is held by approximately 250 large owners; the ownership of the remaining timber is very widely distributed. While there are still a large number of individual owners of timber and sawmills operating as separate units, the larger interests are acquiring a more dominant place in lumber manufacture, especially in the west. Although monopolistic conditions on any general scale do not as yet exist in the lumber industry, the degree of control of the remaining timber by a comparatively small number of large interests must steadily increase as timber depletion continues and may soon approach a monopoly, especially in the case of the diminishing supply of high grade material.

Reforestation of the cut over land and management of the forests in private ownership in the United States is making very slow prog-

ress. A recent estimate by a special committee of the Society of American Foresters put the acreage of private commercial timberland under some form of conscious forest management at about 12,000,000 acres, or 5 percent of the 243,000,000 acres of privately owned timberland (exclusive of wood lots). Many foresters contend that actually 1 percent of the private forest lands, or less than 2,500,000 acres, is handled on a continuous production basis. The reluctance of private capital in the United States to go into timber growing, especially of trees of the large saw log size, must be explained by historic, political and economic factors. The time element together with the large capital required in the growing of saw log timber and the necessity for a continuous plan of management renders the forestry business practical only to states, corporations and trust companies.

In Europe large private forests originated with the landed aristocracy. These forests were often entailed and were kept for generations in the same family. They were a part of the estate and served not only as a source of raw materials but also as hunting preserves. Other private forests in Europe owe their origin to some industry dependent upon wood, particularly the mining industry and more recently the pulp and paper industry. With the settled conditions in the older European countries, with fire danger practically eliminated and the continuous interest of the owners in the land itself supplemented by special laws prohibiting timber cutting that would lead to forest destruction, private forests in Europe have escaped to a large extent forest devastation and proved a sound although conservative investment for their owners. Nevertheless, in spite of all these favorable conditions for private ownership of forests the experience of the older countries has clearly shown that private interest alone is insufficient to secure proper regard for the protective value of the forest cover and for the needs of the future.

During the nineteenth century there was a growing tendency to bring under public ownership forest lands whose preservation could not be safely entrusted to private interest. Norway, France, Germany, Belgium and Italy within the last seventy-five years have greatly increased the area of publicly owned forests, and even the United States has recently undertaken a similar policy in the purchase of forest lands by the federal government and by individual states. About two thirds of all the forests of

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the world are owned by the public and one third is in the hands of private corporations and individuals. In France proper 34.5 percent of the forests are publicly owned; in the French provinces Alsace and Lorraine over 80 percent of the forests are public. In Germany close to 52.7 percent of the forests are publicly owned; in Italy 49.7 percent; in Belgium 38 percent; in Denmark 52.9 percent; in the Soviet Union all the land including the forests is national property. Canada has retained most of her timberland and can adopt conservative methods of handling it without being hampered by conflicts with private property rights.

With all the awakened interest in the importance of forests only 10 or 15 percent of the world's timberland is being handled as a renewable, continuously productive resource; while 15 or 20 percent additional is more or less protected from destruction but still regarded as a timber mine; and the greater part, from 65 to 75 percent, receives no care whatever. Forests managed with a view to conservation are very largely either publicly owned forests or private forests under strict public regulation. Since it is now generally recognized in Europe that uncontrolled private initiative is totally unable to cope with the forest problem, some form of government regulation or ownership is absolutely essential.

In the United States most of the private timberlands were formerly public domain which was parceled out as land grants to the states, the railroads and under various public land laws, such as the Homestead Act, the Timber and Stone Act, to corporations and individuals. The states also allowed most of their domain to pass into private hands. The interest of the owner was in the timber and not in the land. The timber was mined just as an ore, and after it had been removed the interest of the owner in the land itself ceased except for the possibility of selling it to settlers. The country was new; population increased rapidly; and most of the cut over land was supposed to be diverted into agricultural use. The timber resources seemed inexhaustible, and the lumbermen after they cut over one region moved to another. The use of the forest as a continuous, reproducible resource never entered the pioneering psychology of the lumberman, and much the same psychology still prevails among the old generation of lumbermen, who are interested only in immediate profits.

There are several distinct economic and psy-

chological obstacles to private forest practise in the United States. The length of time which must elapse before any expenditure for timber growing bears fruit, especially if one starts with bare land, is great. Forest practise when it begins with an existing forest is a comparatively simple problem. With conservative methods of cutting, such as the removal only of the largest and ripest trees while leaving the younger thrifty trees to obtain their full size, the forest may be perpetuated merely at the cost of protecting it from fire. For the most part, however, private forests have been cut of all merchantable timber, especially within recent times, and as a general rule the cut over land has been repeatedly burned. Nature left to itself may eventually restock the forest, but nature takes its own time and often chooses for its working material kinds of trees which are not always those economically most useful to man. On most of the cut over private lands artificial planting, which is an expensive measure, must be undertaken. Even when nature alone restocks the cut over land with desirable trees, a long time must clapse before a timber crop is matured—in the case of saw log timber from fifty to one hundred years. The average investor refuses to spend money which cannot bring returns for at least two generations. The practise of forestry also involves great risks. With twenty to forty million acres of forests burned annually, with insect depredations over large areas and with many plant diseases rampant the investor's prospects for realizing on future timber values are not promising.

The heavy taxes levied upon forest land and standing timber are likewise an obstacle to reforestation. Although forest land yields no dividends for many years it is taxed annually by state, county and township, and with the growing rates of taxation on all real property the private timber owner in self-defense is often forced to liquidate his standing timber as rapidly as possible and to abandon his cut over land for non-payment of taxes. Overproduction of lumber in the face of a diminishing supply of standing timber is another deterrent. Because of the highly competitive organization of the lumber industry the efforts of the national and regional trade associations to control production have had meager success. The result is overproduction of lumber, on the one hand, and forest destruction without any provisions for renewal, on the other. To these drawbacks must be added the uncertainty of future markets and the low returns from timber growing, while higher returns may be obtained from equally safe, if not safer, investments elsewhere.

In order to encourage private forestry the federal government has adopted a policy of cooperation expressed in the Clarke-McNary and the McNary-Woodruff acts. Under these laws the government has attempted to provide better fire protection, devise a new basis for forest taxation, conduct research in better utilization of forest products, timber growing and control of insect pests and diseases, find new uses for inferior species and new markets for lumber, offer technical advice and demonstrate through the establishment of national forests better methods of handling forest lands. Many states have followed the example of the federal government and have adopted similar policies. In some of them new forest tax laws have been enacted and planting stock is being distributed either at cost or entirely free to any prospective planter of forest land.

The group of private owners which shows the greatest interest in the practise of forestry is the pulp and paper industry. A sawmill is easily depreciated within a few years and the timber operators move to another region. A pulp and paper plant, on the other hand, is a costly investment which involves abundant water supply and water power, and it must be assured of a definite perpetual supply of raw material. Moreover, the timber for the production of pulp can be grown in thirty to forty years, which is not too long a period in the life of a large corporation. Similarly other industries dependent upon wood, such as mining and fruit growing, are likely to become interested in reforestation and forest practise. In spite of all the federal and state encouragement and the interest of the pulp and paper industry private owners have voluntarily placed only from 1 to 5 percent of their forest lands under forest management of any sort.

According to estimates of the United States Forest Service four times as much wood is removed from the forest or destroyed annually as is returned by new growth, and in spite of all conservation measures and talk the rate of destruction is still increasing. It is estimated that the visible supply of accessible timber in the United States at the present rate of cutting will last thirty-five or forty years. The only forests that are being managed on a continuous production basis are the national forests. When the privately owned timber is exhausted, the

national forests will have to stand the brunt of supplying most of the country's needs, especially in high grade saw log material. The actual timber bearing portion of the national forests is not as large as the aggregate area of national forests would indicate; and much of this timbered land is at high altitudes, inaccessible, difficult to log and of slow growth. The timbered area within the national forests by itself through the growth of timber alone will not be sufficient to meet the needs of the country.

The destruction of the privately owned forests besides depleting a natural resource essential to the welfare of the people is creating new economic and social problems. The privately owned forests after they are cut over and, as a general rule, repeatedly burned are abandoned by the millions of acres by their owners and are drifting back into public ownership, into the ownership of the states and counties. In a certain sense a new public domain is thus being created. This new public domain, however, is not the rich domain that passed out of the hands of the federal government. It is land stripped of its valuable timber, ravished by forest fires, land that nobody wants and land that needs to be brought back into productivity at a considerable outlay of money and without tangible returns for a long time. The states, with the exception of a few richer states like New York, Pennsylvania and Michigan, are financially unable to cope with this problem of abandoned cut over land. This is especially true of the counties, which in the cut over regions are for the most part in financial straits and have barely enough funds to carry on the business of the local government, to say nothing of an extensive program for the rehabilitation of cut over land. Nevertheless, the only possibility of economic redemption of the millions of acres of tax delinquent, abandoned and reverted lands lies in their reforestation and in their development for recreational purposes. The movement for creating state forests, county forests, game refuges and state and country parks is gaining momentum in practically all northeastern states, largely both as a means of meeting the needs of a constantly increasing number of tourists and also as an outlet for the use of land which is crowding upon the states and counties. With a few notable exceptions most of the state and county forests are forests on paper only, with no technical supervision and no funds for their proper management. The states, however, will eventually be

obliged to undertake a comprehensive program of reforestation and recreational development of their newly acquired public domain. It may involve readjustment in the local units of government, the evolution of new methods of agricultural settlement, discovery of sources of taxation other than real property and the redistribution of the whole burden of taxation before a proper solution to the cut over problem is found. The economic process of the abandonment of cut over land by the private owners is merely a further proof of the folly of allowing unrestricted exploitation of natural resources, particularly such as forests, which aside from being an economic resource affect the climate, the stream flow, the recreation and health of

The soundness of the laissez faire policy with regard to the timber still remaining in private ownership is now being seriously questioned, but whether it should be replaced by public acquisition of all private timberlands or by regulation of cutting on privately owned land is still in the realm of discussion in the United States. There is, however, a unanimity of opinion in Congress, state legislatures and now even on the part of the lumber industry as to the need of bringing the bulk of the cut over and devastated forest land under public ownership.

RAPHAEL ZON

See: Lumber Industry; Paper and Pulp Industry; Natural Resources; Public Domain; Landed Estates; Parks; Land Grants; Conservation; Government Ownership; Land Taxation

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FORSTER, WILLIAM EDWARD (1818-86), English statesman. Forster attended Quaker schools until his eighteenth year. In 1841 he made permanent business connections in Bradford, where he won a fortune as a woolen manufacturer. Early interested in philanthropic and liberal enterprises, he became active in politics soon after going to Yorkshire and represented Bradford in the House as a Liberal from 1861 until his death. He was acquainted with such radicals as Robert Owen and Thomas Cooper, the Chartist, and was active in Bradford in directing the Chartist movement, with which he expressed moderate sympathies, into non-revolutionary channels. He played a role in the movement for extension of suffrage and advocated abolition of slavery and protection of backward peoples against exploitation. As chief secretary for Ireland and under Gladstone from 1880 to 1882 he advocated the suspension of habeas corpus in order to break the Parnell party and was responsible for the notorious Coercion Bill of 1881. He was chairman of the Imperial Federation League. His chief importance was in his work for the improvement of popular education. He sat on the Schools Inquiry Commission from 1864 to 1867 and was minister of education from 1868 to 1874 under Gladstone. In 1870 he introduced and brought to passage the Elementary Education Act, which broke the old deadlock formed by the radicals, who favored publicly supported schools free to all, with compulsory attendance and a secularized curriculum; by the church party, which desired publicly supported schools with instruction in the tenets and ritual of the Established Church; and by the Dissenters, who opposed both secularization and the dominance of the state religion. Forster himself took a position much like that of the Dissenters, thus alienating radical sympathies. The act provided for national grants in aid to existing voluntary agencies and for the creation of elective district school boards to fill gaps in the educational system by supplying elementary schools where voluntary effort was inadequate. These were to be supported by local taxation and national grants in aid. In the board schools no denominational catechism or religious formulary was to be taught, although the Bible was to remain. School boards were empowered to compel attendance of children up to the age of thirteen. Despite its

compromise character and inherent contradictions of principles this act began in England a movement toward an efficient and comprehensive system of public education. Forster represented the extreme right wing of the Liberal movement and was unsuccessfully proposed by such elements to succeed Gladstone as party leader.

EDWARD H. REISNER

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FORTESCUE, SIR JOHN (c. 1394–1476), English jurist and political theorist. Fortescue became chief justice of the King's Bench in 1442 and sat until 1460, when he espoused the Lancastrian cause. He remained in exile in Scotland, Flanders and France from 1461 to 1471. After the Lancastrian party collapsed in 1471 he was reconciled with Edward IV and spent the last few years of his life in England. His arguments and decisions, one or two of which are of some constitutional interest, are reported in the Year Books and the decisions have been translated by Lord Clermont.

Fortescue's leading academic work, a lengthy treatise entitled *De natura legis naturae*, was written between 1461 and 1463 (cd. by Lord Clermont, 2 vols., London 1864). It is a theoretical study, occasionally tempered with observation upon the law and politics of the period. His thought is characterized by its insistence that the law of nature is purely mundane as contrasted with divine law. Having established this conception, he uses the law of nature as the basis of an argument for the Lancastrian dynastic claim.

His life abroad stimulated Fortescue to undertake the comparative study of English and French law, both public and private. From 1468 to 1470 he wrote De laudibus legum Angliae (1537; tr. by R. Mulcaster, London 1567), in which the English jury trial, limited monarchy, legal profession and legal education are extolled in comparison with French law and institutions. He perceived, however, the connection between law and economic and social conditions and admitted that different countries might require different types of law. Written to instruct the young Prince Edward in the rudiments of law and government, the elementary character of the book makes it especially valuable for its descriptions of jury trial and of the legal profession.

It also contains an interesting analysis of the origins and nature of absolute and limited monarchies, an analysis already begun in *De natura legis naturae*.

De monarchia or The Governance of England (ed. by J. Fortescue-Aland, London 1714, 2nd ed. 1719; new ed. by C. Plummer, Oxford 1885), written about 1471, is a searching criticism of the "Lancastrian experiment" in constitutional government and the causes of its failure. The remedies which Fortescue suggested, in spite of an element of fantasy, really presaged the policy of the Tudors in advocating government by permanent councilors of humble birth instead of by great lords and prelates.

Fortescue was the first English lawyer to write for the lay reader and one of the first to embark upon comparative law and politics; nor is it an exaggeration to say that he really sought for "the spirit of the laws" of England and France.

THEODORE F. T. PLUCKNETT

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FORTUNATOV, ALEKSEY FIODOROVICH

(1856-1925), Russian agronomist and statistician. Fortunatov studied medicine at the University of Moscow and agriculture at the Petrovski Academy of Agriculture and Forestry. He then lectured on agriculture and statistics in agricultural colleges in various parts of Russia and in 1904 joined the faculty of the Moscow Agricultural Institute (formerly the Petrovski Academy) as professor of agricultural statistics. While in Moscow Fortunatov also taught at several other educational institutions and gave short term courses for agronomists offered by the zemstvos, the autonomous provincial bodies.

Fortunatov brought to his work an amazing erudition and remarkable ability. His monograph *Urozhai rzhi v Evropeyskoy Rossii* (Rye

crops in European Russia) (Moscow 1893) immediately won a permanent place in Russian statistical literature. But Fortunatov's chief importance rests on his activities as a teacher. He trained a generation of agronomist statisticians. His teaching methods were largely the outgrowth of his training in the natural sciences and differed widely from the teaching practises then followed in the social sciences; he had little use for the lecture or even the seminar method of instruction. He believed that the student of the social sciences should acquire an attitude toward his subject very similar to the attitude of the student of the natural sciences; that is, he should test the knowledge acquired in the

classroom and the textbook by direct observation of the material and in independent study of sources. The numerous students attracted to him, their many published studies and his influence on their subsequent work and thus on the organization of agricultural statistics all testify to Fortunatov's achievements as a teacher.

V. A. Kossinsky

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FORTUNES, PRIVATE

ANTIQUITY. Fortunes are accumulations of wealth or property which constitute a private legal claim upon production and income. The size and form of private fortunes vary in different historical periods. The great fortunes of one period may be the commonplace accumulations of another; land as the primary source of fortunes yields to trade and industry, war and pillage to speculation. Variations may exist simultaneously, but in any given period a dominant norm tends to develop. All these variations, including frequency, are conditioned by prevailing economic and political relationships in which unequal distribution of wealth and income is a persistent and fundamental characteristic.

In pre-Hellenic Greece there were at first few opportunities for the accumulation of wealth and the piling up of large private fortunes. Differentiation developed in the size of landholdings, however, and after the Peloponnesian War the tendency to acquire relatively large holdings appears to have become stronger and to have been accompanied by speculative buying and reselling. It is also probable that the farming of tax collection and state mines proved to be the source of considerable profits. Nevertheless, the first real opportunity for acquiring large fortunes outside of landownership appeared only with the integration of a vast economic area and with the opening of the East by Alexander the Great and the Hellenic dynasties. To be sure, the new opportunities for fortune building remained narrowly restricted. The situation is exemplified by the economic organization of Egypt under the Ptolemies: the greater part of the land belonged to the monarch or to the state and the state monopolized also the essential branches of industry as well as large scale trade and finance. Such restrictions and monopolies existed in nearly all the Hellenic states, although some of them left more room to private initiative in commerce and finance. The opportunity to acquire fortunes afforded by this system was open at first only to high officials and later to the farmers of the state taxes and monopolies. A representative fortune of this kind is that of Apollonius, a royal minister of the Ptolemaic period and the owner of vast tracts of land in Fayam; his fortune was founded on royal gifts and multiplied by quite rational modern methods.

Very great fortunes existed in Hellenic Asia Minor during the first century B.C., although in many cases it is impossible to trace their origin. For example, Hero of Laodicea possessed a fortune of over 2000 talents and Pythodorus of Tralles, a friend of Pompey, one of 4000 talents. That the opportunities for profitable money transactions constantly increased in the trade of late Hellenic times is indicated by the steady influx of Italians—most of them apparently Greeks from southern Italy-into the most important trading fields of the eastern Mediterranean. Their main activity was banking, particularly exchange and loans—private loans in the form of advances on cargo and public loans in anticipation of tax collections. Many of these financiers acquired large fortunes; Cicero's friend Marius Curius is an example. Trade intermingled with war and piracy; Carthaginian merchants and politicians used efficiently the characteristic combination of commerce and conquest and grew rich from the spoils and labor of subject peoples.

The Roman civilization produced no fundamentally new form of wealth accumulation or type of fortune. Until the late period of the republic landownership on a large scale and tax farming remained the only significant means of piling up really large fortunes. It was only with the conquest of the East and the formation of the empire that interprovincial commerce became important and provided opportunities for large scale accumulation in maritime and trading operations. At the same time the Romans highly developed the extra-economic but typical means of acquiring wealth: the collection of tribute from conquered peoples and the exploitation of provinces by the incumbents of high positions in the administration. In the course of time tax farming became a monopoly of the military class, and the considerable fortunes acquired thereby were increased further by syndicate operations. The wealth accumulated from maritime and wholesale trade was also invested in money lending and later quite frequently in land. The amount of capital employed in money lending operations was quite large even in the late republican period; in Pompey's time the municipalities of Asia Minor were indebted to Roman money lenders to the extent of \$40,000,000.

The possibility of building up large fortunes by means of tax farming disappeared during the empire with the development of state machinery for financial administration. And after the third century, with the steady decline of trade and general economic regression, large fortunes were possible only in the form of latifundia. Some idea of the size of landed estates in the early period of the empire is given by Pliny, according to whom half the land of the north African province in Nero's time belonged to six great landlords. Trimalchio, a typical business man of the time, drew an enormous revenue from the wine trade and ownership of latifundia. Seneca, the richest man of Nero's reign, combined in a characteristic fashion the exploitation of latifundia with money lending on a large scale. Fortunes, particularly in the earlier period of the empire, were enormous, some as much as 400,000,000 sesterces, or \$16,000,000—large even according to modern standards. Wealth was the badge of distinction; the amounts of their wealth and income were inscribed on the tombstones of rich men.

CLEMENS BAUER

MEDIAEVAL AND EARLY MODERN PERIOD. The great Roman fortunes disintegrated with the collapse of the empire. Industry regressed to primitive forms, trade almost completely disappeared and the new economic and political conditions were unfavorable to the development of large fortunes.

From the early Middle Ages to the period of the crusades private fortunes appeared in Europe predominantly in the form of landed possessions, i.e. the real property of a feudal class of ecclesiastical and lay landlords. Large money fortunes scarcely existed. The only significant exceptions were represented by the Templars and the Teutonic Knights, the latter accumulating great wealth through the export of agricultural and forest products. As a general principle non-landed fortunes could develop only after the production of goods for local needs developed into regular production for profit. This was the case toward the end of the Middle Ages with the great English landlords, who during the period of enclosures adopted sheep raising for wool, and with the nobility of Schleswig-Holstein, some of whose representatives early accepted capitalistic agriculture. In general, however, large money fortunes appeared in the city, particularly among a few great merchants of certain Italian cities and a few cities outside of Italy, which were developing as the key trading centers of Europe.

Jews represented a considerable percentage of these early possessors of money fortunes. The great majority of the large Jewish fortunes of the Middle Ages developed from small beginnings in the trade in secondhand goods, pawnbrokerage and the trade in precious stones and acquired greater importance through loans to ecclesiasuical and lay princes. As early as the eleventh century and during several pontificates a banking family of Jewish origin, which later took the name of Pierleoni, played an extremely important role in papal finances. Early in the Middle Ages the Jews recognized the value of accumulating wealth on a large scale by financial dealings with the lay princes, particularly in England and the Iberian Peninsula. To be sure, this was almost nowhere accomplished undisturbed; more or less extensive confiscations by princes and state authorities repeatedly interrupted the growth of Jewish fortunes.

The growth of non-landed fortunes in Christian ownership during the Middle Ages was also subject to interruption by confiscations, either openly or in the masked form of forced loans.

A part of these fortunes originated in dealings in money. All over Europe money changers and money lenders from Lombardy and from Cahors in southern France set up their tables for the exchange of money and pawnbrokerage; with the growth of their "banks" they were able frequently to engage in the business of high finance. These developments provided many opportunities for the accumulation of great private fortunes, particularly where certain state revenues, such as tolls, coinage and taxes, were transferred to creditors in payment of their loans.

Trade played a more important part than money changing and loans in the rise of nonfeudal fortunes. During the crusades various merchants from central and northern Italy built up an exceedingly profitable trade with the Levant, and this was followed by the growth of capitalistic export industry in dozens of Italian cities. This foreign trade yielded enormous profits, particularly the oriental trade in luxuries. In Venice and Genoa the Italian mercantile fortunes advanced rapidly until they reached the peak of their development and also their highest political and economic importance in the large international and financial transactions with popes and kings. During the Middle Ages and well into the sixteenth century in Italy and other economically advanced countries ground rents were not essential to the building up of great bourgeois fortunes; in fact, landownership was important from this point of view only as the means of safeguarding wealth and strengthening credit. There was at the same time a growth in the fortunes of the feudal monarchs and nobility as a result of the general economic expansion.

In the sixteenth century the great south German merchants, the Fuggers, Welsers and Baumgartners, took their place alongside the Italians in the leadership of trade, industry and high finance after they had laid the foundations of their large fortunes in petty trade and had increased them, through fortunate profits from the mining industries, to the proportions necessary for the transactions of international finance. To a much greater extent than in the period of the German Hansa, capitalistic industry and international finance—especially in the two world bourses of the sixteenth century, Antwerp and Lyons—operated to produce great wealth and private fortunes and also to destroy them by state bankruptcy.

The development of European fortunes reached its climax during the sixteenth century in southern Germany. Even the richest Italian

merchants of the fifteenth and sixteenth centuries-the Medici, Grimaldi and others-had not been able to pile up fortunes so great as that possessed by the Fugger family corporation at the height of its affluence—in 1525 about 2,000,-000 and in 1546 nearly 5,000,000 Rhenish gold guldens. These great money fortunes, both German and Italian, were partially destroyed during the second half of the sixteenth and the first half of the seventeenth century by the national bankruptcies of that period. Thereafter a more rapid development of private fortunes appears in the circle of "national" or at least nationalized merchants and financiers. In England the wealthy goldsmiths of London replaced the Italian bankers as professional money lenders to the crown. In the France of Mazarin's day two members of the famous Augsburg merchant family of Herwart were still the strongest financial pillars of the state, but they had already become completely Gallicized. The Herwarts combined the roles of bankers and state officials—comptrollers general of finance - and considerably increased their already large and powerful fortunes. Even more successful were the native French prefitcers in the financial needs of the state, the farmers general: as farmers of taxes and state revenues (such as Fouquet, Rambouillet, Nogaret and others) they acquired such enormous incomes in a short time that one is forcibly reminded of the lucrative tax farming of antiquity, especially in the Roman Empire. Both Richelieu and Mazarin accumulated large fortunes by means of their political power.

Disintegration of the feudal system and the rapid development of capitalist enterprise accelerated the growth of private fortunes, although these were still closely linked to the old order. The domestic financial machinery in France, England and Germany, even in Holland in the seventeenth and eighteenth centuries, was inadequate to satisfy the increasing national and economic needs for mobile funds. A system of international finance was indispensable. Such a system was slowly arising among the Jews and created new European fortunes. In England the Iewish financiers after a hundred years of exile were readmitted under Cromwell to relieve the financial straits of the Long Parliament; these financiers occupy an important place in the history of English private fortunes.

The forces of feudal disintegration and commercial revolution had been powerfully accelerated by the discovery of the New World, which gave an enormous impetus to the accumulation

of wealth and the growth of large fortunes. English sea trade and colonial enterprises, including trading companies, plantations, the conquest of India, piracy and the slave trade, opened up new sources for the rise of private fortunes; the Spaniards acquired immense riches from the gold and silver of the New World. Colonial enterprise appeared earlier in Holland and brought great wealth; the Amsterdam Bourse, that great gold reservoir which in the eighteenth century replenished the empty coffers of the princes of half of Europe, provided rich Dutchmen and the international owners of large money capital with a field for the profitable investment of their funds in colonial as well as European enterprises. French money was also active in colonial enterprises, although less so than money from other countries. In Germany the older methods were still the more important, and the larger and smaller courts afforded increasing opportunities to the so-called court Jews for making fortunes by financing the trade in luxury goods and providing credit for munitions and army supplies.

In these developments of the commercial revolution one can see gradually emerging the typical forms of the great modern private fortunes which arose during and after the industrial revolution, growing out of large scale manufacturing, promotion, speculation and the unearned increment from urban and rural landholdings produced by industrial development.

JAKOB STRIEDER

Modern Period. While in seventeenth century Europe fortunes were piled up out of trade, finance and industry, accumulation in the North American colonies assumed at first the more primitive form of large landholdings. Spaniards acquired fortunes by plundering the Aztec and Inca civilizations, but farther north there was only land to wrest from the aborigines. The English kings gave title to vast domains to their favorites, usually pauperized aristocrats, who combined with merchant capitalists to exploit the grants. Alongside and within the proprietary grants great landed estates were created. In the New Netherlands the Dutch also built up large landholdings; the 700,000-acre estate of Killiaen van Rensselaer was not unusual. These manorial estates were worked with the aid of tenants and indentured laborers. Farther south the plantation system was based on Negro slavery; thus some of the earliest colonial fortunes in Virginia were based on the cultivation of tobacco by slave labor. Even after the colonies reverted to the

British crown the accumulation of large landholdings continued, although some of the older ones were broken up. Entailing of land was extensively practised. The colonial manorial estates represented the transplantation of an essentially feudal type of fortune, but they functioned in an environment which the commercial revolution of the seventeenth century was rapidly transforming into a capitalist economy; in fact, they depended for the profitable disposal of their products upon trade with England.

Another source of private fortunes was overseas trade, which came to occupy a prominent place toward the end of the seventeenth century. By 1680 there were thirty merchants in Massachusetts each worth between \$50,000 and \$100,-000. The fur trade, which supplied the growing luxury demands of the European aristocracy of blood and money, yielded large profits, mainly for the masters of the Hudson's Bay Company in England. The slave trade, which never before had been organized on such a vast scale, was a particularly fertile source of large private fortunes. Money lending and a crude form of banking developed to meet the needs of commerce, constituting another source of accumulation. By the time of the American Revolution mercantile fortunes were disputing supremacy with landholding fortunes, although land still enjoyed social recognition as the dominant form of wealth. The father of James Fenimore Cooper owned a manorial estate of huge proportions and boasted that there were "some 40,000 souls holding land directly or indirectly under me."

The revolution dispersed some fortunes, particularly among the loyalists whose estates were confiscated, but others became larger and new ones were created, mainly by financiering, speculation and privateering. One revolutionary privateer, Israel Thorndike, later increased his wealth from mercantile and manufacturing enterprises, accumulating a fortune of \$1,800,000. Speculative fortunes were enormously augmented when the new federal government assumed \$70,000,000 of national and state debts: most of the bonds were in the hands of a few speculators, who had bought them at 10 to 15 percent of their face value. Mercantile fortunes based upon the expansion of trade and industry increased swiftly after the revolution, and manufacturing fortunes made their appearance. One capitalist amassed \$130,000 from the glass industry and another \$400,000 from the furniture industry. Stephen Girard, who left a fortune of \$7,000,000, derived his wealth largely from

speculative manipulations in trading, shipping, banking and manufacturing enterprises.

With the further development of capitalist enterprise fortunes based on agricultural landownership definitely receded in importance. The protests of tenants forced legislation breaking up the manorial domains, and the earlier abolition of entail and primogeniture had a similar effect. As large agricultural estates disappeared in the east, land fortunes came to consist of urban realty holdings the value of which increased enormously with the rapid growth of cities. Similar fortunes arose in the west—in Chicago, Cincinnati and St. Louis. According to a list published by the New York Sun in 1846 of the 10 New York millionaires who owned an aggregate of \$65,000,000, 8, including John Jacob Astor and E. van Rensselaer, were landowners and 7 were merchants. But the original accumulation of Astor, whose fortune of \$20,000,000 was the largest in its time, came from the oriental trade and the fur trade, and it was multiplied by speculation in New York real estate. According to the same list, of the 78 fortunes of \$500,-000 and over in New York City 26 were owned by merchants, 17 by landowners, 5 by manufacturers, 4 by bankers and 3 by brokers.

The merchant capitalist was now the dominant type. Fortunes based directly on manufacturing were still rare; a contemporary chronicle said of one rich man that he had "managed, strange to say, to obtain large profits and wealth" from manufacturing. In 1845 of 9 Boston millionaires only 2 engaged in manufacturing. But the designation merchant covered at the time a multitude of interests. While merchants did not pioneer manufacture, which was still considered risky, they financed the distribution of its products and secured thereby a large share of the manufacturing profits. Thus in 1834, 85 percent of the Boston merchants were closely connected with manufacturing enterprises. Differentiation proceeded steadily, however; many merchants became industrial capitalists and others abandoned trade for finance. The great American investment banking houses were originally mercantile firms; George Peabody gave up trade for international finance and acquired a fortune approaching \$10,000,000 out of the American need for foreign capital. Merchants and bankers promoted railroads, the rapid development of which offered an unexcelled opportunity for profit; and Jacob Little was already demonstrating how a fortune might be acquired by railroad manipulation and speculation. The characteristic modern

fortunes began to emerge, based upon the development of industrial and financial capitalism.

Modern capitalist fortunes appeared much earlier in England. Immense wealth had poured into England from overseas enterprise and chartered companies such as the Africa Company and the East India Company, most of which combined trade, slaving and colonial plunder; the great wealth acquired by English adventurers in India led to the use of the term nabobs to designate the newly rich. Security speculation made possible by the rise of joint stock companies culminated in the organization in 1711 of the South Sea Company, the promoters of which were mainly wealthy merchants. When the South Sea bubble burst, as its predecessor the Mississippi bubble had burst in France, thousands of people were ruined but the insiders realized handsome profits. Meanwhile, in the nooks and crannies of the English economy forces accumulated which were to create new sources of riches, to change the form and increase the size of private fortunes. The industrial revolution not only multiplied wealth but also accentuated its concentration. The earlier fortunes directly connected with the industrial revolution were made by new men; only after the new industries were successfully established did they prove attractive to the rich families of older standing. But the industrial revolution also enriched aristocratic landowners whose lands contained deposits of coal, iron and other minerals, and whose ancestral privileges enabled them to levy tribute on economic progress. The earliest of the new capitalist fortunes arose out of the coal and iron industries. Although Henry Cort, whose processes transformed iron making, died a poor man, the ironmasters who violated his patents amassed huge fortunes. One ironmaster, who started "at the bottom," died in a castle and left £1,500,000. In the districts of south Wales, where the new industrialism flourished most vigorously and where labor and social conditions, according to one authority, combined "the worst features of the industrial revolution," men in a few years amassed fortunes of unprecedented size. The growth of textile factories in England destroyed the village economy of India based on handicraft weaving but it also produced another crop of millionaires. One fortune of £5,000,000 had its source in the manufacture of carpets by machinery. In the succeeding generations steamships and railroads provided new means for the accumulation of wealth. George Hudson secured for a while a large fortune by unscrupulously exploiting the railway boom of the forties with its consolidation movement. Investment bankers (Rothschilds, Barings) garnered great profits from the export of capital for government loans and for financing railroad construction on the continent, in the United States, in Latin America. Never before had wealth and fortunes piled up so swiftly as in capitalist England between 1815 and 1860, and never were the conditions of the working class more miserable. At the same time land fortunes still remained powerful; even after the Reform Bill of 1832 land represented political power and social prestige. While aristocratic landowners had their wealth increased beyond the dreams of their ancestors by industrial and urban growth and by corporate investments, industrial and financial capitalists bought landed estates in order to qualify for titles and social position.

Capitalist development on the continent thrust up new fortunes and increased the size of old ones, paralleling English developments on a smaller scale. As the financial manipulations of the Rothschilds spread beyond Germany, they became the most powerful factor in the circles of high finance. At the end of the eighteenth century they were worth only \$450,000, but with the development of capitalism they broadened the scope of their operations and immensely increased their wealth. Thus between 1817 and 1848 the Rothschilds placed loans of \$650,000,-000, often at 10 percent interest. Their function may be described as the mobilization for capitalist investment of the wealth of the feudal and semifeudal aristocracy based on precapitalist forms of exploitation. The spread of industrialism and corporate enterprise encouraged promotion and speculation, the sources of many contemporary fortunes. The Crédit Mobilier, which offered competition to the Rothschilds, paid dividends of 12, 40 and 22 percent from 1854 to 1856 and then crashed. France under Louis Napoleon was the paradise of unusually corrupt and predatory promoters and speculators (including the emperor); other fortunes were derived from more prosaic activity in industry, particularly coal, iron and textiles. All over the continent railroads were built, preparing the way for industrialism and enriching their promoters. Holland was no longer the important power it had been in the sixteenth and seventeenth centuries, but the Dutch merchant capitalists continued to draw wealth from the exploitation of their colonial possessions; the Dutch East India Company created many fortunes, and

important colonial officials usually retired as wealthy men. The extremely rapid industrialization of Germany was the basis of several large fortunes. Alfred Krupp, who inherited an iron business with neither capital nor credit and only four workers, became one of the richest of European capitalists. Krupp's fortune was fed from three sources: industry's enormous demand for iron and steel, the industrialization of war and political favors. The Siemens family amassed a fortune from invention and expansion in the electrical industry; the Rathenaus, from electric light and telephones; others, from the development of the chemical industry. No great German fortunes, however, were identified with development of the railroads, which in the period of greatest expansion were owned by the government. Aristocracy in Germany, almost as much as in England, allied itself with capitalism and enormously increased its wealth. The feudal landowners of Upper Silesia, for example, piled up great fortunes by the exploitation of coal, iron and other minerals on their estates; others participated in industrial and speculative enterprises, often of the most shady character. Feudal Russia felt the impact of economic change, and merchants, often illiterate, acquired great fortunes by trading and speculating in agricultural and forest products; the great fortunes, however, were still aristocratic; the wealth of one nobleman amounted to \$200,000,000.

By 1880 the industrialized nations of Europe -Great Britain, Germany, France and Belgium -were actively engaged in the struggle for imperialistic supremacy which led inexorably to the World War. Imperialism, the predatory aspect of the industrialization of the world's economy, became a most important factor in the formation of private fortunes. Capitalist industry came increasingly to depend upon overseas trade, the export of capital and the exploitation of economically backward countries as the source of cheap raw materials and even cheaper labor. Immense profits were made in China by financiers, promoters, speculators and ordinary adventurers. Bankers and speculators made large profits out of the financial and political intrigues of the Berlin-Bagdad Railway, which sharpened imperialistic antagonisms. The Mannesmanns profitably exploited iron mines in Morocco, which brought Germany and France to the verge of war. Construction of railroads in Asia, Africa and Latin America yielded profits which in many ways suggested tribute levied upon the conquered. A cabal of Belgian aristocrats, finan-

ciers and speculators, headed by King Leopold, drew immeasurable wealth from the merciless exploitation of men, women and children in the Congo. French and Belgian financiers profited from the construction of the Trans-Siberian and the Chinese Eastern railroads in Asia. The mounting needs of industry for raw materialsoil, tin, copper, rubber-produced some native as well as many European fortunes; a landholding family in Chile increased its wealth to \$70,-000,000 by the exploitation of minerals and a Bolivian family amassed a fortune of over \$200,-000,000 from tin mines. Argentine cattle ranchers and Portuguese planters in Africa each in their way profited from international economic developments; Argentine millionaires became almost as famous as the American. A German, Alfred Beit, piled up a fortune conservatively estimated at \$150,000,000 from the gold and diamond mines of South Africa. Beit's business partner, Cecil Rhodes, made £,1,000,000 in four years, mainly by consolidating diamond mines; Rhodes' British South Africa Company extorted profitable concessions from the natives and inextricably merged business interests with imperialism. The basis of empire, said Rhodes, is "philanthropy plus 50 percent"; his imperialistic schemes led directly to Britain's war against the Boers and the annihilation of their independence. An aspect of imperialism was the aggravation of competitive armaments; fortunes based on the armament industries increased greatly.

While capitalism produced the characteristic modern fortunes in European countries and the United States, older types of fortunes persisted eisewhere, although modified by capitalist influences. In Asia, Africa and Latin America the piling up of landholdings represented the typical form of accumulation. Chinese merchants amassed great wealth, particularly in the European colonies of the Pacific. Personal exploitation of political power yielded large fortunes to Porfirio Díaz of Mexico and Juan Vicente Gómez of Venezuela; the Venezuelan, who was a poor man when he became president in 1908, had a fortune twenty years later estimated at \$300,000,000. Both Díaz and Gómez maintained intimate relations with foreign concessionaires and financiers.

In 1902 there were in France 15,000 fortunes of 1,000,000 francs and over. In the same year the United Kingdom reported 273 inheritances of £80,000 and over, which included 22 of £500-000 and over—an indication of the great size and number of private fortunes, some of which ex-

ceeded £25,000,000. Private fortunes in Germany were smaller than the English but larger than the French; the five greatest German fortunes combined represented approximately 700,000,000 marks. Although agricultural land in England became more and more unprofitable, aristocratic landowners with estates in mining or urban districts were extremely wealthy; five dukes and two earls owned property valued at £70,000,000. The Duke of Westminster, who owned large parcels of London land, had an income of nearly £,200,000, mainly from rents. A similar development was characteristic of the continent. In 1913 three of the five greatest fortunes in Germany were aristocratic: the Krupps led with 283,000,000 marks; Prince Henckel von Donnersmarck followed closely with 254,000,-000 marks; then came a financier, a grand duke and finally the kaiser with 140,000,000 marks. The majority of private fortunes in Europe were capitalist, however; even the fortunes of the aristocracy were dominantly capitalistic in character.

Great as were the European fortunes they were much smaller than the fortunes piled up in the United States after the Civil War, which strengthened capitalism economically and liberated it politically. Negro emancipation and reconstruction destroyed the great land fortunes in the south, where accumulation had to begin all over again, but in the north accumulation based on capitalist industry attained unprecedented dimensions. American capitalism expanded more rapidly and on a larger scale than elsewhere. Relatively unhampered by vested interests of long standing and by the culture of an older civilization, armed with an almost "pure" acquisitive ideology which justified unrestricted money making, it drew upon the apparently inexhaustible natural resources of an undeveloped continent exploiting them with the aid of large masses of immigrant labor provided by Europe.

Appropriation and exploitation of vast natural resources was of fundamental importance in the formation of very large private fortunes. The Weyerhausers, whose wealth in 1914 was estimated at \$300,000,000, were identified with timber and allied resources, other great fortunes with copper, land, lumber, coal and oil. Most of the natural resources were originally part of the public domain, which in 1860 still consisted of 1,048,000,000 acres; but they came under the control of private interests by "the benevolent paternalism of a government" which, in the words of Charles A. Beard, "sold its natural resources for a song, gave them away, or permitted

them to be stolen without a wink or nod.... The public land office of the United States was little more than a center for the distribution of plunder." Not only entrepreneurs became rich by exploiting natural resources; somnolent farmers acquired wealth overnight by the discovery of oil or minerals in their lands.

Many great fortunes were wrested from the railroads in the period following the Civil War. Yet the legitimate construction costs of American railroads up to 1880 were more than paid for by federal, state and municipal contributions of \$700,000,000 and grants of 155,000,000 acres of public lands. Cornelius Vanderbilt's great wealth came almost exclusively from speculating in railroads and watering their stocks as an accompaniment of consolidation; he left \$100,-000,000 and one of his sons \$200,000,000. The Crédit Mobilier extorted from the Union Pacific Railroad more than \$40,000,000 in excessive construction costs, which was distributed among promoters and politicians. Jay Gould's fortune of \$72,000,000 came mainly from railroad speculation and manipulation and was identified with scarcely any constructive achievement. Collis P. Huntington and others exploited the railroads in similar fashion. When speculation, mismanagement and competition drove the railroads into bankruptcy, wages were cut and thousands of small investors were ruined but reorganizations yielded large profits to financiers and promoters. Part of the Morgan money and power came from this source. Other great fortunes (Hill, Harriman) were piled up by the consolidation of railroads into gigantic systems during the period from 1895 to 1905.

While the older fortunes did as a rule no economic pioneering, inventions revolutionized one industry after another and men of small capital who entered the new industries at an early stage of their development amassed immense profits. Cyrus McCormick acquired a large fortune in developing agricultural machinery and George Westinghouse in electrical manufacturing. The Standard Oil Company between 1882 and 1906 paid out \$548,436,000 in dividends and other millions were represented by equipment and cash resources; the company's stockholdings at the time were highly concentrated. Technological changes, large scale production and competition drove inexorably to industrial concentration and corporate combination. The profits of organizing combinations were astonishing; the series of combinations in the steel industry which culminated in the United States Steel Corpora-

tion yielded the promoters profits of at least \$150,000,000. Profits of this type were often fortuitous; in order to prevent the revival of ruinous competition Andrew Carnegie was paid \$447,000,000 for his steel interests, twice what he would have accepted two years previously. Fortunate investors in some of these combinations became wealthy, others were ruined; but moderate fortunes steadily increased. By 1900 the industrial capitalist had become a financial capitalist interested in a multitude of enterprises. promoting, speculating, financing. The Standard Oil group of multimillionaires, an oligarchy dominated by John D. Rockefeller, engaged extensively in promotion and speculation; "their resources are so vast," said one financier, "there is an utter absence of chance" in their manipulations. Another source of great fortunes (Drexel, Morgan, Stillman) was investment banking, growing with the expansion of corporate enterprise and allied with promotion.

The swiftly rising stream of national wealth also provided many minor opportunities to accumulate fortunes—patent medicines, journalism, the law. Moderate wealth was amassed by corrupt politicians, but on the whole politics favored predatory business men more than corrupt politicians; it served the capitalist class in general and special capitalist groups in particular. The beginnings of American imperialism swelled the stream of wealth; William R. Grace acquired a substantial fortune by industrial and financial enterprises in Peru, and after 1900 an increasing number of American fortunes were derived from exploitation of the natural resources and peoples of Mexico and other Latin American countries.

In 1892 the New York Tribune published a list of 4047 American fortunes of \$1,000,000 and over. A classification based on this list shows quite clearly the change in the character of American fortunes since 1845. Of the 4047 millionaires, 1140, or 28 percent, were identified with manufacturing; among them were 93 patent medicine manufacturers, 81 brewers and 58 publishers. The next largest group, merchandising, numbering 986 millionaires, represents an extremely broad classification, since most of the great merchants engaged in other enterprises as well; thus of Marshall Field's \$120,000,000 estate his interest in Marshall Field and Company was valued at only \$3,400,000, the balance consisting of investments in real estate and 150 industrial, public utility and financial corporations. There were also 468 fortunes connected with real estate; 410 with transportation and communication, including 186 railroad and 12 telephone and telegraph magnates; 356 with banking, brokerage and insurance; 268 with mining, of which 72 were based on the production, refining and transporting of oil; and 168 with forest ownership and lumber manufacture. Of the 84 millionaires who derived their fortunes from agriculture 47 were western cattle ranchers, a group of whom President Roosevelt's land commission said that "hardly a single title is untainted by fraud"; 15 were owners of plantations in the south; and 6 owned plantations in Latin America. The professions contributed 73 fortunes of \$1,000,000 and over; 65 of them belonged to lawyers, mostly corporation lawyers, and only 3 were based on accumulations of patent royalties. The remaining 94 fortunes were obtained from a great variety of pursuits, the only homogeneous group of any size being represented by 24 hotel and restaurant owners. This accumulation of great wealth outstripped improvement in the conditions of workers and farmers

The World War and its aftermath profoundly affected the formation and growth of private fortunes. In the United States the number of persons with yearly incomes of \$100,000 and over increased from 2290 in 1914 to 6633 in 1916. During the period of American participation in the war accumulation was not so great because of severe taxation and the depreciation of fixed incomes, although fortunes connected with war industries and speculation increased tremendously and many new fortunes were created. European developments were similar. Then revolution and inflation on an unparalleled scale brought profound changes. The communist revolution in Russia resulted in the confiscation of great private fortunes with the general expropriation of the feudal and bourgeois classes, while the Succession States broke up the large estates of German and Austrian aristocrats; in other countries, particularly in England, severe taxation brought about a similar shrinking of many landed fortunes. During the inflation period in Germany many private fortunes were completely wiped out and none escaped intact. Out of the general ruin a few monstrously large fortunes arose. Operating by means of paper mark credits Hugo Stinnes pyramided his purchases of distressed properties until he was in practical control of 1535 enterprises in mining, manufacturing, transportation, finance, and journalism; but deflation and his sons' incapacity destroyed this

vast aggregation of wealth. Inflation and deflation wrought similar results in other European countries but on a smaller scale. Because of economic crisis and decline accumulation in postwar Europe consisted mainly in the redistribution of existing fortunes; new fortunes were based on financiering and speculation, although the growth of certain industries, such as munitions, electric power and automobiles, played a considerable role.

In the United States the post-war period was characterized not only by a large increase in national wealth and income but also by an unequaled growth of great private fortunes. The causes must be sought in an unusually rapid expansion of several new industries, such as automobiles, radios, chemicals and moving pictures; a parallel growth of certain older industries, such as electric power; and a great increase in labor productivity of which only a small share accrued to wages. This rapid economic expansion produced an immense increase in speculation, which constituted one of the most fruitful sources of accumulation. Speculative gains reported by income taxpayers increased from \$1,172,000,000 in 1923 to \$4,556,000,000 in 1929; one half of the income of persons with incomes of \$100,000 and over was derived from speculative gains. Large profits were realized also from the wave of mergers and combinations which swept the country before the crisis of 1929. The number of incomes of \$50,000 and over rose from 12,452 in 1923 to 38,650 in 1929 and incomes of \$100,000 and over rose from 4182 to 14,701, accompanied by a substantial increase in the unequal distribution of income. On the basis of income statistics there are approximately 35,000 millionaires in the United States compared with 7000 in Great Britain and considerably fewer in other countries. In 1929, 504 American multimillionaires with incomes of \$1,000,000 and over possessed claims to wealth amounting in the aggregate to \$35,000,000,000, or one third more than the national wealth of Italy. The wealth of these great private fortunes is represented by investments in an extremely diversified group of corporate enterprises with a backlog of government securities; landownership is relatively unimportant except in the case of a few fortunes based on urban realty. Since the war imperialistic expansion has become increasingly important; in 1930 American foreign investments (excluding war debts) amounted to \$17,500,000,000, ownership of which is concentrated in the larger private fortunes.

The characteristic form of modern capitalist fortunes—paper claims upon wealth and income —contrasts sharply with older types of fortunes. The wealth of the aristocracy was bound up with land, the accumulations of industrial capitalists with particular enterprises; both had a tangible form and definite habitation. Contemporary capitalist fortunes, on the contrary, are liquid, mobile, intangible, bound up simply with general rights of ownership. At the basis of this development are the concentration of industry, the separation of corporate ownership and management and the transformation of the industrial capitalist into the financial capitalist. One aspect of these changes is the separation of great family fortunes from the particular enterprises with which they were identified in the earlier stages of capitalism. This process has gone farthest in the United States; industrial family fortunes persisted much longer and on a larger scale in Europe, but even there separation proceeded rapidly after the World War. This increasing intangibility of ownership contributes to the illusion that family fortunes are disintegrating. Family fortunes on the whole do not disappear, although split up among many heirs, but tend to lose the dynamic character of the original accumulation and seek safety in investment counsel, trust companies and government securities. This is especially true of the fortunes of women, the number of which is increasing mainly as a result of inheritance, insurance and divorce settlements. It has been estimated that trust companies in the United States are more or less actively engaged in the management of fortunes amounting to \$25,000,000,000. The development of trust companies and diversified investment insure greater stability for private fortunes.

These fortunes are separated from direct participation in industry; their owners constitute a class of investors, absentee capitalists, while management and control are institutionalized. Because of this the possession of fortunes does not generally carry responsibilities with regard to the source from which the wealth is derived. The lord of the manor had definite obligations, either legal or customary, to the tenants on his land, the serfs who cultivated his demesne and household servants. Where the industrial capitalist recognized obligations to the workers in his factory or the consumers of his product, they were forced upon him by his identification with a particular enterprise. The modern financial capitalist, whose fortune may be scattered in scores of enterprises and in almost as many countries, effectively escapes such responsibilities. Even if he owns a large block of securities in a particular enterprise he may plead—as he does on occasion—that the responsibility is nor his but that of the management. These economic and social changes are accompanied by a change in the forms of conspicuous consumption characteristic of private fortunes; it becomes more individual and personal in contrast with the many social aspects of conspicuous consumption in ancient and mediaeval civilizations.

The rich man of the twentieth century is not only separated from direct contact with production and its social obligations but he also plays a minor role in the cultural life of society. In the past great private fortunes were important cultural influences; formal culture was closely linked to the courts of the rulers of antiquity, the castles of the feudal lords in the Middle Ages and the social activities of the princes of commerce and finance in the succeeding centuries. This influence must not be exaggerated; but while no creative role can be attributed to wealth as such, the rich formerly actively encouraged culture and served as its conspicuous representatives. This can scarcely be said of the possessors of large fortunes who constitute the isolated and exclusive coteries of contemporary American "society." In the United States private wealth still exerts considerable indirect influence in education, social work, organized religion and other fields; but in countries of older civilization, where the welfare and cultural activities of government cover a much wider area than in the American community, such opportunities are much more restricted.

Great private fortunes are an extreme manifestation of the unequal distribution of wealth, of which poverty is the other extreme. They constitute a social relationship sustained by law and inseparably bound up with private property and class rule. All legislative attempts to limit the growth and size of private fortunes have failed; thus they increased tremendously in the United States following the introduction of inheritance and income taxes. There are checks upon private fortunes in the movement of economic forces (price fluctuations, economic decline) and in confiscation, of which a partial form is unusually severe taxation; but the general tendency is to increase, since private fortunes are inherent in any social system based upon private property. The revolutionary bourgeoisie, which objected to great feudal fortunes and in some cases expropriated feudal possessions, considered the "free

ownership" of property equivalent to social equality; but bourgeois private property constituted the starting point of accumulations greatly exceeding the feudal fortunes. In the United States the middle class during the period from 1880 to 1914 waged bitter war upon "tainted wealth" and "swollen fortunes," but this class defended private petty enterprise in which corporate wealth originated, one of the typical sources of great American fortunes. The forms of fortunes change as institutions change; their permanent essentials are private property and class rule.

Fortunes are primarily institutional in their origins. Personal characteristics—ability, duplicity, acquisitiveness- may explain why one man instead of another acquires great wealth but not why fortunes can be accumulated nor why few, many or no fortunes are piled up in different epochs and social systems. Nor is function an explanation of great fortunes. The capitalist entrepreneur who pioneers in the organization of an industry may acquire a fortune in the process or it may be snatched from him by more fortunate individuals; in either event the wealth secured is not necessarily commensurate with the function performed. Moreover, fortunes in the second or third generation are completely separated from the original function and become simply the private ownership and accumulation of social capital. The functions of organization, ownership and accumulation are strictly defined by prevailing institutions; other institutional arrangements, as in the Soviet Union, may perform the functions in a fashion which does not result in the piling up of private fortunes.

Lewis Corey

Sec: Wealth; National Income; Property; Accumulation; Inheritance; Landed Estates; Debt; Revenue Farming; Banking, Commercial; Investment; Speculation; Capitalism; Capitalism; Capitalism; Entrepreneur; Plutocracy; Confiscation; Taxation; Inflation and Deflation; Endowments and Foundations.

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Capital and Finance in the Age of the Renaissance (London 1928); Avenel, Georges d', Les riches depuis sept cents ans (Paris 1909); Law, Alice, "The English nouveaux-riches in the Fourteenth Century" in Royal Historical Society, Transactions, n s., vol. ix (1895) 49-73; Tawney, R. H., The Agrarian Problem in the Sixteenth Century (London 1912); Hammond, J. L. and B. B., The Rise of Modern Industry (London 1925).

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FOSCOLO, UGO (1778-1827), Italian poet and patriot. Foscolo was born at Zante of a Venetian family. He is celebrated primarily as a great poet but is also important in the social sciences as one of the first to voice the national sentiment which developed in Italy in reaction to the ideas and wars of the French Revolution. As a journalist contributing to the Milanese Monitore italiano during the Cisalpine Republic he contended that had France granted inde-

cal gloss, or note, on the individual passages of the newly revived law books of Justinian. These glosses gradually developed into a complete commentary, culminating in the largely compilatory work of Accursius. Their writings are severely academic and are an unsurpassed attempt to master the entire Justinian code. The pure Romanistic tradition was handed down by Bulgarus, his pupil Johannes Bassianus and the latter's pupil Azo to Accursius. Only at the end of the twelfth century did the influence of current practise, Germanic custom and canon law make its appearance.

A classical incident is the appearance of the Four Doctors at the Diet of Roncaglia in 1158, which was summoned by Frederick 1 to advise on the extent of the jura regalia and which decided in favor of the emperor's right to tax the Lombard cities. Until the glosses of the four have been studied systematically in pre-Accursian manuscripts, individual characterization will remain difficult. Jacobus and Hugo are somewhat shadowy figures; more is known of Bulgarus and Martinus. Bulgarus spent his life at Bologna teaching civil law like the others but also taking part in public affairs. His treatise De iudiciis (reprinted in Wahrmund, L., Quellen zur Geschichte des römisch-kanonischen Processes im Mittelalter, vol. iv, pt. i, Innsbruck 1925) and his notable commentary on the Digest entitled De regulis iuris (ed. by F. G. C. Beckhaus, Bonn 1856) are significant. Bulgarus' chief importance, however, like that of the other three, consists in his contribution to the tradition of the school, as his own glosses on all parts of the Corpus juris, the frequent citation of his work by Accursius and his prominence in the Dissensiones dominorum (ed. by G. F. Haenel, Leipsic 1834) bear witness. On controversial points he was almost always opposed by Martinus, his rival also for imperial favor. Tradition exalts both his science and his character at the expense of the latter, but then it is from Bulgarus that the tradition chiefly descends. The usual criticism of Martinus, a jurist of more radical tendencies, and of his followers, the Gosiani, is that of too liberal equity at the expense of legality. For that very reason Martinus was praised by Hostiensis the canonist. As the champion of living needs against the dead letter of legality and as the forerunner of the liberal ideas embodied in subsequent law, Martinus stands out as a more interesting figure than his opponent.

F. DE ZULUETA

Consult: Savigny, F. K. von, Geschichte des römischen

Rechts im Mittelalter, 7 vols. (2nd ed. Heidelberg 1834-51) vol. iv, ch. xxviii; Seckel, Emil, Distinctiones glossatorum (Berlin 1911) ch. iv; Kantorowicz, H., "Über die Entstehung der Digestenvulgata" and "Introductiones Bulgari" in Zeitschrift der Savigny-Stiftung, vol. xxxi (1910) 14-88, and vol. xlix (1929) 85-93.

FOURIER AND FOURIERISM. François Marie Charles Fourier (1772–1837) was the scion of a middle class merchant family and participated in the defense of Lyons against the Convention troops in 1793. The bulk of his patrimony was destroyed during the revolution and he was forced for the greater part of his life to make his living as a traveling salesman and shop clerk. He produced a series of writings which have won for him a place along with a dozen other early nineteenth century utopians in the history of socialism.

Nineteenth century socialism bore many posthumous sons to eighteenth century rationalism, but none whose legitimacy is more completely authenticated than Fourier's. A rationalist among rationalists, he rejected contemporary society as monstrous, brushed aside consideration of the slow processes of institutional development and asserted the possibility of a social order governed by pure reason. He saw the perfect society as the final stage in a process of historical change whose principal epochs after the fall from Eden are savagery, patriarchy, barbarism, civilization, guarantyism, simple association and finally composite associa. tion or harmony. The society of his day, which he called civilization, he found unorganized, irrational, the prey of caprice, force and fraud. Although his thought was at times colored by materialist philosophy, he saw human reason as the prime mover in history.

It is hard to imagine anyone further removed from contemporary life than Fourier. He was oblivious of the possibility of utilizing to the advantage of man the revolutionary changes in production technique associated with the industrial revolution. In the huge volume of his writing there is scarcely any mention of the French Revolution, the conquests of Napoleon, the Restoration, the revolution of 1830 or any other of the epoch making events through which he lived. The key to his often penetrating criticism of the economic order is that he was an economist in the sense of one who economizes. The waste involved in a competitive organization of the distributive system appalled him, and he worked out in great detail the savings possible through community kitchens, common living quarters and cooperative buying.

Remote from worldly considerations, Fourier deduces his plan of a future society from first principles derived from a complex and detailed analysis of human nature. He proceeds from a first approximation, which divides the passions constituting human nature into the senses; the affective passions, which determine social groups and combination; and the distributive passions, which lead to certain classifications and distinctions between groups, to higher and higher approximations laying bare human motives in all their detail. Once human nature has been thus analyzed it becomes clear to Fourier that the passions, if perfectly expressed, lead to a certain division and combination of human activity natural to a perfectly harmonious society. Human desires, needs and interests are determined at birth, and there is no reason to suppose that human nature changes from age to age. The qualities of man are as definite and unalterable as those of a physical object. History exhibits no process of individual adaptation to the environment. The problem which Fourier sets himself is the adaptation of society and the environment to the individual. The fact that contemporary society is so poorly adapted to the free expression of human desires he sees as the root evil from whence come all woes.

The fundamental unit of the harmonious society he desired to create is the phalanx (phalanstère), whose structure, size and functioning Fourier deduced from his analysis of the passions. Within the phalanx, which is composed of 1620 people cultivating some 5000 acres of land, each individual follows his impulses or passions completely and in so doing discovers himself to be acting not only in his own interest but also in the interest of the community and of society as a whole. This happy result is made possible by the action of a benevolent deity, whose universe has so distributed qualities among individuals and within individuals has so diversified the passions that to act by impulse is to act rationally and rightly in the ultimate and absolute sense of these terms. Once the laws of this universe are understood, reason has no further function and thought becomes "a disease of the flesh." "The passions are the work of the eternal Geometer; ... He has not created them uselessly; they have a purpose; and it is necessary to determine this by fixed

After working in isolation until about 1815

Fourier succeeded in gathering about him a number of ardent disciples who popularized his ideas. By far the most significant of these was Victor Considérant, who not only wrote voluminously for the movement but also founded a phalanx in Texas. Fourierism came to fullest fruition in the United States, where Albert Brisbane disseminated the idea and the "Furyites," as they were called, organized a number of colonies. Brook Farm was the most famous and the North American at Red Bank, New Jersey, probably the least unsuccessful. All were, however, only very rough approximations of the phalanx. The diversification of employment and the adaptation of the task to the individual inclination were never carried very far, and the life of all the enterprises was too short to permit of a thoroughgoing application of Fourier's essential principles.

While Fourier's school lacked the cohesion and the personalities of the Saint-Simonian group, its influence has in many ways been broader and more lasting. There still exists a small but active Fourierist group in France. The phalanx was essentially a cooperative conception and Fourier may be called the father of cooperation. His disciple Godin established at Guise a cooperative familistère which is a Mecca for all those who are interested in the cooperative movement. Moreover, Fourier's demonstration of the wastes of the competitive order and of the possibility of joyous labor is perpetuated in the body of socialist dogma, and his bitter criticism of the prevailing marriage system has become a standard reproach against capitalist society.

Some ideas of Fourier were similar to those of Owen, and the two enjoyed simultaneous popularity in the United States. But Fourier was inclined to see in Owen's estimate of 3000 as the number of members for an ideal community distinct evidence of a faulty analysis of the diversification and distribution of human passions. While both Fourier and Owen looked to an abolition of the difference between town and country, Fourier's ideal was an agrarian-handicraft economy, Owen's a combination of agriculture and factory manufacture. Fourier envisaged human nature as determined at birth; the essence of Owen's thought was environmentalist. Fourier criticized the egalitarian character of Owen's proposals; his own were based on his view of individual differences. Then too the voluntarism of Fourier's scheme contrasts strongly with the socialist paternalism of Owen's scheme. While Fourier is distinctly

nearer the anarchists than Owen, his originality makes it difficult to describe his ideas as anarchism or even to classify him, in Kropotkin's phrase, as an anarchist-communist. While he was a critic of the capitalist order, the Saint-Simonian attack on inheritance struck him as revolutionary. He defended interest and profits as distributive incomes, and he even promised high returns to those willing to invest in a trial phalanx.

There is, despite a great deal of the fantastic and ridiculous and a verbiage so luxuriant as to seem at times that of a madman, a curious modernity and foresight in Fourier's thought. The importance of a study of individual aptitudes and inclinations in order to find the proper place in the economic mechanism for each smacks strongly of personnel investigation and management. The insistence on the necessity of selfexpression has a strangely familiar ring. The ideal phalanx, described as a vast building in which food is prepared and delivered from common kitchens and eaten in common halls, in which services for all are performed by groups of specialists, in which purchases of all necessities may be made on the premises, is not far removed from the modern metropolitan apartment hotel.

EDWARD S. MASON

See: Utopias; Communistic Settlements; Brook Farm; Cooperation; Rationalism; Socialism; Saint-Simon and Saint-Simonianism; Owen and Owenism.

Works: Oeuvres complètes, 6 vols. (Paris 1841-48).

Consult: Bourgin, Hubert, Fourier (Paris 1905); Considérant, Victor, La destinée sociale, 2 vols. (4th ed. Paris 1851); Gide, C., Introduction to Fourier's Oeuvres choisies (Paris 1890); Wessels, Werner, Charles Fourier als Vorläufer der modernen Genossenschaftsbewegung (Bergisch-Gladbach 1929); Louvancour, Henri, De Henri de Saint Simon à Charles Fourier (Chartres 1913); Ryazanov, D., Explanatory Notes to his edition of the Communist Manifesto, tr. from the Russian by E. and C. Paul (London 1930).

FOURNIÈRE, EUGÈNE (1857-1914), French socialist. Fournière was at an early age a journeyman jeweler and later a proof reader; he had no formal education but was led by intellectual curiosity to extensive reading and study. After collaborating with Jules Guesde on *Égalité*, organ of the Labor party, he swung toward Benoît Malon and the "integralists." He created a sensation at the third workers' congress in Marseille in 1879 by denouncing Louis Blanc for his opposition to the Paris Commune. His militant socialism and trade unionism in the

strikes of Bessèges and the Grand'Combe in 1882 cost him eight months' imprisonment. He was a municipal councilor of Paris from 1894 to 1898 and a member of the Chamber of Deputies from 1898 to 1902. From 1905 until his death he directed the *Revue socialiste* and occupied chairs in the Conservatoire National des Arts et Métiers and the École Polytechnique.

Fournière's chief importance was as a theorist. He had read deeply in Fourier and Saint-Simon and recognized their influence; as apologist for a society which "liberates man from the domination of others without subjecting him to collective property" he continued the theories of Proudhon. Socialism, he contended, is not and cannot be a dogma. Born of the eighteenth century, it is intimately related to democracy, which is the political as socialism is the economic contract. He saw socialism as the enlargement and fulfilment of democracy and cited Marx and Engels to prove that it has its origins in democratic thought. Fournière maintained that the historical materialism of Marx, under whose influence he remained for a long time, distorted moral and political problems, and he desired to modify it by Proudhon's conception of justice as the dynamic force making for socialism. He retained the appeal to the class struggle, visualizing the growth of socialism through trade unions and the cooperative movement but differed from Marx, for example, in his beliefs that capitalist concentration would not be completed (the middle class growing rather than disintegrating) and that economic crises were becoming less frequent. Especially after the elections of 1906 he proclaimed the necessity of cooperation between workers and the middle class.

Paul Louis

Works: L'âme de demain (Paris 1895, rev. ed. 1902); La règne de Louis-Philippe 1830-48, Histoire socialiste, vol. viii (Paris 1906); L'idéalisme social (Paris 1898); Essai sur l'individualisme (Paris 1901, 2nd ed. 1908); Théories socialistes au XIXº siècle (Paris 1904); L'individu, l'association et l'état (Paris 1907); La crise socialiste (Paris 1908).

Consult: Louis, Paul, Les étapes du socialisme (Paris 1903) p. 277-79; Weill, G. J., Histoire du mouvement social en France 1852-1924 (3rd ed. Paris 1924).

FOVILLE, ALFRED DE (1842-1913), French economist and statistician. Foville studied at the École Polytechnique, held various posts in the Conseil d'État and in the department of finance, lectured on economics in the Conservatoire des Arts et Métiers and at the École des Sciences Politiques, became member of the Académie des

Sciences Morales et Politiques in 1896 and was appointed permanent secretary of this academy in 1909. He combined scholarship with remarkable ability of lucid presentation of carefully chosen material. In the study "Les variations des prix en France depuis un demi-siècle" (in the Économiste française, 1874-78) he utilized the practise of French custom authorities of calculating the values of imports and exports twice, once at the moment of entry, according to the prices prevailing in the preceding year, and again at the end of the year, according to the prices of the current year. The two sets of figures were used by Foville to compile a chain index of price variations; helpful though it is, the index is subject to criticism in some respects. In Études . . . sur la propriété foncière: le morcellement (Paris 1885) he attempted to strike a balance between the advantages and disadvantages attending the division of landed property. After becoming director of the mint he devoted his attention to the problem of money, edited Rapports du directeur des monnaies et médailles au ministre des finances, 1896-1899 (4 vols., Paris 1807-1900) and wrote La monnaie (Paris 1907), an excellent introduction to the study of money including a discussion of the relation between the quantity of money and variations in the price level. Foville made important contributions to the organization of statistics in France. He directed and presented the results of the valuable Enquête sur les conditions de l'habitation en France (2 vols., Paris 1894-99). When commissioned to reorganize the statistical service of the Department of Finance in 1877 he initiated the publication of the Bulletin de statistique et de législation comparée, which he edited until 1893 and which has been continued since by this department. His compendious La France économique (Paris 1887-90) is still useful as a source book of statistical information for this period and those preceding it. Foville frequently contributed to the Bulletin of the International Institute of Statistics, the Journal of the Société de Statistique de Paris and to the Journal of the Royal Statistical Society.

François Simiand

FOWLER, WILLIAM WARDE (1847–1921), English historian and scholar. In 1872 Fowler was elected to a fellowship at Lincoln College, Oxford, which he held for nearly half a century. He was one of the early band of scholars and teachers who succeeded in raising the study of Roman history to the same high level in Oxford

that it had attained in Germany through the genius of Mommsen. The distinction of Fowler's work was due to a rare combination of vivid imagination and quick intuition with unwearying research and the logical estimate of evidence. The materials of learning were fused in his mind until they shone. Hence his most learned work possesses freshness and warmth, unchilled by any pedantry. Fowler's most important contributions lie in the field of Roman religion. The conventional classical scholar had been entirely ignorant of real Roman religion, and it is not too much to say that it was Fowler's writings on the subject that disclosed a new world of thought and experience to English students. He was one of the first to apply the new science of anthropology to the study of the classical world; and by his far reaching research and his creative imagination working on the fossil relics of old Roman ritual he was able to endow them with life and spirit and to reveal a strange religious mentality unfamiliar to the modern mind.

LEWIS RICHARD FARNELL

Important works: Julius Caesar and the Foundation of the Roman Imperial System (London 1892); The City State of the Greeks and Romans (London 1893); Roman Festivals of the Period of the Republic (London 1899); The Religious Experience of the Roman People (London 1911); Roman Essays and Interpretations (Oxford 1920).

FOX, CHARLES JAMES (1749-1806), English statesman. He was the son of Henry Fox, the first Lord Holland, a politician who made a fortune as paymaster general and became the most unpopular man in England. Fox was brought up in luxury and extravagance and he entered Parliament at the age of nineteen, a selfwilled and dissipated young man and a violent Tory. He served as a junior minister under North but in 1774 joined the opposition to the American war, coming under the influence of Burke. In the next few years he made himself one of the leaders of the campaign for peace and democratic reform. After the fall of North in 1782 Rockingham formed a government in which Fox and Shelburne were secretaries of state. The two secretaries quarreled, their mutual suspicions being reenforced by definite differences of opinion, for Fox was much more anxious than Shelburne to reduce the king's power. When Rockingham died a few months afterwards, the king made Shelburne prime minister and Fox resigned. The next year he took a fatal step. Allying himself with North in

the hope of forming a government that would check the king's power he lost for some time the popular confidence which had been his chief strength. Although the coalition defeated the government on the peace it retained power only a short time, falling on its India Bill, against which the king had mobilized the opposition. Fox was out of office, except for a few months at the end of his life, for the rest of his career. In opposition he behaved sometimes factiously and recklessly, as in his attitude to the Regency Bill and to Pitt's wise commercial policy. But he redeemed his reputation by his brave and powerful stand against domestic repression during the French wars and by his wise and liberal pleas for moderation. The first French war he regarded as a war against liberty; this war was ended with the Peace of Amiens, and the war that followed the rupture of that peace was of a different character. Fox's quarrel with Pitt in this second war was based chiefly on Pitt's methods, for he held that Napoleon could not be fought successfully by bribing the sovereigns of Europe to resist him. Pitt's death in 1806 brought Fox into power for a few months. He tried to make peace with Napoleon but failed. On the other hand, he succeeded in putting an end to the British slave trade. This was a signal exhibition of his personal power, for the obstacles that had baffled Pitt for so long had not been removed by Pitt's death.

Fox was the first great Liberal leader in English politics. The best illustration of his temper was to be found in his admirable saying that he wished to make the people of Ireland the garrison of Ireland. He believed in peace, in self-government, in liberty of speech, in religious toleration, and he inspired a small but powerful element in the aristocracy with his generous ideas. He had the eighteenth century dislike for compulsion, but he was not a pedant, for he supported the proposal to fix a minimum wage in agriculture in 1795 rather than let the laborers sink into complete dependence on charity. He was the ablest debater of his age and a man of great personal charm.

JOHN LAWRENCE HAMMOND

Consult: Trevelyan, G. O., Early History of Charles James Fox (London 1880), The American Revolution, 3 vols. (new ed. London 1907-09), and George the Third and Charles Fox, 2 vols. (London 1912-14); Memorials and Correspondence of Charles James Fox, ed. by John Russell, 4 vols. (London 1853-57); Russell, John, The Life and Times of Charles James Fox, 3 vols. (London 1859-66); Drinkwater, John, Charles James Fox (London 1928).

FOX, GEORGE (1624-91), English Quaker. Fox is generally considered the founder of Quakerism. He belonged to a mystical movement dating from the Middle Ages and existing strongly among the religious sects of the Commonwealth period in England. What characterized Fox was his hatred of priests of any kind and his belief in the voice of God, the "inner light" in all men. Church worship was abominable to him. His belief that God was in each individual led directly to his antipathy to "intermediaries," to his opposition to war and slavery and to his schemes for social reform. His pronouncement in favor of the freeing of slaves after a period of service started an agitation among the Quakers which led eventually to complete emancipation. His sufferings in prison enabled him to appreciate the need for prison reform, especially the classification and separation of criminals. He advocated the establishment of mental hospitals and special homes for the afflicted and disabled and urged "those that could work to work" (A Warning to All the Merchants in London, London 1658). He had a finer estimate of human nature than the Calvinists of his time and saw clearly the evils of seventeenth century English law, which rated property higher than human life. His social ideas seem as modern now as they were then.

In a political sense Fox mirrors a new and significant movement among the lower classes. To the Quakers the Puritan revolution in both its political and its religious phases constituted merely a successful attempt on the part of the landed gentry dominating Parliament to remove the grievances which under a variety of forms they had hitherto suffered at the hands of a tyrannical oligarchy in state and church. Fox, once a shepherd and a shoe apprentice, spoke for a group which tended in the main to be indifferent to the claims of monarchy and Parliament. He knew of a good with which the magistrates of the time were not concerned. His faith in the inner light led to an individualistic political doctrine with regard to the claims of formal authority. The law in general must be "witnessed" to by the voice of God in everyone; only then did law obtain validity. This he contended led to order not anarchy, because the laws were built upon the social conscience and thereby obtained obedience. Compulsion that neglected conscience was therefore wrong. Although aware of the danger inherent in such anti-authoritarian views Cromwell was deeply impressed by Fox's sincerity as manifested in several interviews between the two men, and largely because of this personal sympathy he was more indulgent than he might otherwise have been toward the Quakers.

PHILIP S. BELASCO

Consult: Jones, R. M., George Fox, Seeker and Friend (New York 1930); New Appreciations of George Fox, ed. by J. R. Harris (London 1925); Braithwaite, W. C., The Beginnings of Quakerism (London 1912) ch. ii; Belasco, P. S., Authority in Church and State (London 1928) pt. i; Gooch, G. P., English Democratic Ideas in the Seventeenth Century (2nd ed. Cambridge, Eng. 1927) p. 228-38, and Political Thought in England from Bacon to Halifax (London 1914) p. 152-57.

FOYNITSKY, IVAN YAKOVLEVICH (1847-1913), Russian criminologist. After studying criminal law, criminal procedure and penology at St. Petersburg, Berlin, Vienna, Leipsic and Paris, Foynitsky became judge of the Senat (imperial supreme court) and professor at the University of St. Petersburg. There he organized an institute and museum of criminology and was the first in Russia to give a course in penal institutions. As founder and president of the Russian section of the International Union of Criminal Law from 1897 to 1904 he worked for a reform of the fundamental conceptions of criminal law and criminal procedure in accordance with modern sociological criminology. He was a member of the commission which drew up the Russian criminal code of 1903. This code, reflecting in the main classical criminological theory and containing a few concessions to modern criminal science, such as conditional liberation and individualization of punishment, was never operative in its entirety. His individual contribution to the code was concerned with the penal system and with the crimes against property. To him the function of punishment was both to improve and to repress the criminal; but as punishments involved in repression were costly to both the offender and the state, he advocated that the most economical punishments be meted out. He was a decided opponent of exile as a mode of punishment. His works marked by crudition and by cautious utilization of the newer ideas in the field contain the first extensive and systematic discussions in Russia of Anglo-American law and penology.

M. Chubinsky

Important works: Ssilka na zapade (Exile in western Europe) (St. Petersburg 1881); Kurs ugolovnago sudopronzvodstva (Textbook on criminal procedure), 2 vols. (St. Petersburg 1884-97; vol. i, 2nd ed. 1896); Uchenie o nakazanii v svyazi s turmovedeniem (Punishment and prison administration) (St. Petersburg

1889); Kurs ugolovnago prava (Textbook of criminal law) (St. Petersburg 1800, 2nd ed. 1893).

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FRANCE, ANATOLE (Jacques Anatole Thibault) (1844-1924), French critic and novelist. After a respectable but undistinguished career as a poet France was appointed literary critic of the Temps and between 1880 and 1892 wrote the graceful and academic essays which are gathered together in the four volumes of La vie littéraire (1888-92). His critical attitude has been termed one of Pyrrhonism; a skeptic, an eternal doubter, he declared himself a "son of the eighteenth century" opposing with pessimistic irony both the Catholic royalism of Brunetière and the sociological positivism of Zola. Turning, toward fifty, to prose fiction he continued to direct his scorn, although always indulgent and light of touch, at all institutions and parties. His novels, discursive and pleasantly sparkling, were when they were not works of fancy chiefly autobiographical vehicles whose characters were the mouthpieces for the author's opinions. Speaking now as the abbé Coignard and now as M. Bergeret, France attacked the Catholic church and the army, but also the more democratic movements including the French Revolution. The upshot of this phase of his social thinking was that man "is naturally a very wicked animal" ruled only by force and that all proposed changes of social institutions are consequently "futile."

During the turbulent days of the Dreyfus case, however, Anatole France underwent a notable conversion. He became acutely conscious of the error or political crime which government and army sought to defend. He saw the issue as extending beyond race feeling and he joined Zola and the other "Dreyfusards" in the fight of "socialism and freedom of thought" against "Catholic theocracy and bourgeois authoritarians," becoming finally a member of the Socialist party. His later writings were deeply colored by this change of attitude. L'affaire Crainquebille (1901) was a moving study of social injustice. The brilliant allegory of L'ile des pengouins (1908) contained a satirical summation of human history with its endless cycles of wholesale murder and theft, culminating in a

thin disguise of the Dreyfus case. It is significant that the great crisis in the affairs of the penguins is shown as the outcome of their institutional set up.

France's social tracts possessed eloquence and worldly wisdom rather than originality. Typical are the speeches and papers collected in Vers les temps meilleurs (1906), and the L'église et la république (1904) written during the agitation over the new anticlerical laws. His beliefs seemed to issue from the complex needs of his temperament rather than from a well integrated social philosophy. His attitude during the World War, for example, was at first one of intense patriotism, then of disillusionment and finally, just before his death, of espousal of Russian communism. He was at heart a skeptic and a dilettante, whose passion for individual freedom threw him upon the popular side. He loved to dwell chiefly upon human foibles, as did his favorite masters Rabelais and Montaigne; in doing this he employed his wit and his lucid style with telling effect upon the various social emergencies of his time.

MATTHEW JOSEPHSON

Works: Oeuvres complètes illustrées, ed. by Léon Carias and Gérard Le Prat, vols. i-xx, xxii (Paris 1925-31), tr. by Frederick Chapman and others, 39 vols. (London 1908-28).

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FRANCHISE. See Suffrage.

FRANCHISES. See Public Utilities; Corporation.

FRANCIA, JOSÉ GASPAR RODRIGUEZ (1766–1840), Paraguayan statesman. Francia studied at the University of Córdoba del Tucumán, where he received the degree of doctor of theology in 1785. After a short career as professor of theology he turned to the practise of law.

Francis stood out as a political personality from the very beginning of the struggle for an independent Paraguay. He was a member of the junta which acquired control of the country when Paraguay declared its independence in 1811, and two years later he became one of the two consuls at the head of the newly organized

consular government. His great prestige, due to his integrity and culture, now increased rapidly. In 1814 he was placed at the head of a dictatorship established for the purpose of protecting Paraguay from the imperialistic ambitions of the neighboring countries; soon afterward he was made dictator for life. His regime was an era of paternal absolutism. He controlled the entire government and energetically crushed all the attempted rebellions fostered by the foreign enemies of Paraguay—a task made easier by the fact that the population, trained in the severe discipline of the missions, was accustomed to obey.

Historians' judgments of his achievements have varied widely. It cannot be denied, however, that at a crucial period in the history of Paraguay he succeeded in maintaining its independence against the imperialism of Buenos Aires and Brazil. To achieve his purpose he imposed upon the country a policy of political and economic isolation which went to the extent of prohibiting emigration. His economic program was important in that it brought about a fuller exploitation of the soil, an increase in cattle raising and a diversification of industry in order to supply the home market. During his regime great importance was attached to education. Nevertheless, under his rule Paraguay lost contact with the rest of the world and entered on a period of stagnation.

José Ots y Capdequi

Consult: Báez, Cecilio, Ensayo sobre el Doctor Francia y la dictadura en Sudamérica (Asunción 1910), with bibliography; Opisso, Alfredo, Los fantasmas de la historia, el Doctor Francia (Barcelona 1916).

FRANCIS JOSEPH I (1830-1916), emperor of Austria and king of Hungary. Francis Joseph was, as he called himself, the last monarch of the old school. With the exception of the last few years, when his forces were already waning, he exercised more personal power in the domestic and foreign policy of his empire than any other monarch in recent times. In spite of his well developed sense of duty and extreme bureaucratic diligence his mental gifts were not equal to the enormous task of maintaining the social and political equilibrium of fifty-two million people divided among a dozen nationalities, most of which had irredentist tendencies. The old conception of the empire as a family fideicommissum of the Hapsburgs continued almost unaltered until the end in spite of certain constitutional forms. During the seven decades of his long rule there was no real constructive policy

either in the field of the agrarian problems or in that of the nationality struggles, although these were two major issues which ultimately deadlocked the very mechanism of the state and accelerated the clash with the absolutism of Russia. The gravity of the southern Slav problem became especially acute after the frivolous occupation in 1878 of Bosnia and Herzegovina and the creation of the Albanian buffer state. Four different socio-political systems may be distinguished in Francis Joseph's governmental methods. The first period was the bloody suppression of the achievements of the Revolution of 1848 and the restoration of the mediaeval autocracy in a close alliance with the pope in the Concordat of 1855. The second period was an experiment with constitutionalism when in 1859 Austria was badly defeated on the Italian battlefields. In 1860 the emperor issued the so-called October diploma, which meant a rupture with the Germanizing centralism and an essay to gain the more active cooperation of the feudal nobility. The resistance of Hungary, however, brought about in a few months an entirely new course with the so-called February patent, signifying the continuation of the German bureaucratic centralization, combined with the curia system, which gave a certain participation in power to the landed estates and the bourgeoisie of the cities. This system, appropriately called "provincial diets, strengthened by a few attorneys and manufacturers," lasted until the introduction of the third system, the dualistic constitution established in 1867 as a result of the defeat of the Austrian army by the Prussians. On the basis of a very artificial electoral law this system gave the leadership in Austria to the German bourgeoisie and bureaucracy and in Hungary to the feudal nobility. In this way two privileged nations were created, with whom two minor partners participated in the form of a broader territorial autonomy: the Croats in Croatia and the Poles in Galicia. But dualism led more and more to pan-Slavic currents whose danger was enhanced by the irredentism of the Italians and the Rumanians. Even the privileged nations became passionate enemies in the long run and the more clear sighted statesmen of the monarchy convinced the emperor of the necessity for remolding the constitution. In this fourth period Francis Joseph in spite of his rigidly militaristic and aristocratic personality became the protagonist of universal suffrage (Burgsozialismus) as a result of his conflict with the Magyar oligarchy. Universal suffrage was attained in

Austria in 1907, but the crisis became even more acute due to the antagonism between the popular parliament in Austria and the feudal one in Hungary. In this way the conviction of the emperor, "this realm cannot be ruled constitutionally," was justified by the last events of his empire, disintegrating because there was no place for the growing national consciousness of its various peoples. Thus the personal tragedy of Francis Joseph's life—his wife had been murdered, his brother executed, and his son had committed suicide—became more pathetic with the final collapse of his empire.

Oscar Jászi

Consult: Steed, H. W., The Hapsburg Monarchy (4th ed. London 1919); Szilassy, G. von, Der Untergang der Donau-Monarchie (Berlin 1921); Bibl, V., Der Zerfall Österreichs, 2 vols. (Vienna 1922-24); Redlich, J., Emperor Francis Joseph of Austria (New York 1929); Glaise von Horstenau, E., Die Katastrephe (Vienna 1929); Chlumecky, L. von, Erzherzog Franz Ferdinands Wirken und Wollen (Berlin 1929); Jászi, O., The Dissolution of the Habsburg Monarchy (Chicago 1929).

FRANCIS XAVIER (1506-52), Christian missionary to India and the Far East. Francis Xavier was born in Navarre of mixed Basque and Spanish blood. He was a student of arts and theology at the University of Paris for about twelve years and while there, in 1534, he became a member of the original group under the leadership of Ignatius Loyola which founded the Society of Jesus. From 1536 to 1540 he remained in Italy as secretary to the society while it was taking shape and winning the approval of Pope Paul III. In 1540 at Loyola's direction and in response to a request from John III, king of Portugal, Francis Xavier left Rome and reached Goa in 1542 to inaugurate the Jesuit mission in the new Portuguese possessions in the East. The remaining ten years of his life were spent in almost incessant religious work and travel. In Goa, among the newly converted Paravas, or pearl fishermen, of the south coast of India, at Malacca, in the East Indies and again in India he sought to raise the moral level of the Christians, to win new groups of adherents to his faith and to lay the foundations of the future missionary activities of the Jesuits. During his sojourn in Japan from 1549 to 1551 he founded a Christian mission which was soon to achieve great popularity and the reaction from which was to be the chief factor in closing Japan to the foreigner in the seventeenth century. He also became the forerunner of modern Christian enterprise in China and died during an attempt to reopen Christian

missions from an island off the south coast. His unwavering devotion, extraordinary endurance and proselytizing fervor had a profound effect in molding the activities of succeeding generations of Christians in their culture contacts with the East.

K. S. LATOURETTE

Consult: Cros, J. M., St. François de Xavier, sa vie et ses lettres, 2 vols. (Toulouse 1900); Brou, A., Saint François Xavier, 2 vols. (2nd ed. Paris 1922); Robertson, E. A., Francis Xavier (London 1930).

FRANCISCAN MOVEMENT. The Franciscan movement was an attempt at social and religious reformation emanating from the Franciscan order and producing its most significant effect during the thirteenth and fourteenth centuries. Its inception coincided with a period of widespread popular dissatisfaction with the Roman church, a dissatisfaction caused in large part by the inadaptability of contemporary Christian institutions to the kaleidoscopic social changes of the time. While the rapid breakdown of the feudal system, the rise of the towns and the sudden fluidity of populations were multiplying social needs and making almost unprecedented demands upon the church, the secular clergy, lying in a torpor of moral and intellectual degeneracy, remained indifferent. Monasticism by its very ideal of seclusion from the cares of ordinary life was barred from mediating between the church and the people. Both secular clergy and monasteries had fallen under the sway of a rigid aristocratic tradition: the potentates of their hierarchies received appointment, in the majority of cases, by virtue of birth or station and ruled with unqualified absolutism. To the natural disaffection of the numerous clerical proletariat crushed beneath this structure was added that of the lay proletariat in the towns, where the consciousness of recently acquired freedom was engendering an incipient democratic spirit. The reaction gathered immense strength with the rise of the new commerce and economic standards which came in the wake of the crusades. As the church maintained a sympathetic silence before this threat to its traditional teachings and as the Roman Curia, at first surreptitiously, then openly, began to traffic with the bankers, the conviction rapidly grew that the current institutions for the transmission of Christ's precepts were outworn. In the last decade of the twelfth century Joachim of Flora preached the imminent approach of a new age, that of the Eternal Gospel, in which the church militant, having

outlived its function, would yield to the reign of the Holy Ghost. The profound impression created by his apocalyptic visions as they reverberated through France and Italy is indicative of the restless, expectant temper of the time. What Joachim did was to sanctify by a philosophy of history a return to the Gospels already begun by sporadic lay movements in search of an authority for their aversion to ecclesiastical wealth and luxury. At the turn of the thirteenth century Italy and France were overrun by a number of sects or confraternities—the Waldenses, the Humiliati of Milan--all professing and practising the doctrine that Christ enjoined complete renunciation of property upon the adherents of His religion.

While these diverse currents helped prepare the age for the Franciscan movement, there is no evidence that its founder, St. Francis (1182-1226), was more than vaguely aware of any of them. St. Francis has been called the "most spontaneous and unconventional genius of many ages." The town of Assisi, where he was born into the family of the rich merchant Pietro Bernardone, had early reaped its share of advantage from the revival of trade. During his early youth Francis' romantic, sensitive nature found ample gratification in the life of an indulged scion of wealth and of a popular leader of festive exploits. His year's captivity in 1203 04, as a result of a war between Perugia and Assisi, and his subsequent illness mark the beginnings of one of the great mystical conversions of the world, a conversion as inexplicable in its essence as that on the road to Damascus. But portents of Francis' future mission came slowly. When La donnà povertà appeared in a vision, his troubadour's heart vowed fidelity. In the transitional period of conscious self-immolation he journeyed to Rome, begged at the gate of St. Peter and upon his return mingled with the lepers. He began to frequent in solitude the ruined churches and grottoes about Assisi. In the little church of San Damiano, the crucifix spoke to him, "Go repair my church." He responded with characteristic literal obedience, and in Assisi his mason's work may still be seen. Before long, flinging his garments at the feet of his angry and disappointed father, he severed the last ties of the past. Probably in 1209 while listening to the mass in the miniature chapel of the Portiuncula he heard the verses from St. Matthew x: 7-10 which gave him his definitive commission: "And as ye go, preach, saying, The kingdom of heaven is at hand. Heal the sick, cleanse the lepers, raise the dead, cast

out devils; freely ye have received, freely give. Provide neither gold, nor silver, nor brass in your purses; nor scrip for your journey, neither two coats, neither shoes, nor yet staves; for the workman is worthy of his meat." Upon the apostolic commission Francis founded his life. He began to preach among the people and disciples flocked to him-nobles, plowmen, professional men, representatives of all classes willingly submissive to the spell of Francis' passionate conviction. The profound humility which accompanied his conversion prompted him to seek forthwith the sanction of the Holy See; in 1210 he received at Rome Innocent III's oral approval of an order founded on rules no more definite than the simple passage from St. Matthew. But in its very lack of organization the primitive Franciscan order dissolved the protest against the aristocratic and parasitical tendencies of the church. It had neither hierarchy, nor at first even novitiate; its purpose was not detachment from society, but unwearied absorption in alleviating the misery of the distressed; it imposed absolute poverty not only upon individual members but, in contrast with the monastic rule, upon the order as a corporate institution. Means of sustenance came as voluntary contributions from the recipients of its services; when these were withheld, the Franciscan might beg, "for the workman is worthy of his meat."

By the end of the first decade of Francis' apostolate, the order already numbered several thousand brothers, drawn chiefly from Italy and southern France. Although this spontaneous growth can be explained in part as the expression of the current revolt, it represents still more the popular response to a movement transcending the limitations of mere protest. Francis rediscovered the Christian religion as an individual experience in which all might participate. Whatever social or political implications that religion held he transmitted to the masses, not as theories or as corollaries or even as duties, but as means to the attainment of the final individual joy, the true imitation of Christ. Thus poverty became for Francis a treasure rather than a renunciation, the indispensable prerequisite for freedom from the inconsequential and the vilifying. "If we had property," he once said, "we should need arms to defend ourselves, for thence arise disputes and lawsuits, wherefore . . . we be minded to possess naught of worldly goods." In extracting the promised reward of the Christian life from the empyrean heights to which it had been elevated by the gradual evolution of Catholic dogma

Francis spread a message as unformalized, as individual and at the same time as universal as that of the primitive Christian apostle. This message he uttered in the market place; before the sultan, whom he visited in 1219; as the legend relates, to Frederick 11, the Holy Roman emperor. The number of his professed followers, magical as was its growth, gives but partial indication of the effect of his work. Not the least important element in his almost unparalleled influence in erasing the stigma from poverty was the poetic halo with which, by the example of his own life, he was able to surround the life of the poor. The figure of the Poverello drawn by mystical love into intimate communion with "Brother Sun" and "Brother Fire" made his age aware of the long buried beauties of nature and of the idyllic splendor of the simple life; and the saint who had once loved the troubadours brought the romance of chivalry to the masses in his following, whom he called the minstrels of the Lord. Turning his eyes toward the reorientation and reform of the individual, Francis had no thought of destroying existing institutions. The democracy which he represented could not be attained by depriving others of privilege: peace was its condition. "We are sent to succor the clergy for the salvation of souls," quotes Francis' first biographer, Brother Leo, in the Mirror of Perfection; " . . . cover their slips, and supply their many defects, and when ye have done this be ye therefore yourselves the more humble."

The church on its side perceived the advan tage of sponsoring a movement which, while offering no threat to the ecclesiastical structure. was at the same time capable of producing religious regeneration, of arresting social and political dissension and of shouldering the formidable burden of Christian charity. Chiefly through the initiative of Cardinal Ugolino of Ostia (later Gregory IX) and Popes Innocent III and Honorius III the order began to be subjected, very early in its history, to a process of systematic adaptation to the needs of the church. Their task was facilitated by Francis' lack of concern with matters of law and organization. As the natural consequences of growth made it imperative that the amorphous Franciscan order be provided with definite administrative machinery, control gradually passed to more practical men like Peter da Cataneo, to whom in 1220 Francis humbly relinguished his official leadership, and Brother Elias, who succeeded Peter the following year. Meanwhile the example of the Dominicans,

founded in 1216 for the purpose of preaching the orthodox creed among the heretics, had given the church the embryonic model of a highly organized order of friars, combining mobility with centralized control. Deviation from the original system of government, according to which the rules and decisions were made by annual popular chapters attended by all the brothers on the principle of pure democracy, began as early as 1221. By the definitive constitution the chapters consisted of provincial ministers, each with his socius, one custos elected from each custody (division within the province) and one discretus elected by the provincial chapters. In its solicitude to render the order powerful and influential, the church, conjointly with Brother Elias and later minister generals, progressively attenuated the mandate of absolute poverty by a series of tortuous compromises. Two new rules supplanted the simple formula of 1209: the first in 1221; the second, for which Ugolino was probably largely responsible, in 1223. The omission from these rules of the Gospel precept to take nothing by the way and of the severe injunction to labor agonized Francis, and shortly before his death in 1226 he composed the famous Testament enjoining upon his followers the strict observance of the primitive rule. But the process of institutionalization went on and with it the inevitable adulteration of Francis' principles. Before Francis' death the order had already assumed international proportions, with chapters in France, Germany, Hungary and England. Within less than half a century it was to reckon thirty-four provinces, seventeen Cisalpine and seventeen Transalpine; and a membership of over 200,000, a figure never before equaled by any order in the history of the church. In recognition of the earthly needs of this great and growing body, Ugolino (now pope) in 1230 officially dispensed the order from St. Francis' embarrassing will, confirming the rule of 1223 and creating a new avenue for evasion by the decree that the friars, although forbidden corporate property, might nevertheless receive gifts through trustees. Fifteen years later Innocent IV provided that friars might have recourse to money—the thing which Francis "did above all execrate"-not only for necessities but for convenience; and that they might assume the virtual ownership of houses and land by formally vesting their titles in the Holy See. The full extent of the order's divergence from its founder was indicated when the chapter of 1266 authorized the destruction of all previous Franciscan literature and constituted as the official legend of the saint the one which St. Bonaventura completed in that year.

The compromise of Francis' precept of poverty was not accomplished without a struggle. The internal history of the Franciscan order is one of a continuous effort, constantly thwarted but never abandoned, on the part of certain groups to retain intact the standard of absolute poverty bequeathed by St. Francis. Fluid factions roused to spasmodic outbursts of fervor under the influence of a series of great leaders, these groups came to be called Spirituals or Zealots, in contrast with the Moderates, who after the expulsion of John of Parma from the generalate in 1257 were always dominant. Through the Spirituals the mystical, apocalyptic elements in primitive Franciscanism were kept alive. During the thirteenth century they welded the Franciscan tradition with Joachism and, undaunted by a contradictory reality, proclaimed that St. Francis had initiated the age of the Eternal Gospel—the age of the spirit and of freedom, the age without class or social distinction, without property. Although the reflection of their ideals was caught and retained in a distorted form by the Moderates, the inevitable tendency of the Spirituals was to destroy themselves by battering against institutions which were stronger because they were more practical. The first open breach between the two factions came after the death of St. Bonaventura in 1274, and a number of great Zealots were brought to the front: Angelo da Clareno, Ubertino da Casale, Pierre Jean Olivi of Provence. But in Provence the insurgents succumbed in 1318 and subsequently in the fire of the Inquisition; in Italy the bull Sancta romana suppressed Angelo's followers about the same time, driving them into a sterile isolation from society which in reality directly contravened the spirit of St. Francis' reform. The tangible impact of Franciscanism on the thirteenth and fourteenth centuries is to be discovered not in the controversies of the Zealots but in the work of those friars who remained sufficiently unpreoccupied with the rigid enforcement of an ideal at cross purposes with civilization to mingle with the world and take their part in the concerns of secular life.

Francis Thompson's characterization of the Franciscans as the Salvation Army of the Middle Ages is not without significance. Throughout the entire history of the movement one distinguishing quality dependent upon the example and precepts of the founder retained its vitality. The

Franciscans were preeminently the apostles of the masses and in particular of the urban masses. They founded hospitals and leper houses; they introduced works of public utility, such as water supplies. The persistence of the original impulse to relief work in the towns is indicated as late as the fifteenth and sixteenth centuries when the order participated in the establishment of the montes pietatis, or municipal loan institutions of Italy. While these institutions implicitly clashed not only with St. Francis' prohibition of money but with the traditional teachings on interest. their functional importance in relieving the financial straits of the needy won the sympathy of the Franciscans, who became their principal protagonists against the more orthodox and, at least in this case, more doctrinaire Dominicans. Many historians have also attached great weight to the significance of the Third Order of St. Francis in the growth of the towns. Probably owing its constitution largely to Ugolino, this order had been established before Francis' death to supplement the First Order, to which men professing the absolute poverty of Francis were eligible, and the Second Order, or Order of St. Clare, which recruited women on the same basis. It was a brotherhood of laymen released from any mandate of poverty, either personal or corporate, but enjoined to live lives of simplicity and Christian charity. Their obligations included abstention from oaths and from the use of arms. Since oath taking and military service were essential elements in the feudal system, the inference seems logically just that the Third Order contributed to the breakdown of that system and gave corresponding impetus to the growth of the communes. But in reality the history of the Third Order is enshrouded in mystery and it is difficult to judge to what extent it performed functions distinct from those of the other religious guilds which seem to have been rife in most centers of industry at the time. Its territorial and numerical extent cannot be fixed even approximately, although it is known to have flourished in the towns of Umbria and Tuscany and in the Rhenish cities.

In certain spheres the influence of the Franciscans coalesced with that of the Dominicans. No less than the Black Friars the Grey Friars were the confessors of kings and still more the confessors of queens; no less than the Black Friars they helped, by the example of their own representative constitution, to propagate the idea of representative government in affairs of state. But perhaps their influence is least distinct from

that of the Dominican in the realm of education. St. Francis had looked upon learning as antipathetic to the true imitation of the lowly Christ, but by the latter half of the thirteenth century the Franciscan order had come to represent a Christian utopia for some of the finest minds of the time, and St. Bonaventura, the "Seraphic Doctor," who was minister general from 1257 to 1274, could declare: "I confess before God that it is this which has made me most of all to love the life of St. Francis, that it is like the beginning and the consummation of the church, which first began from simple fishermen and then advanced to the most famous and most learned doctors." Adam Marsh, Alexander of Hales, Roger Bacon, Duns Scotus and William of Ockham were Franciscans. Under the influence of the intellectuals within the order and of the Dominican example the Franciscans perfected an elaborate educational organization, including advanced schools in the university towns—Oxford, Paris, Cambridge and Bologna—and subsidiary schools located in their priories. Like those of the Dominicans these institutions were flung open to the public, and particularly during the thirteenth century won such prestige that they exercised a virtual monopoly of general education.

But the Franciscans struck deeper than the superstratum of culture—philosophy, science, educational organization. Francis, embodying in his own life the deep poetry of the Gospels, adding to the religious inspiration an extraordinary sensitivity to natural beauty and a superlative capacity for seizing upon the concrete image, has been generally accepted, especially through his Canticle of the Sun, as the creator of the vernacular religious poetry of Italy; and the impulse which moved him extended to a long line of Franciscan poets, of whom the best known are perhaps Jacopone da Todi and Thomas of Celano. It was through St. Francis that Cimabue and Giotto and through them that the nascent Florentine school of painters learned the deep poetic significance of Christianity; while the tomb of the Poverello at Assisia monument, like so many of the works of his followers, built in exact contradiction to his ideals and yet testifying to the vitality of those ideals—became the model of a new architecture in Italy. Of more direct social significance were the contributions made by the Franciscans to the cultural life of the masses in the towns. Traveling swiftly from place to place, cosmopolitan in their outlook, they ranked with the

merchants as disseminators of information, discoveries, alien customs and standards of life. Freed, unlike the merchants, from the eager quest of personal gain, having the inestimable advantage of the religious entrée in an age when all culture was still widely regarded as a kind of Plotinian emanation from Christianity, their influence was correspondingly more universal and more popular. It was the friars who developed the art of popular preaching, and whereas the Dominicans concentrated on matters of faith and dogma the sermons of the Franciscans were chiefly occupied with the details of daily lifewith morals, the obligations of Christian charity and even matters of dress. A picture of thirteenth century German life might be drawn from the sermons of Berthold of Ratisbon. In the early history of miracle plays the name of the order constantly reappears, and their continued interest in the popular drama is manifested as late as the sixteenth century when they became the sole directors and organizers of the Coventry plays.

The Franciscans made various attempts to elaborate the economic aspects of St. Francis' way of life into a body of formal speculation. When compared with the contemporary work of the great Dominican Aquinas, who was attempting to bridge the gap between the traditional doctrines inherited from the church fathers and the new conditions precipitated by the revival of commerce, their highly idealistic and ethical system left little impress on the main currents of thought of the time. Some, like Anthony of Padua, were carried by their zeal into vehement condemnation of all money or material rewards considered as quid pro quo for economic activity and came to regard all who enjoyed the goods of this world as belonging to the devil. Systematic thinkers like Alexander of Hales and St. Bonaventura approached more closely the church fathers, and while assuming that property was a consequence of sin emphasized the Christian duty of redistributing surpluses among the poor. The most distinctive characteristic which pervades Franciscan economic speculation as a whole is its justification of mendicancy. Even St. Bonaventura, who clearly perceived the dangers of the practise and who declared during his generalate, "It has come to this, that the wayfarer fears to meet a friar as he fears a robber," could not escape the conclusion that economic industry was the virtue of the godless and that man was justified in begging when work interfered with his pursuit of Christian per-

fection. The Franciscan who combined in greatest degree a capacity for systematic thought with unwavering fidelity to the idea of evangelical poverty was the Zealot Pierre Jean Olivi, who developed the doctrine of the "poor use" and whose speculations on egoism strongly suggest Tolstoy. The doctrine, ending in the dictum that not only economic activity but any endeavor which brought satisfaction to the ego was sin, would have condoned no life but that of the man bereft of possessions and surviving by partaking of the bounty of the Lord. All these thinkers were in varying degrees guilty of distorting Francis' simple, unformalized views on begging. To him begging was no more than the substitute device which God provided when the brethren could not work. But his followers elevated this device into a rational principle and fortified it by elaborate logic; in so doing they provided a much exploited refuge for the host of idlers who were to help destroy the influence of the order.

The principal political connotation of the Franciscan movement was one which the age was hardly prepared to develop into a body of formal doctrine. That democratic spirit which the movement released in the masses everywhere —the vivid sense of human equality and of the significance of the individual-necessarily remained an intangible force affecting the outlook of men but debarred from integral expression. Nevertheless, in the history of Catholic absolutism the Franciscan movement stands as the first powerful assertion of the rights of the individual against church authoritarianism in the long series of explosions which led to the final fulmination of the Reformation. The heretical basis on which the Franciscans had been founded remained for more than a century merely implicit. But when in 1323 John XXII sought to demolish that basis by officially pronouncing the doctrine of evangelical poverty to be heresy, the order, precipitately abandoning its policy of submission to compromise and subterfuge, united in self-assertion and presented the spectacle of a recognized institution of the church flinging back at the pope his own anathema—heretic. It was this controversy which inspired the political writings of the famous Franciscan William of Ockham in which he developed his theory of the limitation of the powers of the papacy through the church body, thereby joining Marsiglio of Padua in laying the foundations for modern theories of sovereignty.

The Franciscan revolt against John was the

flare of a spirit which had already lost much of its power to translate itself into reality. Decline was rapid during the fourteenth century, accelerated by external conditions, such as the Black Death, during which over 100,000 Franciscans lost their lives, but due still more to the gradual moral corruption of the friars themselves. In England, Chaucer, Gower, the author of Piers the Plowman, Wycliffe and the Lollards castigated their vices: their idleness, their ubiquitous begging, their hypocrisy; and on the continent there is the same abundant evidence of the withdrawal of public approval. Internal schisms, periodic reforms and attempts to recapture the primitive spirit of the order continued down to the Reformation. During the fourteenth century a line began to be drawn between the Observants, who under Bernardino of Siena became for a time the most vital religious force in Italy, and their laxer brethren the Conventionals. In the face of repeated failures to reconcile the two groups, the church separated them in 1517 into independent organizations; since that time the Observants have been by far the more numerous of the two. In the succeeding years the Observants were in their turn confronted with a rapid succession of schismatic reformers, of whom the most important were the Capuchins. But by the same token that each successive reform made for increased severity of discipline, it made for increased isolation. Since the fourteenth century the history of the Franciscans has been that of an order progressively losing contact with secular life, retreating from the apostolic ideal of service in the world and ending in virtual conformity to the old monastic pattern. After that century its membership dwindled to a fraction of the enormous figure it reckoned at its height. Nevertheless, down to the present time it has, in general, attracted more recruits than any other religious order of the church; and it has remained preeminently the order of the poor.

HELEN SULLIVAN

See: Religious Orders; Monasticism; Asceticism; Communism; Christianity; Religious Institutions; Dominicans.

Consult: Cuthbert, Father, Life of St. Francis of Assisi (New York 1912); Sabatier, Paul, Vie de S. François d'Assise (Paris 1894), tr. by L. S. Houghton (New York 1894); Salvatorelli, Luigi, Vita di San Francesco d'Assisi (Bari 1926), tr. by Eric Sutton (New York 1928); Gratien, Père, Histoire de la fondation et de l'évolution de l'ordre des frères mineurs au XIII' siècle (Paris 1928); Muzzey, D. S., The Spiritual Franciscans (New York 1907); Ehrle, Franz, "Die Spiritualen" in Archiv für Litteratur- und Kirchengeschichte, vol. i (1885) 509-69, vol. ii (1886) 106-64, and vol. iii (1887)

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FRANCK, SEBASTIAN (1499-1543), German mystic. At first a Catholic priest, then a Lutheran preacher, Franck renounced all formal religion in 1528 and spent the remaining fifteen years of his restless life as a writer and printer. His aversion to organized churches is explained by his conviction that only the "invisible word," the "spirit of God," can give power and light to man. It was to the "invisible spiritual church" that Franck aspired in his intense individualism. By virtue of his uncompromising demands for freedom of conscience Franck is to be regarded as one of the first champions of the idea of tolerance. But to exalt him into a path breaker for the modern era, as many scholars have done, is to overrate him. The otherworldly and mystical set of his mind prevented him from attaining

to any positive view of the concrete realities of life or from formulating a definite social program. Although he did in passing recommend community of goods, fundamentally he was indifferent to the needs of the masses and even acquiesced in the smothering of such movements as the Peasants' Revolt of 1524-25. On the other hand, he was as antagonistic to imperial authority as to democracy. The most that can be said is that the critical attitude toward the social institutions and spiritual tendencies of his time which Franck expressed in his writings, especially the Chronica, Zeitbuch und Geschichtsbibel (Strasbourg 1531), with its supplement Weltbuch ('Tübingen 1534), and the Paradoxa (Ulm 1534; new ed. by H. Ziegler, Jean 1909), helped to pave the way for the Aufklärung. In the section of the Chronica known as the Ketzerkronik is contained the essence of Franck's philosophy of history, that the heretics of every age have been Christs.

KARL VÖLKER

Consult: Hegler, A., Geist und Schrift bei Sebastian Franck (Freiburg i. Br. 1892); Reimann, A., Sebastian Franck als Geschichtsphilosoph: Ein moderner Denker im 16. Jahrhundert (Berlin 1921); Oncken, H., "Sebastian Franck als Historiker" in Historische Zeitschrift, n.s., vol. xlvi (1899) 385-435; Stadelmann, Rudolf, n.s., vol. xlvi (1899) 385-435; Stadelmann, Rudolf, Com Geist des ausgehenden Mittelulters, Studien zur Geschichte der Weltanschauung von Nicolaus Cusamus bis Sebastian Franck, Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte, vol. xv (Halle 1929).

FRANCKE, AUGUST HERMANN (1663-1727), German religious leader and educator. Francke, with Philipp Jakob Spener, was the foremost leader of the German religious awakening known as Pietism. While Spener may be considered the theorist of the movement, it was Francke with his tremendous energy and remarkable powers of organization who brought into being a host of institutions that gave concrete expression to the Pietist ideals of living faith and practical piety. In 1692 Francke came as preacher to Glaucha, at that time a poor suburb of Halle, and a few years later became associated with the newly founded University of Halle. His interest in the welfare of the lower classes as well as in general educational improvement led him to the organization of a group of institutions which comprised a charity school, an orphan asylum, a Pädagogium for wealthier pupils, a German school, a Latin school and a Gynäceum for the education of girls. At the time of his death these institutions had 2200 pupils with 171 teachers and eight inspectors.

Francke was the first to direct the attention of philanthropic workers to the need for providing for the educational as well as for the physical welfare of the poor, and schools patterned after his model were established in various parts of Germany. His primary educational aim was religious and in this connection he was the first to emphasize the principle of the education of the will, but he also pointed out the importance of the need for training better and more useful citizens for the state. The example of his schools as well as the activities of his pupils and disciples thus had a marked influence on the subsequent organization of the Prussian public school system under Frederick William 1 and Frederick II. His influence was also significant in the Realschulen movement started by his disciple Hecker; through his seminarium praeceptorum and his seminarium selectum praeceptorum he may be considered the founder of teachers' training schools. The Franckische Stiftungen, the outgrowth of the organizations started by Francke, still occupy a prominent place among German educational institutions and form in themselves almost a suburb of the city of Halle.

KOPPEL S. PINSON

Consult: Kramer, Gustav, August Hermann Francke, 2 vols. (Halle 1880-82); Otto, August, August Hermann Francke, Die pädagogischen Klassiker, vols. ix-x, 2 vols. (Halle 1902-04); Geschichte der Erziehung, ed. by K. A. Schmid, 5 vols. (Stuttgart 1884-1902) vol. iv, pt. i, p. 187-302; Sommer, Feodor, August Hermann Francke und seine Stiftungen (Halle 1927); Weiske, Karl, August Hermann Franckes Pädagogik (Halle 1927), and August Hermann Francke, der deutschen Seelsorger (Halle 1927).

FRANCKE, ERNST (1852-1921), German journalist and social reformer. After studying philosophy, natural science and economics in Strasbourg, Göttingen and Leipsic, Francke went to St. Petersburg in 1876 as a private tutor. In 1877 he began a journalistic apprenticeship in Nuremberg as editor of the Fränkischer Kurier, at that time a liberal democratic paper. Four years later he became editor in chief of the Münchener neueste Nachrichten and in twelve years made it a leading daily. He was publisher of the weekly Soziale Praxis from 1897 to 1921, general secretary from 1901 to 1913 and later president of the Gesellschaft für Soziale Reform and a member of the provisional federal economic council from 1920 to 1921. Francke's achievements were seldom original, yet they were creative. Through his well informed and lucid writings he greatly influenced German

pre-war social politics, and his practical wisdom enabled him to find common ground for the administrative officials and labor leaders. In the society for social reform, a forum for the discussion of socio-political problems, Francke gained the confidence of the labor unions and often succeeded in prompting social reformers and labor leaders of different political tendencies to common action. With the exception of a few leaders of industry like Albert Ballin, Wilhelm Merton, Richard Roesike and Franz Brandts employers distrusted Francke until the revolution, but he was supported by such scholars as Brentano, Sombart and Schmoller. Francke made the Sociale Praxis unique; in this organ all tendencies were allowed free expression, although the editor held the journal fundamentally to a consistent attitude on social reform. He worked successfully in the international field; the International Union for Protective Labor Legislation and the post-war International Labour Organization were results of his efforts. In all his fields of work he had the close confidence of the former Prussian minister of trade, Baron von Berlepsch. His great achievement was no single work, whether book or institution, but lay in the fact that he was confidant and mediator to forces that could not find a way in imperial Germany to practical cooperation for social reform.

Ludwig Heyde

Consult: Heyde, Ludwig, "Ernst Francke" in Soziale Praxis, vol. xxx (1921) cols. 1331-34.

FRANK, JOHANN PETER (1745-1821), Austrian physician and writer on public hygiene. Frank, who was a professor of medicine and director of hospitals at Pavia and at Vienna, is best known for his System einer vollständigen medizinischen Polizey (4 vols., Mannheim 1777-88). In it he offered the first system of public hygiene by a German speaking physician which discussed comprehensively the mutual responsibilities of the state and the individual in reference to health. Frank formulated a program for the care of the individual from before birth to death. He recommended that the physical condition of women at marriageable age be guarded, discussed marriage as an institution and proposed a tax on bachelors to discourage celibacy. When dealing with the care of the pregnant woman he warned against the harm resulting from overindulgence in alcohol. In his treatment of the care and instruction of children in the first seven years of life he emphasized the value

of a varied diet and proper exercise. He considered the education of youth by the state, pointing out the need of well lighted and properly ventilated school buildings with good benches and the value of supervised exercise and frequent bathing. He recommended the teaching of sex hygiene and of human anatomy and saw the necessity for proper entertainment. In his community program he advocated that the state supervise the construction of dwelling houses, provide good water supplies, dispose of filth, accomplish civic cleanliness by a corps of medical police, shelter the aged and supervise burial. If public health practises resulting from modern knowledge of the infectious diseases and immunology be added, the program of public hygiene which Frank outlined might serve with few changes today.

W. W. FORD

Consult: Frank's autobiography, Biographic des D. Johann Peter Frank (Vienna 1802); Seiler, Hugo, Peter Frank (Dresden 1895); Doll, K., in Naturwissenschaftlicher Verein, Karlsruhe, Verhandlungen, vol. xxii (1908-09) 3-85.

FRANK, LUDWIG (1874-1914), German socialist politician. Frank was born in Baden of Jewish parentage. Early in his career he became a member of the radical wing of the Social Democratic party. In 1904 he started a socialist youth movement. As a member of the Baden Landtag and later in the Reichstag he swung his party to opportunist tactics aimed at democratization. He became the soul of the so-called great Left block of Baden, in which the Social Democratic party allied with the liberals went so far as to approve the budget of the grand duke's government. Despite opposition in his party, especially from the older elements, he sought to repeat these tactics in imperial politics. In his fight against the plutocratic Prussian three-class franchise he attempted to win the Social Democrats in the Reichstag to active cooperation. To win Alsace-Lorraine for Germany and wipe out the menace of a French war of revenge he induced the imperial government to grant universal suffrage to these provinces in 1911. When all south Germany had universal suffrage, he argued, it could not long be withheld from Prussia and the victory of democracy there would, he hoped, make certain European peace. He had long been in friendly contact with the French Social Democracy and was with Jaurès the instigator and leader of the socialist peace demonstrations in Berne at Easter, 1913, and in Basel at Easter, 1914. When neither the democratization of Prussia nor the clearing of the European horizon seemed to be imminent, he finally favored pressure upon the Prussian government by means of a political general strike. When the World War, the prevention of which he had looked upon as his life task, broke out he entered the army as a volunteer. A week before a French bullet ended his life in Lorraine he explained his action on the ground that "the international ideal will still, for a long time, be kept in the background by the reality of a national labor movement. Instead of a general strike, we are waging a war for the Prussian franchise." With the death of Frank the German Social Democratic party lost the most statesmanlike personality of the younger generation.

GUSTAV MAYER

Consult: Frank, L., Aufsätze, Reden und Briefe, ed. by II. Wachenheim (Berlin 1924).

FRANKEL, LEÓ (1844-96), Hungarian Jewish socialist. At the age of twenty he emigrated to Germany, where he earned his livelihood as a goldsmith and became a socialist. In 1867 he settled in France. There he took a prominent part in organizing the Lyons section of the First International. He was sentenced to two months in prison during the Franco-Prussian War and was liberated on the downfall of Napoleon III. At the organization of the Commune of Paris he was elected to the Central Committee and the Labor Committee (délégué au travail), where he was active especially in reorganizing abandoned industrial plants. He was responsible for the ordinance of May 3, 1871, against night work in bakeries, the first instance of such a measure. On the fall of the commune he escaped to London, where he acted as Austrian secretary of the International. From 1876 to 1883 he was in Hungary editing a socialist weekly, the Arbeiter-Wochenohronik, and was the first real organizer of the Hungarian General Labor party, a socialist movement. He was jailed by the Vienna and Budapest police for his participation in the Paris Commune, although the French government had not brought legal action against him. While representing Hungary at the Socialist Congress in Ghent in 1877 he was ordered out of Belgium. He passed most of his remaining years in Paris. Frankel was a friend and staunch follower of Marx and in 1889 was a member of the presidium of the Paris socialist conference which led to the establishment of the Second International. He was a gifted speaker, a good organizer and a lively journalist, contributing numerous articles on practical questions to such journals as the Neue Zeit, Gleichheit, Bataille, Ere nouvelle and the Jahrbuch für Sozialwissenschaft und Sozialpolitik.

ROBERT BRAUN

Consult: Rezsö Krajcsi, Frankel Leó, a párizsi commun magyar vezére (Budapest 1919); Brügel, Ludwig, Geschichte der österreichischen Sozialdemokratie, 5 vols. (Vienna 1922–25); Mason, Edward S., The Paris Commune (New York 1930).

FRANKEL, ZECHARIAS (1801-75), German-Jewish religious leader and scholar. Born in the old ghetto of Prague, Frankel obtained a thorough Hebrew education at the Yeshiba of R. Bezalel Ronsperg. In 1825 he went to the University of Budapest. He was one of the first Jews trained in secular fields to serve as a rabbi in Bohemia. After filling several rabbinical posts in Töplitz and Dresden he declined in 1843 the chief rabbinate of Berlin-a position never since filled—because of the equivocal character of the Prussian government's reply to his demands for full legal recognition of the Jewish communities and the abandonment of state support of Christian missionary activities among Jews. In 1854 he became president of the new theological seminary in Breslau.

He was the outstanding intellectual leader of conservative Jewry in Germany and exercised great influence over the younger generation of rabbis and Jewish scholars throughout central Europe. During the stormy days of reform in the forties he rejected the Hamburg prayer book, spectacularly left the rabbinical assembly in Frankfort and insisted in general upon preserving traditional observances, Hebrew prayers and the hopes of a restoration to Palestine through a personal Messiah. He laid down a program of preserving "positive-historical Judaism" in practical life while permitting relatively free research in post-Biblical sources. In defense of his theological view against both extreme orthodoxy and reform he issued the Zeitschrift für die religiösen Interessen des Judentums (Berlin 1844-46). Later he edited the prominent scholarly periodical, Monatsschrift für Geschichte und Wissenschaft des Judentums, which he edited from its establishment in 1851 until 1867. Frankel's studies in jurisprudence introduced the comparative method into the investigation of Talmudic law. Their main thesis was that Talmudic law was independent of Roman law, although Frankel admitted that certain similarities might flow from a common source. The historical school in contemporary German jurisprudence strongly appealed to him. His book *Die Eidesleistung bei den Juden* (Dresden 1840, 2nd ed. 1847) was a significant contribution to the efforts to abolish the oath *more judaico* throughout Germany and in France. His important investigations into the methodology of the Talmud and the dependence of the Greek and Aramaic versions of the Bible on Palestinian traditions are still of considerable scholarly value.

SALO BARON

Important works: Vorstudien zur Septuaginta (Leipsic 1841); Der gerichtliche Beweis nach mosaisch-talmudischem Rechte (Berlin 1846); Über den Einfluss der palaestinischen Exegese auf die alexandrinische Hermeneutic (Leipsic 1851); Darkhe ha-Mischnah (Leipsic 1859, new ed. Warsaw 1923); Mebo ha-Yerushalmi (Breslau 1870).

Consult: Kaufmann, D., in Monatsschrift fur Geschuchte und Wissenschaft des Judentums, vol. xxv (1876) 12–26, and articles by M. Brann, A. Kisch, J. Eschelbacher, M. Gudemann, L. Treitel, and L. Dobschutz in vol. vl. (1901) 193 216, 227 78, 336–52, 558–62, giving tull bibliography of Frankel's writing; Rabbinowitz, S. P., Rabbi Zechariah Frankel (Warsaw 1898 1902), in Hebrew; Deutsch, G., Ginzberg, L., and Kohler, K., in Menorah, vol. xxxi (1901) 329–66.

FRANKING. Derived from the French franc, this term has been used for upwards of three hundred years to denote the right of sending letters, documents, newspapers and packages through the mails free of charge. Properly, it does not apply to the carriage of matter which a government as such sends out, but is reserved for the free transmission of mail for the benefit of private individuals or corporations or of legislators and other officials when sending out communications or documents not required to be dispatched in the performance of duty.

So far as the records show, franking as thus defined was an invention of Cromwellian England. The Council of State in 1652 gave orders that the letters of all members of Parliament, of all officials and of all other persons acting in a public capacity should be carried free; and in the following year the people to whom the posts had been farmed agreed to carry free also all letters addressed to parliamentary members. Following the Restoration an act of Parliament in 1693 authorized the free carriage during the current parliamentary session of all letters from and to the king, the great officers of state and members of Parliament. The practise established itself impregnably and for more than a hundred years was continued with no express parliamentary authority at all.

In the later seventeenth and earlier eighteenth centuries abuses of the franking privilege became notorious. Members of Parliament frequently received from their constituents batches of letters to be readdressed under their signatures. Private individuals forged the names and imitated the scals of the privileged for their own use, and the selling of counterfeit franks developed into a regular business. Newspapers being entitled to be sent post free, people wrote their messages on them in "invisible ink" or even by dotting letters or pricking through them. Repeated warnings and investigations had little effect.

Until the accession of George 111 all postal revenues accrued directly to the sovereign and all postal regulations took the form of warrants issued in his name. In 1763, however, the revenues were surrendered in exchange for a fixed sum from the Civil List and were thereafter paid into the Consolidated, or as it was then called the Aggregate, Fund; and, inasmuch as postage could no longer be remitted without authority of Parliament, an act was passed which for the first time placed franking on the basis not of a concession granted by the crown but of a right conferred by statute. The opportunity was seized to impose restrictions and penalties which, it was hoped, would curb abuses and by so doing appreciably improve the postal finances, but the new regulations proved almost as ineffective as those previously set forth in warrants of the crown.

In 1837 Sir Rowland Hill made an unanswerable plea for the suppression of the system in a widely circulated pamphlet entitled *Post Office Reform*, and in 1840 Parliament when providing for a uniform penny rate for letters throughout the United Kingdom put an end to franking in every form except for correspondence emanating from or addressed to government departments or their local officials on the service of the state. All later attempts of members of Parliament to reinstate the former pernicious system have failed.

The United States has never suffered as seriously from the franking evil as did England, but on the other hand has not arrived at any full solution of the problem. The practise originated in an act of the Continental Congress in July, 1775, establishing the Constitutional Post Office and extending the franking privilege to members of Congress and army officers. Another form early taken was that of free exchanges of newspapers by their editors as a means of

promoting communication between different states and localities in the period of the Confederation and after. As the number of newspapers grew in the earlier nineteenth century, the burden upon the post office increased. Proposals to abolish free exchanges were resisted as "unconstitutional" and subversive of "the strongest bulwark of free government."

In reenacting earlier legislation in 1792 Congress sought to keep the franking privilege within bounds. Despite all efforts, however, it expanded steadily during the next half-century, and minor government officials, ex-presidents, their widows, signers of the Declaration of Independence and other groups of prominent citizens were added to the list. Along with post free distribution of documents by the government itself these privileges cut heavily into postal revenues, although never until very recently were accounts kept in such a manner that the precise extent of the burden could be known.

An act of March 3, 1845, imposed some restrictions, but another of March 3, 1863, while tightening up in connection with executive and administrative franking authorized members of Congress not only to send their correspondence post free at all times but also similarly to distribute "seeds, roots, and cuttings" in connection with the work of the Department of Agriculture. By act of January 31, 1873, franking was indeed abolished, but the sequel was less fortunate than in England under the act of 1840. The American congressman could not reconcile himself to the loss of so valuable a privilege, and from 1875 onward special acts revived it not only as applying to senators and representatives but for the benefit of ex-congressmen (for nine months after the close of their terms), congressmen-elect and other groups both official and non-official. Possession of the right in its present broad form by members of Congress materially affects the conduct of business in the two houses, especially by the injection of speeches (not always, however, actually delivered orally) intended primarily for later distribution among the member's constituents; it also figures in political campaigns, since much of the franked material sent out is designed, directly or indirectly, to win votes.

Under existing laws postal matter from which no revenue is derived falls into four categories: (1) correspondence carried on and publications distributed under the penalty privilege by departments and establishments of the national government; (2) correspondence of members of

Congress and speeches and other documents sent out by them; (3) country newspapers within the county of their publication; and (4) books, pamphlets and other reading matter in raised characters for the use of the blind. During the fiscal year ending June 30, 1930, the total number of pieces handled free was 767,145,388, from which a revenue of \$11,037,152 would have been derived had postage been paid. Congressmen franked about 35,000,000 pieces equivalent to \$718,000 in revenue; other persons franked 6,987,761 pieces, which would have yielded \$154,545. But the privilege, while indefensible in principle and subject to gross abuse in practise, is accountable to only a limited extent for the unfavorable balances shown by the postal business in the United States.

Frederic A. Ogg

See: Postal Service; Legislative Assemblies; Campaign, Political; Government Reporting.

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FRANKLIN, BENJAMIN (1706-90), American statesman and scientist. Franklin was born in Boston of English ancestors, and there he learned the printer's trade under his brother on the New England Courant. At the age of seventeen he went to Philadelphia, where in 1730 he became sole owner of the Pennsylvania Gazette, which he edited until 1748. During these early years he read widely, learned French, Italian, Spanish and Latin and by constant practise perfected a simple and lucid style of writing. With a passion for improving himself and the community, he founded a debating club, the Junto, prepared annually Poor Richard's Almanac (1732-57), which made him famous at home and abroad, founded the Philadelphia library, the American Philosophical Society and an academy which later became the University of Pennsylvania.

With the same conscious deliberation he fashioned a religion by deciding that whereas a materialistic theory of the universe might be true, it would be more "useful" to believe in God and the immortality of the soul and to practise the useful virtues, which turned out to be thirteen in number. In 1748 he retired from active business with the intention of devoting his life to science, which fascinated him more than any other subject. During the next six years, making experiments with "an electric tube" and with "Musschenbroek's wonderful bottle" (Leyden jar), he "established the essential phenomena of the condenser." The identity of lightning and electricity was demonstrated in France in 1752 by methods suggested by Franklin, who later confirmed it by his famous kite experiment (on this disputed subject, see Jernegan, M. W., in New England Quarterly, vol. i, 1928, p. 180-96).

After these six years of leisure Franklin was drawn into politics. In 1754 he attended the Albany Congress and drafted a Plan of Union, which the Congress adopted but which was rejected by the colonial governments because it had in it "too much prerogative" and by the English government because it contained too much of "the democratic." In 1757 he went to England to press the claims of the Pennsylvania Assembly to tax the proprietary estates. He remained there five years and found life so agreeable that he was loath to return. In 1760 he published The Interest of Great Britain Considered (Boston), to which was appended a paper written in 1751, "Observations concerning the Increase of Mankind," which anticipated some of the ideas of Malthus on population. It is supposed that these papers had some influence in deciding Great Britain to take Canada instead of Guadeloupe from France in 1763. From 1764 to 1775 Franklin was again in England as agent of the Pennsylvania Assembly (after 1768 he was also the agent of Georgia and after 1770 of Massachusetts). During the early years his influence was conciliatory; he was regarded in America as too English and in England as too American in his views of the controversy. But his residence in England gradually abated his admiration for the English government and strengthened his American sympathies, and after 1770 his influence was rather to embitter than to compose the quarrel. By procuring and sending to Boston certain private letters of Governor Hutchinson of Massachusetts he did much to make the dispute irreconcilable. As his bias changed his views of American rights were extended and strength-

ened. Upon his return to America in 1775 Franklin was elected to the Second Continental Congress and served on many committees, including the committee to draft the Declaration of Independence. In 1776 at the age of seventy he was sent to France as representative of the Congress and remained there in that capacity until 1785. He was of incalculable assistance to the colonies during the war. In France, according to John Adams, his fame was "more universal than that of Leibnitz or Newton, Frederick or Voltaire" (Works, vol. i, Boston 1856, p. 660). He was chiefly responsible for keeping the French government well disposed toward the colonial cause and for obtaining the financial assistance without which the revolutionary war could scarcely have been brought to a successful conclusion. He took a leading part in negotiating the treaties of 1773 and 1778. After his return to America in 1785 he was made president of the Executive Council of Pennsylvania and in 1787 served in the Constitutional Convention, where he exercised a great influence in composing quarrels and took a leading part in framing the compromise between the large and the small states on the question of representation in the House of Representatives. His last public act was to sign a petition for the abolition of slavery.

Franklin was fortunate in being by temperament and character in harmony with his age. He accepted easily and expressed without effort all the characteristic notions of the Enlightenment. He was fortunate also in enjoying a wider experience than falls to the lot of most great men. Rising from poverty to affluence, he lived on every social level and was equally at home with kitchen girls and kings. He lived for twentyfive years abroad, either in England or France, and came to know personally or by correspondence more men of distinction than any other man of his time. All this experience he easily assimilated without being warped by it. His amazing success in practical affairs and in assimilating experience was perhaps the result of his disposition to take life with infinite zest and yet with humorous detachment. Apart from his scientific experiments his activities seem to have been the result of outward pressure rather than of inner impulse. In all of his dealings with men and affairs one feels that Franklin was never wholly committed. Nature alone met him on equal terms; she alone enlisted in the solution of her problems the full powers of his mind.

CARL BECKER

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are those of John Bigelow, 10 vols. (New York 1887-88), and A. H. Smyth, 10 vols. (New York 1905-07). The *Autobiography*, completed by selections from his correspondence, has been edited by John Bigelow, 3 vols. (Philadelphia 1868, 2nd ed. 1879).

Consult: Parton, James, Life and Times of Benjamin Franklin, 2 vols. (New York 1864); Morse, J. T., Jr., Benjamin Franklin (Boston 1889); Ford, P. L., The Many-Sided Franklin (New York 1899); Bruce, W. C., Benjamin Franklin, Self Revealed, 2 vols. (New York 1917); Fay, Bernard, Franklin, the Apostle of Modern Times (Boston 1929); The Amazing Benjamin Franklin, ed. by J. Henry Smythe (New York 1929); McMaster, J. B., Benjamin Franklin as a Man of Letters (Boston 1887); Wetzel, W. A., Benjamin Franklin as an Economist (Baltimore 1895); Stifler, James M., The Religion of Benjamin Franklin (New York 1925); Eiselen, Malcolm R., Franklin's Political Theories (New York 1928).

FRANKO, IVAN (1856–1916), Ukrainian writer and national leader. Franko was born of a peasant family in Galicia. He studied at the university in Lemberg and even in his student years identified himself with the ideal of social and political liberation of the Ukrainian masses. Under the influence of Drahomanov he formulated a socialist program based on a combination of anarchic syndicalism and agrarian federalism and was soon recognized as the intellectual leader of the Galician workmen's movement.

He displayed a wide literary and political activity unchecked even by frequent imprisonments: he founded the first Ukrainian socialist publication in Galicia, wrote a handbook on political economy based on Chernyshevsky, Mill and Marx, translated parts of Marx' Das Kapital, popularized the principles of socialism, helped to draw up the first program of Galician socialists and aided in the development of the Polish Social Democratic party. Franko, however, was enough of a realist to be interested more in possibilities of immediate political reform than in discussion of remote forms of the social order and devoted much time to the organization of all democratic elements in Galicia, Polish as well as Ukrainian. With Pavlik he founded the Ukrainian Radical party in 1890, which besides preparing the ground for Ukrainian Social Democracy consolidated the peasants into an independent political force that had a far reaching effect on the political and cultural development of the Ukrainian nation.

Franko's influence transcended the realm of politics. His position as poet of the Ukrainian renaissance is second only to that of Shevchenko. He also attained fame as a scholar and critic but was barred from a professorship of Ukrainian

literature by pressure of conservative politicians and reactionary clergy.

M. Wozniack

Consult: Ivan Franko, ed. by I. Lakyza and others (Kiev 1926).

FRANTZ, KONSTANTIN (1817-91), German publicist and political theorist. Frantz steered an independent course between rationalism and the various systems of German idealism and romanticism, all of which influenced him. as did Comte, the French socialists, List and Marlo. At first a Prussian patriot like Bismarck, Frantz later advocated a Christian pan-German federalism, to be founded on a synthesis of liberalism and socialism, and fought the German Reich created by Bismarck, His numerous writings, containing a strange mixture of political realism and utopianism, often of prophetic character, exercised no effect after 1866 but experienced a renaissance after the World War, especially in democratic and pacifist circles, although Frantz was neither democrat nor pacifist. He opposed the nationality principle because of its relation to the doctrine of natural rights, but he saw might as the core of politics and added to Montesquieu's list of three state powers a fourth, the military. He criticized all parties in Germany, most of all the Liberals because of their atomizing political and capitalistic economic attitude, and attacked the system as the reign of the bourse (reign of the Jews). For the Conservatives as a party he cared little, although his teachings were conservative throughout. He advocated a "true" national economy, empirically grounded, to investigate the interaction of economic branches and sociopolitical institutions. An early advocate of the cooperative system, he proposed to develop mediaeval institutions along modern lines. He considered the state as a product of nature and of history but in the main as the work of man with the attendant moral qualities of good and bad. The state was to be built up pyramidically of the different professions and social and political unions. Constitutionalism, bureaucraticabsolutistic centralism and particularism were equally rejected by Frantz.

In world politics Frantz again advocated federalism. To check the political and economic imperialism of the United States and Russia, which he regarded as the only really great powers by reason of their natural resources, he desired to make the German *Bund* (Germany and Austria-Hungary) the basis of a central

European federation toward which England would incline, and which, Frantz believed, could develop into a Kantian league of nations. Kurt Borries

Important works: Die Naturlehre des Staates (Leipsic 1870); Der Nationalliberalismus und die Judenheirschaft (Munich 1874); Literarisch-politische Aufsätze (Munich 1876); Der Föderalismus als das leitende Prinzip für die sociale, staatliche und internationale Organisation (Mainz 1879; abridged ed. with title Deutschland und der Föderalismus, Stuttgart 1921); Weltpolitik (Chemnitz 1882-83).

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FRATERNAL INSURANCE. See Fraternal Orders; Insurance.

FRATERNAL ORDERS. This term as commonly used designates a variety of associations which combine secrecy and sociability with financial cooperation in meeting one or more of the contingencies of life. In its widest connotation it includes both secret and non-secret social and benevolent societies, ranging from local working men's mutual benefit associations to such national and international secret societies as the Freemasons and the Loyal Order of Moose, in which beneficiary features are subordinate to the appeals of good fellowship and ceremonialism. Concurrently with the proliferation of fraternal orders has occurred the growth of secret college Greek letter fraternities and of such attenuated non-secret bodies as the Rotarians and the Boy Scouts. But as usually defined in American law a fraternal order is a voluntary association for mutual benefit, organized under a lodge system with representative government and making provision for payment of death and other benefits. It combines certain features of the older friendly society with certain features of the secret society typified by Freemasonry. The English friendly societies, dating from the sixteenth century, became during the ninetcenth century important working class agencies in providing for sickness, old age and funeral expense; their principles were carried over into the United States and the British colonies to become the basic elements in the modern fraternal society. From the Masonic movement the fraternal order derived ideas of organization, government,

secrecy, ritualism, symbolism and sociability. The true prototypes of the modern fraternal order were thus certain secret societies patterned after Freemasonry which emphasized their benevolent features. Such include the Independent Order of Odd Fellows, the United Ancient Order of Druids and the Ancient Order of Foresters introduced into the United States in 1819, 1830 and 1832 respectively and the Improved Order of Red Men, the oldest beneficiary society of distinctly American origin. A few of these early societies later adopted those insurance features which have converted them into true fraternal societies; nevertheless, of the nearly two hundred orders furnishing life insurance as a main feature in 1931 only some half dozen antedate 1860.

The phenomenal growth of fraternal orders throughout the English speaking world since the middle of the last century has been associated with the development of democratic institutions and the consequent freedom to form voluntary associations for the promotion of common interests. Many orders have been based on a consciousness of kind arising from occupational, moral, racial or religious similarities. Many have existed in connection with skilled trade unions; many have limited their membership to particular national or religious groups. Of the two hundred largest orders operating in the United States in 1931, one third recruit from immigrant racial elements; those among the Poles, Jews, Slovaks, Czechs, Croats and French-Canadians are especially numerous, while a dozen other immigrant groups have one or more societies. Nearly one sixth of them have the word Catholic in their names, indicating that the opposition of the Roman Catholic church to secret societies does not extend to fraternal orders. The Knights of Columbus, for example, has become one of the largest orders both in membership and assets. Many societies formed for specific political, reform or religious purposes have included sick. funeral or certain other benefits among their attractions. Of the considerable number of patriotic and political societies formed about the middle of the last century the Order of United American Mechanics, the American Protestant Association and the Brotherhood of the Union have paid such benefits. After the Civil War certain trade unions, influenced by the increasing popularity of the secret fraternal orders, adopted the lodge form of organization. In addition there existed thousands of mutual assessment associations, especially among Negroes and

special labor groups; most of them were of short duration, and little is known of them.

The order which seems to have served as a new model for fraternal societies in America was the Ancient Order of United Workmen, Jefferson Lodge Number 1, founded in 1868 at Meadville, Pennsylvania, by a Mason named John Jordan Upchurch. Designed originally as a social and defensive organization for working men, it began after its first year to pay a substantial death benefit by means of an assessment of one dollar per local lodge member upon each death. From this levy funeral expenses were paid and the remainder, up to and not to exceed \$2000, was given to the deceased's family or heirs. This life insurance or death benefit feature in its various forms together with the popular prejudice against regular life insurance companies and the fact that ordinary insurance was not readily available to members of the middle and lower classes led to a rapid expansion of fraternal orders. When during the seventies more than sixty old line companies failed amidst extensive evidence of deceit and corruption, there developed an almost fantastic belief in the financial legerdemain of the assessment principle and an unreasoning opposition to the value of accumulating reserves to offset the increasing mortality of age. As a result the public was grievously exploited by wildcat commercial assessment companies and ill starred fraternal orders.

Inevitably the uniform levy or assessment proved workable only during the early years of a society, while the membership was increasing at a rapid rate and the majority of members were still young and their mortality low. As the average age of the membership increased and it was no longer possible to maintain the early percentage rate of growth, the death rate and hence the number of assessments rose sharply. Since this threw a disproportionate financial burden on the younger members, recruiting became steadily more difficult and withdrawals were stimulated by the constant formation of new societies offering lower rates and as a rule promises of additional benefits. Many flourishing orders became insolvent; some merged; all were compelled to make radical alterations in their financial operations. By the late eighties the leaders of the movement saw that the only salvation lay in the adoption of sound actuarial methods. The neglect of the simple fact that the insurance risk increases with age would have been even more disastrous if it had not been for the rise in the average longevity of the population. But even though it has been estimated that, of the 3500 mutual assessment associations formed during the period between 1870 and 1910, fully 3000 failed after an average life of fifteen years, the ideal of mutual aid and the social values of fraternity so harmonized with the democratic aspirations of the day that fraternal insurance itself survived.

Reform proved extremely difficult, however, because of the general ignorance of insurance principles on the part of the rank and file and the vigorous opposition of the older members and of many of those in office. The first reforms attempted to relate assessments to age by such means as the so-called step rate, whereby the premiums advance with age or by age classes (five-year age groups). At first increases in rates were sometimes denied by the courts as violations of the original contract, but in 1915 the United States Supreme Court in Royal Arcanum v. Green (237 U.S. 531) guaranteed considerable discretion to the fraternal orders in the revision of their rates. The National Fraternal Congress, founded in 1886 to promote sound actuarial practises, drew up a uniform bill in 1892 and a mortality table in 1899, the enactment of which it urged. It was opposed in this by the Associated Fraternities of America (1901–13). Nevertheless, the conference of fraternal orders and insurance commissioners held at Mobile, Alabama, in 1910 adopted a uniform fraternal code establishing minimum actuarial standards; and this code, slightly modified in New York in 1912, has since been enacted in most states. It has given the insurance commissioners considerable supervisory powers, checked the formation of orders with rates below the safety level and helped to educate the public in the requirements of sound insurance. The Fraternal Congress has continued to advocate state supervision, periodic revaluation of assets and liabilities, better selection of members and enlargement of insurance privileges. It has encouraged the formation of juvenile departments for the insurance of children under sixteen and the modification of those laws which allow only certain blood relations to be named as beneficiaries in a fraternal insurance contract.

As a whole the fraternal insurance business has made steady progress during the past two decades toward a sounder actuarial basis, although it is true that much of it is still sold at an inadequate price. The movement cannot be said, however, to be holding its own. Many orders are still struggling with reorganization problems.

The advancement of rates results in numerous withdrawals and adult membership has steadily diminished in recent years. On January 1, 1931, the 200 leading orders reported an adult membership of 8,198,000, organized into 114,890 lodges, showing a net decline for the year of 378,000 members and 1331 lodges. This decline has been partly offset by the rapid increase in juvenile members during the past decade, their number being 976,400 in 1931. About one third of these orders had uninsured members aggregating 533,700. While only thirty-five were granting sick and accident benefits, all but four were selling one or more types of life insurance. The fraternal society has thus tended to become a mutual insurance company.

The two major appeals of the order, sociability and financial aid, have been weakened by recent social changes. Rapid urbanization, with its manifold attractions and distractions, has all but destroyed the spirit of neighborhood and communal solidarity. The pleasures of lodge night and the lodge sociable have been dimmed by the automobile, the motion picture and the radio. As alien elements have become assimilated they have felt less keenly the need of fraternization and mutual aid. The force of the religious motive has also been weakened in an atmosphere of freedom, democracy and improved material welfare. Political and economic relations have become more impersonal, thus atrophying the spirit of mutual helpfulness, and the increasing complexity of social organization has made personal assistance to fellow members more difficult.

The chief difficulties of the orders, however, appear to be financial. While increasing proportion of the public insists upon complete security for its insurance investments, the repeated raising of rates by the orders during the long period of reorganization has lessened confidence in their methods. Many of the societies have placed soliciting agents in the field to assist in the conversion of old contracts into new ones and to secure the new business that formerly came to them through the personal contacts of their members. These new methods are not yet efficient and economical, and the costs of new business are further increased by a large percentage of lapses during the first year. Consequently the net rates of the fraternal orders are no more attractive than those of some of the old line companies. The future of the orders, which thus depends on their capacity to compete with the regular insurance companies, is not promising. Since 1910 the insurance annually written by them has fallen steadily from slightly above one third of the national total to less than one fifteenth.

FRANK H. HANKINS

See: Friendly Societies; Mutual Aid Societies; SECRET SOCIETIES; PATRIOTIC SOCIETIES; MASONRY; CLUBS; CLUBS, POLITICAL; WORKINGMEN'S CLUBS; BENEFITS, TRADE UNION; SOCIAL INSURANCE; LIFE INSURANCE; WELFARE WORK, INDUSTRIAL; CHAMBERS OF COMMERCE; SERVICE; WOMEN'S ORGANIZATIONS; BOYS' AND GIRLS' CLUBS; RELIGIOUS ORDERS; CHARITY. Consult: Basye, Walter, History and Operation of Fraternal Insurance (Rochester, N. Y. 1919); A Dictionary of Secret and Other Societies, compiled by Arthur Preuss (St. Louis 1924); Merz, Charles, The Great American Band Wagon (New York 1928) ch. iii; Ellis, C. E., An Authentic History of the Benevolent and Protective Order of Elks (Chicago 1910); Irons, Thomas, A Brief Story of Early Odd Fellowship (Philadelphia 1925); Knight, C. K., "Fraternal Life Insurance" in American Academy of Political and Social Science, Annals, vol. cxxx (1927) 97-102; Dawson, M. M., Assessment Life Insurance (New York 1806); United States, Bureau of Labor Statistics, "Beneficial Activities of American Trade Unions" by F. E. Parker, Bulletin, no. 465 (1928) ch. ii, and "Care of Aged Persons in the United States," by F. E. Parker, Bulletin, no. 489 (1929) ch. viii; National Industrial Conference Board, Experience with Mutual Benefit Associations in the United States, Research Report no. 65 (New York 1923). See also Proceedings of the National Fraternal Congress (annually, Chicago 1886-1913), Proceedings of the National Fraternal Congress of America published in Minneapolis annually since 1914, and the annual statistical supplement to the Fraternal Monitor (Rochester).

FRATERNIZING may be either a spontaneous movement or a method of political action. As a method fraternizing consists in making friendly overtures directly to opponents in the hope of breaking down their resistance. Since these overtures are made by those who are openly identified with a cause, fraternizing differs from those forms of propaganda whose success depends on concealing the affiliation of the propagandist. Fraternizing is restricted to face to face relations, while propaganda may be transmitted through secondary channels of communication. Since the initiative is taken for the express purpose of modifying the attitudes of the enemy, fraternizing is distinguished from the friendly approaches of the deserter or the spy.

Spontaneous fraternizing often occurs among contending armies or corps. Soldiers work out a system of arrangements with their antagonists for the exchange of commodities between the lines or even for the suspension of hostilities during times of sleep or play. This tendency is particularly marked where the issue involved in the war does not penetrate to the rank and file.

Where the war is considered an upper class interest, as in dynastic wars or civil wars aimed chiefly at the offices, there is much fraternizing, as in many South American revolutions and in the wars of the late Roman Republic. With the establishment of the conception of the national state fraternizing abates. The emergence of internationalism in the masses, as in the form of proletarian class consciousness, opens the way to fraternizing.

Such friendly intercourse has no place in the strategy of fraternizing except as simple minded sincerity may be exploited for the spread of defeatism. During the World War the Austro-Hungarian command took great precautions to avoid friendly contact between southern Slavs, Italians and kinsmen across the lines. But part of the strategy of Caporetto was to allow socialist and other unreliable elements to build up friendly intercourse with the Italian troops, who were already suffering from war weariness and bitter resentment against the iron disciplinary policy of the Italian high command; just before the offensive began, loyal troops were rushed to the front line. Spontaneous fraternizing may be tolerated if one's own forces are better fed and better equipped than the enemy. Some of the fraternizing on the German-Russian front was intended to depress and to demoralize the Russian soldiers. Disaffected elements may be sought out on the other side, as when the Germans approached the Irish.

A conquering general has sometimes used fraternizing to reduce bloodshed in consolidating his victory and also in diminishing the possibility that resentments will produce an early revival of resistance. Caesar was able to remove the army of Pompey in Spain by means of adroit manoeuvres and fraternizing and to hasten eastward to deal with Pompey himself, reasonably insured against revolt.

Fraternizing is particularly prominent during civil disturbances, like Putsche, coups d'état and strikes, since many common bonds unite the antagonists. Differences of language, tradition, aspiration, physiognomy and dress are at a minimum and a network of intimate personal connections cuts across the battle array. It will be remembered that in the critical days of the 1917 revolution the Bolshevist demonstrators were notably successful in winning over many of the soldiers who were ordered out to suppress them. Employers have often fraternized with their employees in the hope of breaking up an incipient strike movement. In the United States, where the forms of personal intercourse are informal and democratic, the employers with genial personalities have often proved very successful in maintaining personal rather than categorical relations with their men.

It is important to take account of certain important limitations upon fraternizing as a weapon. Unless one's own side is thoroughly dependable, contact may prove to be a boomerang, as was alleged to be the case at some points where German troops were permitted to mingle with Russian revolutionary troops on the eastern front. It is a very sound impulse which leads the true sectarian to eschew too great intimacies with the rest of the world. Among the true believers mutual reenforcement is provided by the constant reiteration of dogmas, arguments, plans and slogans and by the growth of emotional attachments within the group. Mass confrontation of the opponent occurs but rarely, and fraternizing as a campaign of attrition upon the morale of the enemy had best be conducted by men of fixed purpose.

The strength of fraternizing lies in the powerful appeal which it makes to deep, non-rational motives of the human personality. When approached with respect or treated as moral beings men tend to play the role imputed to them. By stressing the common symbol of "brother, comrade, fellow man" emotional identifications are effectively mediated. Since fraternizing is carried out face to face, advantage is taken of the fact that in primary relations many opportunities are given for emotional interests to arise and for friendships to develop. Moreover, there is always the possibility that friendly yet firm criticism of a ruling regime by an apostle of change may bring to expression slumbering hatreds in the breasts of its adherents. And not the least advantage of fraternizing lies in the repercussion when it fails to win a favorable response from the other side. Any denial of response to friendly overtures activates powerful hostile impulses, especially if the enemy has followed up his rebuff by "atrocities" against those who made the actual overtures.

In applying the method several technical considerations should be borne in mind. If opponents can be dealt with in isolation from their faction, the chances of success are best. The policeman or the guardsman may be approached when he is away from the support of his environment, and much may be done to activate his doubts and to destroy his impression that the enemy is inhuman. In war it has not infrequently proved possible to win over prisoners by generous treatment and then permit them to escape back to their comrades. It is advantageous to have personal friendships established in advance of overt conflict. This is one of the incidental advantages of boring from within as practised by the communists and other revolutionists. And it is important to establish confidence by consistently avoiding unfriendly acts.

HAROLD D. LASSWELL

See: Propaganda; War; Military Desertion; Revolution; Coup d'État; Strike; General Strike.

FRAUD. There is no inherent reason why in primitive societies falsehood should be socially reprehensible. That the duty not to mislead is not fundamental is apparent from the presence in the folklore of almost every people of a "trickster" cycle, as the Jacob cycle of the Old Testament, the coyote stories in North America or the mediacval Eulenspiegel tales. It is only when deception is practised for profit and results in wealth, power and rank, rewards which ought to be obtained by merit or by divine favor, that it becomes an obvious evil.

Thus it is recognized as a vice before its special association with commercial dealings. There is ample room for deception in an economy that rests entirely upon barter, but obviously the possibility increases as soon as a credit system is established. There is now also the factor of the dishonest promise, the undertaking that is not meant to be kept. Of course the development of modes of security guards against deception to some extent but it can never be entirely eradicated. A certain amount of deception comes to be treated as an inevitable adjunct of business, as a normal risk which must be reckoned in estimating costs and market prices. In nothing have the practise and the profession of Europeans been further apart than in their attitude toward business honesty; no element of European culture has seemed more to justify the repute of hypocrisy in which Europeans have been generally held by oriental nations. 'The half cynical maxim, "Business is business," expresses the difference between business and ordinary social morality, although the point at which the line is drawn must inevitably be difficult and delicate. Deceit may be objectionable but not "hard" bargains, and between "hard" bargains and "sharp" bargains and between the latter and downright fraud distinction is not too clear except perhaps at their extremes. In popular usage the word deceit is probably preferable to

fraud, which has had various meanings in different legal systems. The essence of fraud is not so much the falsehood it involves as the deliberate desire to enrich oneself at the expense of one whose confidence has first been gained. Socially if not morally the objection to deliberate deceit is that it adds a serious obstacle to social adjustment, since it falsifies any estimate of what one's associates will do and makes it impossible to depend upon their conduct.

In all the very ancient bodies of law, the cunciform, the Hebrew and the Greek law, frauds in sales, especially in the market, were the subject of legal regulation through market commissioners or otherwise. But there is no evidence that any general doctrine of fraud was ever attained. Of the two terms for fraud in Greek the one, *apate*, seems to have meant the disappointment of expectation and the other, dolos, probably meant a lure or bait. At any rate they are used for legitimate ruses in warfare as well as for deceit in the modern sense and there is no conscious paradox in the phrase euprepes apate, "a fine deceit." In Athens "fraud upon the people" was applied politically to misleading the ecclesia by false statements.

In Roman law three different aspects of fraud were dealt with from relatively early times, apparently from the time of Ciecro. One, as in the other ancient bodies of law, was connected with sales whether of land or of chattels and came under the jurisdiction of the aediles. Another was withdrawal from the reach of creditors of property which should be used to pay them; and the third consisted in inducing others by craft to act to their prejudice.

The latter was the general notion of fraud, the concept of dolus. In a characteristically Roman fashion an action of dolus was first established as a penal suit sounding in heavy damages, next a defense was allowed to claims founded upon dolus and finally dolus became a reason for rescission and for a restitution of the status quo. To this were added in later times independent criminal penalties. The clear cut and frequently repeated description that dolus is found whenever a present or future situation is different from what anyone pretends it is or will be, aliud simulatum, aliud actum, provided a formula flexible enough for all purposes and differentiated it from those various types of unfair dealing in which the oppressive character might be due to accident or misfortune without being thereby less in need of redress. The latter group of situations, best typified by "fraud on

creditors," were those in which the term fraud (fraus) was properly applied, but by a not unusual shift of terminology this word has displaced dolus, except in technical legal usage, in most languages derived from Latin. Yet the Roman and English specifications for fraud, for instance, are notably different.

The Germanic tribal customs hardly allowed for a theory of fraud. A man had what he was clever or powerful enough to win, and markets were little different from tournaments in which cunning took the place of skill in arms. The church attempted to protect the weaker of the parties in a bargain, but even the schoolmen did not emancipate themselves from the notion of a bargain as a contest of wits and the canon law had nothing to add to the concept of dolus which the revived Roman law made familiar. Indeed the natural economy of the Middle Ages gave few opportunities for fraud except for the cruder forms of overreaching. In sales guild responsibility and pride of achievement often compensated for the want of warranties of quality. As for the highly important feudal transfers of land, the chief business of the Middle Ages, these were hedged in by so many conditions and forms that ingenious turns were likely enough to be effective: Chaucer's Sergeant could make fee tail fee simple and vice versa.

Mohammedan law, which may well be a direct development of a Levantine common law, however much determined by the Koran and the Bible, amalgamated the concept of usury (riba) with that of overreaching, or rather treated overreaching as a form of usury, i.e. of interest, which was as strictly forbidden by the imams as it was by the mediaeval church. It does not appear, however, that other forms of fraud were specifically noted.

England was economically a backward country until well into Tudor times. It is not surprising therefore that the rule of caveat emptor, i.e. the notion that in the market one is entitled to get what one takes pains about and no more, was so firmly embedded that it resisted even the growth of equity and the natural law of the eighteenth century. However, there was no lack of power on the part of the courts to deal effectively and drastically with all types of fraud. As early as Bracton in the thirteenth century, when a man was induced to seal an instrument which was wholly different from that which he thought he was sealing it could be made legally void. Still, if the power was not lacking, the practise in the technicalized courts

of common law was soon limited enough. On the other hand, the Chancery soon declared itself the particular enemy of fraud and tried to understand it as broadly as the Romans understood dolus. One may even say that it went further, since in applying rules of "conscience" it soon included mistake, extortion and even negligence. Fraud in its legal aspects was soon differentiated into various types: one which would justify the intervention of the Court of Chancery to allow the rescission of a transaction, another which might be pleaded in a court of common law as a defense, a third upon which an action of damages for deceit could be based (indeed, one of the most famous of the common law actions, that of assumpsit, was based upon the idea that an unfulfilled promise for which there had been a consideration was a "deceit") and lastly a fourth, which might be the basis of criminal prosecution. All these were technically differentiated, but except in equity the notion that fraud demanded a knowingly false and intentionally deceptive statement became very nearly the essence of the term.

Modern frauds especially have assumed a wide range. But the legal remedies under modern codes, however much these may differ in their concepts of fraud, still remain either rescission, action for damages or penal measures. But there is a growing tendency for legislation to be preventive rather than punitive and for reliance to be placed upon public administrative agencies and private business bureaus. The economic effects of fraud would be relatively slight if there were any probability that a general contact of consumer and producer could be reestablished. As it is, the needs of a competitive system do not tend to scrupulous accuracy of statement. Overproduction and over-readiness to purchase on credit are two elements of no contemptible importance in the existing tendency to unbalance the entire modern economy. The establishment of higher and more rigorous standards, since a complete elimination of every aspect of fraud is not to be expected, would not merely stiffen the moral tone of commerce but might have real and beneficial results on practical economics.

Max Radin

See: Business Ethics; Caveat Emptor; Sales; Usury; Adulteration; Advertising; Bucket Shops; Consumer Protection; Just Price; Blue Sky Laws; Auditing; Trade Associations; Duress.

Consult: Westermarck, E. A., The Origin and Development of the Moral Ideas, 2 vols. (2nd ed. London 1912-17) vol. ii, p. 72-136; Green, T. H., Prolegomena to Ethics, ed. by A. C. Bradley (5th ed. Oxford 1906), which may be taken as an example of ethical treatises all of which deal with fraud to some extent; Weber, Max, "Die protestantische Ethik und der Geist des Kapitalismus" in his Gesammelte Aufsätze zur Religions-Soziologie, 3 vols. (2nd ed. Tübingen 1922-23) vol. i, tr. by T. Parsons (London 1930) ch. ii; Pernice, A., Laben, 2 vols. (2nd ed. Halle 1895-1900); Pollock, Frederick, The Law of Torts (12th ed. London 1923); Williston, Samuel, The Law of Contracts, 5 vols. (New York 1920-22) vol. iii, bk. vii, ch. xli; Kerr, W. W., Fraud and Mistake, ed. by S. E. Williams (6th ed. London 1929); Tawney, R. H., Religion and the Rise of Capitalism (London 1926) p. 36-55; Kohler, Josef, Treue und Glauben im Verkehr (Berlin 1893); Enneccerus-Kipp-Wolff, A., Lehrbuch des burgerlichen Rechts, 3 vols. (6th-12th eds. Marburg 1928-30) vol. i, pt. i, sects. 192-93; Saleilles, Raymond, De la déclaration de volonté (Paris 1901); Baudry-Lacantinerie, G., and Barde, L. J., Traité théorique et pratique de droit civil, vol. xii (3rd ed. Paris 1906) p. 142-61; Planiol, Marcel, "Dol civil et dol criminel" in Revue critique de la législation et de jurisprudence, vol. xxii (1893) 545-73, 649-63; Binding, Karl, Die Normen und ihre Übertretung, 4 vols. (2nd ed. Leipsic 1914-19) vol. iii, p. 1069-81; Radin, Max, The Lawful Pursuit of Gain (Boston 1931).

FRAUDS, STATUTE OF. The statute of frauds was enacted by Parliament in 1677, the twenty-ninth year of Charles 11, and purported to be "An Act for Prevention of Frauds and Perjuries." It contained twenty-five sections dealing with the making of wills and contracts and with the creation of estates and trusts in land. It was probably drafted in part by Lord Nottingham but was criticized and amended by a committee of judges and others, including Lord Chief Justice North. Some of its sections have been replaced by statutes under other names; but two of them—sections 4 and 17—have become deeply embedded in Anglo-American property and commercial law. The provisions of section 4 have been reenacted without much change in all of the states; the provisions of section 17 were reenacted with some changes in two thirds of the states and are incorporated in the Uniform Sales Act codifying the law applicable to the sale of goods. Lord Tenterden's Act in 1828 supplemented the original statute by making oral promises unenforceable for the purpose of renewing debts barred by the statute of limitations (9 Geo. IV, c. 14).

The need felt for this legislation in 1677 grew out of such facts as these: informal contracts had become enforceable, the rules of evidence were embryonic, parties in interest were disqualified from testifying, the courts had lost much of their earlier control over the jury and the power to set aside a verdict was undeveloped. The statute was probably useful in checking existing evils. Thayer and Stephen agree that it operated to limit the power of the jury and to reduce the effectiveness of perjury.

The method of preventing fraud and perjury that was adopted in section 4 was to provide that no action should be brought to enforce certain classes of agreements unless the terms of the agreement were evidenced by a written memorandum signed by the party against whom enforcement was sought. The classes included were: suretyship and guaranty, agreements in consideration of marriage, agreements for the transfer of any interest in land and agreements that were not to be performed within one year. By the terms of section 17 contracts for the sale of goods, wares and merchandise of the value of £10 or more were made unenforceable unless there had been a part payment, the giving of earnest, or the receipt and acceptance of a part of the goods.

Opinions have greatly differed as to the functioning of the statute. The confident expectations of its authors are indicated in Lord Nottingham's statement that "every line was worth a subsidy." The disillusionment of his successors after two centuries of experience is seen in a retort by Smith: "Every line has cost a subsidy, for it is universally admitted that no enactment of any legislature ever became the subject of so much litigation" (The Law of Contracts, 7th American ed., Philadelphia 1885, p. 74). This flood of litigation has not decreased, until now such cases in the appellate courts alone can be numbered in the tens of thousands. Its meaning and operation can now be determined only by a comparative study of these many cases. L. J. Buckley has said: "It is now two centuries too late to ascertain the meaning of section 4 by applying one's own mind independently to the interpretation of its language. Our task is a much more humble one; it is to see how that section has been expounded in decisions and how the decisions apply to the present case" [Hanau v. Ehrlich, 2 K.B. 1056 (1911)]. The task may be more humble, but it is also more difficult.

The margin of merit in the statute is not capable of perfect demonstration. It may prevent the bringing or the winning of fraudulent suits; how many no one can say. It may cause contracts to be reduced to writing that otherwise would not have been, thus avoiding litigation due to misunderstanding and forgetfulness—a matter of mere speculation. In 1821 a South Carolina

judge thus estimated its value: "But for the salutary influence of this statute thousands would tumble into ruin by having their estates taken from them to answer for the debts, defaults, and miscarriages of others" [Leland v. Creyon, 1 McCord 100 (1821)]. Blackstone called the statute "a great and necessary security to private property"; and Kenyon, "one of the wisest laws in our Statute Book" [1 East 194 (1800)]. More progressive jurists, such as Mansfield, Stephen, Pollock, Salmond and Holdsworth, have believed that the statute has outlived its usefulness.

The weightiest evidence against the statute is the mass of litigation itself. In the appealed cases, at least, victory for the defendant seems the triumph of injustice; while victory for the plaintiff, the more frequent result, portrays the apparent circumvention of the statute by the court. An examination of a thousand guaranty cases shows that in about three out of four the statute is held not to prevent enforcement. The devious reasoning by which this result is reached and the resultant narrowing of the statute are enlightening.

The strongest evidence in favor of the statute lies in the fact that it has actually survived; its chief provisions have been voluntarily reenacted in all of the states and there is no agitation for its repeal. Similar requirements have been extended to new classes of cases, such as oral promises to renew a barred debt, the ratification after majority of a promise made as an infant, and promises to pay a commission to a real estate agent.

ARTHUR L. CORBIN

See: EVIDENCE; FRAUD; LAND TRANSFER; WILLS;

Consult: Holdsworth, W. S., A History of English Law, 9 vols. (3rd ed. London 1922–24) vol. vi, p. 379–97; Street, T. A., The Foundations of Legal Liability, 3 vols. (New York 1906) vol. ii, chs. xix–xx; Costigan, G. P., "Interpretation of the Statute of Frauds" in Illinois Law Review, vol. xiv (1919) 1–42; Costigan, G. P., "The Date and Authorship of the Statute of Frauds" in Harvard Law Review, vol. xxvi (1912–13) 329–46; Hening, C. D., "The Original Drafts of the Statute of Frauds (29 Car. 11, c. 3) and Their Authors" in University of Pennsylvania Law Review, vol. ki (1913) 283–316; Stephen, J. F., and Pollock, F., "Section Seventeen of the Statute of Frauds" in Law Quarterly Review, vol. i (1885) 1–24; also editorial "notes" in Law Quarterly Review, vol. xxix (1913) 247, and vol. xliii (1927) 1–3.

FREDERICK I (Frederick Barbarossa) (c. 1125-90), Holy Roman emperor. Frederick succeeded his father as duke of Swabia in 1147 and became emperor in 1152, owing his election to

his relationship to the Guelphs. The beginning of his reign was marked by the general reaction against the mysticism of the period of Bernard of Clairvaux which had influenced the preceding emperor to participate in the ill fated second crusade. Under Frederick I the secular character of the German government was restored, although largely based on the cooperation of worldly aristocratic bishops. His method of government, the attempt to restore German influence in northern Italy and his claim of imperial superiority over the papal authority brought him into conflict with Pope Alexander III and the cities of Lombardy, which after a papal schism of eighteen years ended in a compromise in the peace of Venice with the pope in 1177 and the peace of Constance with the Lombardic cities in 1183. The result was the acknowledgment of the legitimate pope and of the Lombardic League, the power of which Frederick checked in his later years by establishing an immediate administration of Tuscany and Romagna. In Germany he endeavored to base the power of the German kingship on an enlarged and more bureaucratically governed duchy of Swabia, which should be the largest duchy in the realm. Hence his struggle with his cousin Henry the Lion, duke of Saxony and Bayaria, which ended in the dismemberment of the Guelphic fiefs in 1180. Generally speaking, the development of feudalism in Germany was completed during Frederick's reign; and in the third crusade, in which the emperor perished, the international fame of the empire reached its highest point.

WALTHER HOLTZMANN

Consult: Giesebrecht, W. von, Geschichte der deutschen Kaiserzeit, 6 vols. (Leipsic 1881-95) vols. v-vi; Simonsfeld, II., Jahrbucher des deutschen Reiches unter Friedrich 1, vol. i- (Leipsic 1908-); Carlyle, R. W. and A. J., A History of Mediacval Political Theory in the West, vols. i-v (Edinburgh 1903-28) vol. iv, pt iv, ch. i. For two opposite views on the politics of Frederick 1 see Hampe, K., Deutsche Kaisergeschichte in der Zeit der Saher und Staufer (6th ed. Leipsic 1920); Below, Georg von, Die italienische Kaiserpolitik des deutschen Mittelalters mit besonderem Hinblick auf die Politik Friedrich Barbarossas (Munich 1927).

FREDERICK II (1194-1250), Holy Roman emperor and king of Sicily and Jerusalem. Frederick combined in a remarkable way the political tradition of the Sicilian Normans, inherited from his maternal ancestors, with the imperial claims of the Hohenstaufen family; and by his exalted position he gave enhanced

prestige to the Roman, Greek, Arab, French and Provençal cultural tendencies which he embodied and promoted. He abandoned the exercise of the imperial power in northern Europe to his sons Henry and Conrad and devoted himself primarily to the administration of his Mediterranean domains. In the ordinances of his constitutions of Melfi in 1231 Frederick took the decisive step from the feudal order of the Middle Ages to the modern state. He developed a rigidly centralized royal power in which the feudal nobility was displaced by a bureaucracy that suppressed all autonomy and was made up of jurists schooled in the Roman law and trained in the newly founded state university of Naples. He employed Arabian mercenaries in his army and modernized the judicial system by the introduction of inquests and the abolition of the ordeal and the rack. He curbed clerical influence and advocated the reform of the secularized church, rationalized the administration in its economic, hygicnic, educational and social branches, and organized an elaborate financial system with land and poll taxes, customs duties and public control of the grain monopolies. True, the absolute sovereign power was still surrounded with the mystic halo of an oriental, Byzantine monarch and protected by laws against high treason and heresy, yet it acted not only as the source but also as the servant of the law. To the metaphysical Augustinian conception of the foundation of sovereign authority Frederick added another conception, one that was based upon natural law and the purely secular character of the state.

The court of Frederick with its mingling of Arab, Jewish and Christian scholars became an important center for the diffusion of oriental and classical learning. The range and intensity of his own cultural activities are astonishing. Under the influence of Aristotle and his Arabic commentators, notably Averroes, he developed a conception of the universe which, being founded independently of all religions upon the reasonableness of nature alone, shook the very foundations of Christianity and caused him for a long time to be looked upon as the Antichrist. His eager quest for truth in the natural sciences and mathematics led him away from vain book learning to observation and experiment especially productive in ornithology and gave a decided impetus to the growing empiricism of his century. The labors of the translator, which but lately had received fresh

stimulus, brought valuable material to western Europe from the Arabic, Greek and Hebrew. The pompous learned prose style of Frederick's Latin letters of state had a far reaching influence. As head of the Sicilian poetic school he introduced the vulgar Italian into poetry. His interest in the arts (in castle building, sculpture, collections of ancient statuary, coins) had considerable influence on the Renaissance, for whose enlightened despots, eager for knowledge and rejoicing in art, he became the admired and imitated model.

KARL HAMPE

Consult: Kantorowicz, Ernst, Kaiser Friedrich II. (Berlin 1927), Hampe, Kail, "Kaiser Friedrich II. in Instorische Zeitschrift, vol. Exxiii (1899) 1-42, and Kaiser Friedrich in der Auffassing der Nachwelt (Stuttgart 1925), Carlyle, R. W. and A. J., A History of Mediaeval Political Theory in the West, vols. i-v (Edinburgh 1903–28) vol. v., p. 187–317; Niese, Hans, "Zur Geschichte des geistigen Lebens am Hote Kaiser Friedrichs II." in Historische Zeitschrift, vol. cvii (1912) 473-540; Kampers, Franz, Kaiser Friedrich II., der Wegbereiter der Renaissance (Bielefeld 1929), Haskins, Charles Homer, Studies in Mediaeval Culture (Oxford 1929) ch. vi, and Studies in the History of Mediaeval Science (2nd ed. Cambridge, Mass. 1927) chs. xii viv.

FREDERICK II (Frederick the Great) (1712-86), king of Prussia. Frederick made Prussia one of the great powers of Europe and the rival of Austria for the control of Germany. In his enthusiastic youth he was won to the cause of rationalism and Enlightenment, which was just then mounting to its zenith, and becoming the friend of its major prophet, Voltaire, he wrote in French the Anti-Machiavel (Copenhagen 1740; English translation London 1741), an indignant rebuttal of Machiavelli's *Prince*. However, on mounting the throne in 1740 he at once accepted the raison d'état, the heart of Machavelli's doctrine, as his guiding political priociple and throughout his reign treated the state as a sovereign entity whose essence was power and which existed by and for itself alone. It was this concept which enabled him to describe himself with conviction and fervor as "the first servant of my state." Enlightened despotism as practised by him was directed primarily toward improvements in the administration, the finances, the law and the army with the sole view of giving greater vigor to the government. Not that the humanitarian motif, inseparable from the movement of Enlightenment, had no part in his legislative activity-acts like the abolition of torture in all but a few cases,

such as treason, and the proclamation in 1740, the first to be issued in Europe, of a practically unconditional religious toleration, patently bear the humanitarian stamp. None the less he regularly put his humanitarian promptings aside whenever they ran counter to solemn considerations of state.

The criterion of state supremacy applied to economics made him a devotee of the bullion doctrine of the mercantilists and the cameralists. Desiring a favorable balance of trade he prohibited as much as possible the importation of manufactured goods and in order to bring a native industry to life granted subsidies with amazing lavishness for so thrifty a monarch. Again, in the case of products which Prussia did not grow, such as tobacco and coffee, he created state monopolies in order to regulate consumption and garner the profits for the national treasury. A more attractive feature of his policy of insistent economic regulation was the initiative he showed in building roads, digging canals and draining swamps. By this last action much new land was won for settlement by colonists. His educational legislation too does not suggest an addiction to startling innovations. True, the Schulordnung of 1763 went beyond the practise of the age in providing a modicum of schooling for the country people; but it was accurately suited to the needs of peasants destined to remain peasants. The Schulordnung should be regarded as an integral part of his social policy, which was conservatism itself inasmuch as it aimed to keep unchanged in their respective positions the two main classes of this still feudal state, the peasant serfs who tilled the soil and the Junkers who owned it. At dinner with Voltaire the king talked like a philosopher who was ready to reshape the world; but on retiring to his cabinet he issued orders for his enlarged and prospering Prussia indicative of the greatest respect for the principle of historical continuity.

With his attention riveted on the greatness of the Prussian state Frederick was wholly indifferent to the movement of German nationalism which came to birth in his lifetime. The emotional and romantic character of the German nationalism of the Sturm und Drang period elicited from Frederick, the child of an earlier, rationalist age, a double measure of contempt. The situation is not without keen irony, for Frederick by successfully resisting a world of enemies in the Seven Years' War fostered the nationalism which he disliked, while the nation

alists in their need of individual instances made him a German hero despite himself.

FERDINAND SCHEVILL

Works: Oeuvres de Frédéric le Grand, ed. by J. D. E. Preuss, 31 vols. (Berlin 1846-57); Politische Correspondenz Friedrichs des Grossen, vols. i-xlii (Berlin 1879-1931); Preussische Staatsschriften aus der Regierungszeit Friedrichs 11., ed. by J. G. Droysen and M. Duncker, 3 vols. (Berlin 1877-92).

Consult: Koser, Reinhold, Friedrich der Grosse als Kronprinz (Stuttgart 1886), and König Friedrich der Grosse, 2 vols. (3rd ed. Stuttgart 1904-05); Küntzel, G., "Die drei grossen Hohenzollern" in Meister der Politik, ed. by E. Marcks and K. von Müller, 3 vols. (Stuttgart 1922-23) vol. ii, p. 105-273; Meinecke, F., Die Idee der Staatsräson in der neuren Geschichte (2nd ed. Munich 1925) bk. ii, ch. v; Oncken, Wilhelm, Das Zeitalter Friedrichs des Grossen, 2 vols. (Berlin 1881-82); Carlyle, Thomas, History of Friedrich 11. of Prussia, 6 vols. (London 1905); Tuttle, Herbert, History of Prussia under Frederic the Great, 3 vols. (Boston 1888-96); Schmoller, Gustav, "Studien über die wirtschaftliche Politik Friedrichs des Grossen . . . 1680 bis 1786" in Schmollers Jahrbuch, vol. viii (1884) 1-61, 345-421, 999-1091, pt. i tr. by W. J. Ashley as The Mercantile System and Its Historical Significance (New York 1896).

FREDERICK WILLIAM, (The Great Elector) (1620-88), elector of Brandenburg. In 1640 Frederick William succeeded to the throne of an impoverished country menaced by imperial, Swedish, Dutch, Spanish and Polish forces. In 1648 the great powers which dominated the helpless empire as well as Brandenburg forced the elector, in the Peace of Westphalia, to surrender his right to inherit the important Baltic port of Stettin. Painfully aware of a defenseless ruler's lack of rights amidst superior military powers, he was unable, until the Northern War fought between Sweden and Poland from 1655 to 1660, to achieve a decisive success and win the sovereignty of Prussia. This he accomplished by opportunistically utilizing the changing phases of the war and by raising an army without the consent of the estates of Prussia or Cleve.

He never surrendered the authority won in the war. After bitter conflicts, which he sometimes decided by the use of force, he wrenched new constitutions from the estates of Cleve in 1661 and Prussia in 1663 as he had done from the estates of Brandenburg in 1653. These constitutions granted him above all a standing army as an assurance of his political independence. He constantly increased the size of his army, and henceforth it was the chief concern of his administration. He gradually created "provincial domain boards" (provinzielle Kanmern) and

a central domain board for the exploitation of the large domanial possessions which he had redeemed from pawn. For the administration of the army and the imposts commissariat departments (Commissariatsbehörden) were founded, which limited the power of the estates and took over social welfare activities and such matters relating to commerce and industry as the construction of the Spree canal and the admission of the Huguenots. The elector laid the corner stone of the Prussian bureaucratic state, destroyed the antiquated coregency of the estates, established the principle of religious tolerance and united his territories under a rule which was absolute de facto if not de jure.

Since Sweden retained Stettin in 1660 only through French influence, the elector repeatedly participated in attempts to break the hegemony of Louis XIV after 1667. In 1675 he drove the Swedes out of the March of Brandenburg but was compelled to relinquish Stettin in 1679 Infuriated by Austria's supposed treason and by its withholding of Liegnitz, Brieg and Wohlau in Silesia, promised him in 1675, and despite hesitations caused by his national conscience, he entered into an alliance with France at the time it took Strasbourg, hoping to win Stettin with French aid. A firm Protestant, he withdrew from France after the repeal of the Edict of Nantes in 1685. He sought contact with the coalition headed by William III of Orange which aimed to establish a European balance of power, to protect Protestantism and to realize the ideal of religious tolerance. For the sake of these goals he was forced to forego his particular aspirations for Stettin and Silesia. The elector approached but never quite attained the position of a great European power. Although the majority of his subjects saw in his state merely a restriction of their liberty, he died convinced that his attempt to found a truly spiritual state serving the ideal of religious tolerance corresponded with the progressive ideas of Bodin, Leibnitz and Samuel von Pufendorf.

GEORG KÜNTZEL

Consult: Küntzel, Georg, Die drei grossen Hohenzollern und der Aufstieg Preussens im 17. und 18. Jahrhundert (Stuttgart 1922), reprinted in Meister der Politik, ed. by E. Marcks and K. A. von Müller, 3 vols. (Stuttgart 1922-23) vol ii, p. 105-80; Hensell, G., Das protestantische Moment in der Aussenpolitik des grossen Kurfürsten von 1672 bis 1688 (Borna-Leipsic 1927).

FREDERICK WILLIAM I (1688-1740), king of Prussia. Reigning from 1713 to 1740 Frederick William established the absolutist govern-

ment of Prussia as an institution ordained by God, a "kingdom of work" bound by duty and conscious of its responsibility, with experienced and incorruptible officials and an exemplary, economical and provident administration. His energetic mercantilism (the furthering of manufactures, especially wool) produced seven million thaler of annual revenue, of which five millions were used for the army of 83,000 soldiers. By introducing compulsory military service among the nobility he established a body of officers devoted to the state, prepared for sacrifice and imbued with a sense of group honor. By regular conscription of recruits, beginning in 1733, he taught the masses to accept the idea of a permanent armed force. His welfare work among the recruits was a social policy which later resulted in the emancipation of the peasants. The moral level of the country was raised through the founding of public schools based on religious principles. Criminal procedure was reformed with the aid of Cocceji. The welfare of the bourgeoisie was promoted. Official positions, even the highest, were filled on the basis of merit and the administrations of municipalities were purged of dishonesty and inefficiency, so that by severity and example the people might be trained in the fear of God, in duty, in diligence and in simplicity of life. In his foreign policy Frederick William was successful only at first when at the end of the War of the Spanish Succession and the Northern War he gained Lingen-Mörs and Stettin. He was unable ever to attain his principal objects, which were to win respect as a ruler and establish himself as the rightful inheritor of Berg. Nevertheless, he created the basis for Prussia's later position as a great European power under Frederick II.

GEORG KÜNTZEL

Consult: Küntzel, Georg, "Die drei grossen Hohenzollern" in Meister der Politik, ed. by Erich Marcks and K. A. I. A. von Müller, 3 vols. (Stuttgart 1922–23) vol. ii, p. 105–273; Selle, Götz von, "Zur Kritik Friedrich Wilhelms I." in Forschungen zur brundenburgischen und preussischen Geschichte, vol. xxviii (1926) 56–76; Droysen, J. G., Friedrich Wilhelm I., Geschichte der preussischen Politik, no. iv, pts. ii–iii, 2 vols. (Leipsic 1869).

FREE LOVE. The term is applied, usually in a reprobatory sense, to sexual unions in which social, legal and religious sanctions are dispensed with, but it more particularly denotes the deliberate and reasoned repudiation of those sanctions in theory and in practise. Although the term and the principle apply logically to every

degree of the relation between man and woman, however transient and casual, they are usually understood as having reference to continuous sexual association differing little in substance from marriage except by the absence and rejection of legal or religious conditions imposed by the external authority of society. The issue raised by free love as a doctrine is how far, if at all, the claim of that external social authority to lay down and enforce the terms and conditions of the personal relation and agreement between man and woman is justified on grounds of equity and social necessity or expediency.

The adequate appreciation of that issue involves a consideration of the causes and motives which have led to the social control of marriage. The history of marriage institutions shows that social and traditional control of marriage, necessitated in its earliest form by the rule of exogamy, has in its further development been determined for the most part by economic considerations, such as the respective contributions of the partners, provisions for the upbringing of offspring and finally the transmission of property and social office. Non-economic considerations have played but a small part in its development. The religious grounds which bulk so large at the present day in the traditional conception of these social claims are of very recent cultural origin and have in reality done little more than lend the weighty support of religious and moral sanctions to social regulations already established by economic factors. The Roman religious ceremony, out of which the Christian marriage consecration developed, was but a confirmation of the civic contract.

From these historical considerations it appears that the claim of modern society to impose its sanctions on the personal relation between man and woman derives in a far greater measure from the authority of established tradition as such than from considerations arising out of actual existing conditions. Hence the recurring challenge directed against that traditional authority and the contention that the grounds of equity or social expediency corresponding to actual conditions are alone valid grounds for society's claims to intervene in a contract which is viewed as purely personal.

That challenge has not become formulated until relatively modern times. One reason for this is that only within modern times has the claim to impose coercive social sanctions on all sexual associations been stringently enforced by legal measures and social pressure. That strin-

gency may in fact be said to have its origin in the Protestant Reformation and the rise of Puritanism. As the German jurist Christian Thomasius observed: "Among all civilised peoples, and in all times, until the date of the Lutheran Reformation, concubinage was permitted, and even to a certain extent legally recognised, and was an institution involving no dishonour" (Bloch, ch xi). The controversy concerning the doctrine of free love developed in both Protestant and Catholic countries but it has been most acute in those of Puritan tradition. The fact that the strict enforcement of coercive sanctions was generally lacking for so long seems to show that they do not discharge a function as indispensable to social order as is sometimes represented by advocates. Unions unconditioned by legal sanctions were recognized in Rome and continued to be recognized by the church as regards the lower classes, among whom indeed down to the present time legal sanctions are in many parts of Europe commonly dispensed with. Other usages dating from pagan times, such as handfasting in Scotland and the "island custom" of Portland, have also survived the influence of religious coercion; and common law marriages in America, which are juridically equivalent to the Roman usus, represent a like concession to general extra-Christian usage. Among the upper classes even after the Reformation legal and religious sanctions were often dispensed with where social and economic interests were not involved, and it was not until the fall of feudal power in the last years of the eighteenth and the beginning of the nineteenth century that outward conformity of the aristocratic classes to Puritan standards became general. The quip that marriage was invented during the reign of Queen Victoria is not so wildly paradoxical as it sounds.

Concurrently with the intensified stringency and coercive legal and social enforcement of the sanctions on sexual union, the criticism of their validity from the point of view of rational standards and of equity became more pronounced. Those criticisms, adumbrated in the eighteenth century by Goethe, received full formulation during the period of the romantic revival by such writers as Godwin in England and at a much later period by adherents of the pre-Raphaelite movement, notably Ruskin. The doctrine of free love has formed a prominent part of every socialistic or communistic scheme of social reform from the time of Fourier and Saint-Simon and indeed even from that of Plato. The rationalization of social organization in general carries with

it as a corollary the rationalization of sex relations. In Soviet Russia the social sanctions of sexual association are confined to requiring the notification of its conclusion and its dissolution. economic responsibility for children, however, being unaffected by the separation of the parents. Notwithstanding a degree of legal freedom which does not even place any obstacle on polygamy, sexual associations are said to be nowise looser or more disorderly than under the old conditions. It is curious to note that some non-Russian communities are said to refuse to give official notification of otherwise orderly unions and that in their case Soviet authorities have some trouble in enforcing even that minimum of state regulation.

While the dominant note of the early romantic advocates of free love, such as Shelley and George Sand, was the idea of freedom as an element of individual happiness, the emphasis of more mature and considered defenses of the doctrine is laid upon the suffering and evil resulting from coercive authoritarian moral standards in regard both to their direct effects upon married partners and to their indirect effects upon sexual life in general. The indissolubility, absolute or relative, of marriage, the penalties on unmarried motherhood, the disabilities of illegitimacy, are evils not adequately compensated for by any benefit they may be said to promote. The coercive moral restrictions, the general attitude toward sex, the censorships, the disastrous mismanagement of puberty, which are accounted aids to the safeguarding of coercive marriage, bear likewise no proportion to that professed object. The testimony of cultural history tends to show that not only are great evil and suffering produced by the coercive enforcement of stringent sexual codes, but that the effect of such coercion on loose conduct and unwholesome sexual manifestations is not proportionately appreci-

The freedom which modern criticism of coercive marriage has in view is not the promotion of individual happiness by license, but the abatement of needless suffering and evil resulting from groundless and unwarranted coercion. The extended freedom which it advocates is not desired for its own sake but, on the contrary, as a means of realizing more completely the ideal of monogamic sexual association. Such freedom from authoritarian coercive social sanctions and restrictions in regard to the personal contract of sexual association calls for a larger measure of the self-control and reciprocal limitation of indi-

vidual freedom which every form of association implies.

By far the larger proportion of the opposition to doctrines of free love and to criticisms of coercive marriage rests on appeal to authoritarian and dogmatic religious tradition. If those grounds be excluded, the issue resolves itself into the question of how far the contract resulting in the association of man and woman is a purely personal one and how far interests other than those of the contracting parties are involved. Society, represented by the state, has the right to intervene as regards the latter but not as regards the purely personal aspect of the relation. The view that it is a function of the state to protect its members against themselves has here little relevance for in this instance, under existing conditions, the action of the state has exactly the opposite effect. In no aspect of life are disastrous mistakes more frequent than in regard to the sexual relation, yet the action of the state as at present carried out places every obstacle in the way of rectifying such mistakes and, far from protecting the individual, prevents him from protecting himself. State interference is powerless to remedy the intimate personal difficulties attaching to the association, and its scope is thus limited to the protection of social interests extending beyond those of the contracting parties.

The nature of these interests depends upon social conditions. Marriage institutions, as above noted, have developed in relation to those conditions and have in general changed with them. Dogmatic and authoritarian religious tradition has imparted fixity to regulations which call for continual adaptation. Many of the economic factors which once conditioned the development of marriage institutions no longer operate at the present day in the same manner as when the form of those institutions became invested with moral sanctity. The importance of the family as an economic and segregated social unit for the transmission of property and social status has diminished. Parental claims have in consequence become weakened, education has become in a larger degree socialized. Above all, the claims of women to equitable economic and social independence have challenged and sapped traditional patriarchal conceptions. The personal relation between man and woman has more and more displaced the economic motives in importance, and even procreation cannot be said to be the first and essential motive leading to the association. This substitution of the psychological for the economic values of the association implies an enhanced importance of the personal, as opposed to the juridic and economic, relation and an extended basis of mutual consideration making for common happiness. These changed conditions, the new orientations of modern thought, the general decay of traditional and dogmatic authority, discount the force of many of the common objections to doctrines of free love.

At the same time, economic factors cannot under existing conditions be entirely eliminated; and so long as they are involved some measure of social control is indispensable to regulate and protect the implicated interests. Free love in the full sense of the term postulates complete freedom from economic factors, the economic independence of women and social provisions for the upbringing of children. Such an ideal does not belong to the conditions of capitalistic societies as at present constituted. The aims of marriage reform at the present day have reference to the more limited but yet vital freedom from coercive sanctions and controls founded upon authoritarian and dogmatic traditional grounds, in so far as these are productive of suffering which is not adequately justified or necessitated by social requirements.

ROBERT BRIFFAULT

See: Sex Etilics; Marriage; Concubinage; Common Law Marriage; Family; Woman, Position in Society; Puritanism.

Consult: Albert, Charles, L'amour libre (6th ed. Paris 1910); Bloch, Iwan, Das Sexualleben unserer Zeit (Berlin 1907); Briffault, Robert, Sin and Sex (London 1931); Russell, Bertrand, Marriage and Morals (London 1929); Key, Ellen, Kärleken och äkten skapet (Stockholm 1903), tr. by A. G. Chater as Love and Marriage (New York 1911); Carpenter, Edward, Love's Coming of Age (12th ed. London 1923); Hindus, Maurice, Humanity Uprooted (rev. ed. New York 1930) ch. viii; May, Geoffrey, Social Control of Sex Expression (London 1930).

FREE PORTS AND FREE ZONES are enclosed free trade areas usually located in maritime cities within the territory of a country with a protective tariff. Ships may enter such areas, discharge and load cargoes and depart without paying customs duties and being subjected to customs inspection. Goods may be stored, repacked, sorted, reexported and in some instances manufactured free from customs formalities. The tariff regulations become effective only when such goods are conveyed to the interior of the country beyond the boundaries of the free area.

The origin of free ports is closely connected with the rise and development of international

commerce. In the Middle Ages certain cities granted trading privileges, which amounted at times to the creation of free trade zones, with respect to groups of merchants, classes of commodities, specified periods of time or selected geographical areas. In the period of mercantilism the general movement for national economic consolidation behind high tariff walls threatened to disrupt international trade and many countries found it indispensable to exempt certain maritime cities from the general customs regulations. Thus Leghorn and Genoa were declared free port towns in the sixteenth century; Naples, Venice, Marseille, Bayonne and Dunkirk in the seventeenth century; Ancona, Messina, Trieste, Fiume and Gibraltar in the eighteenth century. The Hanse towns Hamburg and Bremen, which were made free ports in the early years of their existence, retained their privileges throughout this period. In a system of early capitalism the free port privilege was an important factor in the development of an active carrying trade, and most free ports became prominent as distributing centers for overseas imports, serving the entire continent.

With the growing industrialization of Europe in the nineteenth century the importance of the carrying trade in the economic life of the principal countries declined and the free port cities became to an increasing extent trading outlets and inlets for the hinterland. The raison d'être for free port privileges was thus disappearing. At the same time governments began to resent the loss of revenue entailed by the exemption of large areas from the customs territory; extensive free areas difficult to supervise offered large opportunities for smuggling. One by one free ports were reincorporated in the general customs territory, so that by the end of the century free port cities almost completely disappeared in Europe.

Free ports were not, however, entirely abolished. Some of the free port cities were permitted to retain a free zone where the business of the former ports could be carried on as before. With the subsequent development of large scale shipping and international commerce free zones were established in the ports of other countries. In the post-war period the multiplication of boundaries, the upward movement of customs tariffs and the general desire of countries to emancipate themselves from dependence on intermediaries in world trade and to capture a slice of the trans-shipment trade for themselves led to a rapid extension of the device of free zones, with the result that there is at present hardly a

protectionist country of economic significance which does not provide or contemplate the provision of free zone facilities.

The free zone is important as a device for the centralization of international trade at a few focal points. The exclusion of the zone from a country's customs area makes it the natural distributing point for imports intended for reexport. In this respect the free zone is superior to the system of refunding the import duty upon reexport; the latter entails formalities which may prove irksome. Since the importer into a free zone is at liberty to dispose of his goods either by reshipping them to foreign markets or by selling them in the domestic market he is inclined to handle larger quantities and tempted to speculate on future demand on a larger scale; this makes for an increase in the turnover of a free zone. Shipping concerns are naturally attracted to free zones even at some sacrifice in rates charged for freight, because the opportunities of securing cargoes are better. This development is further reenforced by the tendency toward the concentration of transoceanic traffic in a few leading ports. The increase in tonnage and draft of ships necessitates well equipped harbors, which are usually provided in free zones, and the increase in capital investment represented by such ships calls for the acceleration of loading and unloading operations, which is facilitated by the absence of customs inspection.

Free zones are generally equipped with spacious storage facilities such as warehouses and elevators in which room is provided for sorting, cutting, repacking and similar operations necessary to prepare merchandise for reshipment to various markets. The warrants issued by such warehouses enjoy general currency in the world markets and are accepted by banking houses engaged in financing international commercial traffic. Manufacturing is prohibited in most free zones, but even in such zones where it is permitted, for example, Hamburg, few industrial plants are found. The high rentals which necessarily prevail in such areas would add needlessly to the cost of production, and in the leading industrial countries the benefit derived from manufacturing in a free zone for shipment to foreign markets would not be great, for important raw materials may be imported duty free under most prevailing tariffs. Unless local reasons favor the establishment of some special industry, the industrial activities of free zones are usually confined to shipbuilding and small scale auxiliaries to shipping.

Free zones are usually opposed by extreme protectionists on the ground that they constitute a breach of the protective principle. Of greater importance is the current objection on the ground of overexpansion of free zone facilities, which for the time being has outrun the trading capacity of the world. Many of the newly established free zones have not justified the expenditure incurred in their equipment; and the excessive multiplication of free zones has rendered more difficult the concentration of trade, thus impairing one of the essential advantages of the free zone.

Outside of Europe free ports exist in some Asiatic colonies of European powers. Hongkong, Singapore and Aden are important centers of the carrying trade; that is, they serve the same economic function as did the European free ports before the nineteenth century. Treaty ports in China did not play the part of free ports, but plans for the establishment of Chinese free ports have been recently discussed. The United States is an outstanding example of a protective country which has never had free ports or free zones. Recent proposals for the establishment of free zones as a stimulus to the development of American shipping came to nothing.

Another device similar in purpose to the free zone is the bonded warehouse and the bonded manufacturing warehouse. The former is a place where goods intended for reexport may be entered and stored free of duty unless withdrawn for purposes of domestic consumption. The latter is a building or enclosed area where imported goods may be handled, altered or manufactured with or without the admixture of domestic materials and parts.

The facilities offered by the bonding system are similar in kind to those offered by the free zones but are inferior in effectiveness. The bonding system does not aid in expediting the entry and clearance of shipping or the handling of merchandise, for shipments must undergo all the formalities of customs inspection before they are allowed to proceed for storage. The requirement of providing bonds, in some instances double the amount of the duty, which are forfeited if the goods are stolen, lost, destroyed or fraudulently removed, increases the cost of handling goods. The goods stored in the warehouses are under the continuous supervision of customs authorities. The handling, sorting, mixing or repacking of the stored goods is impeded by restrictive customs regulations and finally the storing privilege itself is restricted both in point of time and in the range of commodities. The usual limit on the storing period is three years, after which goods are declared abandoned; and perishable or dangerous commodities cannot be stored in bonded warehouses.

SVEN HELANDER

See: Ports and Harbors; Shipping; International Trade; Customs Duties; Drawback; Protection; Treaty Ports; Warehousing.

Consult: MacElwee, R. S., Ports and Terminal Facilities (2nd ed. New York 1926); Cobden, C. J., "Foreign Trade Zones" in World Ports, vol. xiv (1925–26) no. vi, p. 43-55; Helander, Sven, Die internationale Schiffahrtskrise (Jena 1928); Bellet, Daniel, "La question des zones et ports francs" in Revue d'économie politique, vol. xxxi (1917) 197-225; Clapp, E. J., "The Free Port as an Instrument of World Trade" in American Problems of Reconstruction, ed. by E. M. Friedman (2nd ed. New York 1918) p. 245-66; Kugler, Hellmuth, "Die Entstehung der neuen Freihafensformen" in Weltwirtschaftliches Archiv, vol. xix (1923) 188-219.

FREE SILVER. The fight for a bimetallic standard found its most striking expression in the free silver movement in the United States. During the Civil War the large issues of currency and the ensuing rise of prices produced a situation in which many economic groups enjoyed unusual prosperity. When after 1865 the government proceeded to retire the greenbacks, strenuous opposition developed and further contraction was eventually countermanded. In the early seventies labor organizations in the east and after the panic of 1873 the remnants of the granger organizations in the west and south entered national politics on platforms which demanded an increase in the currency. In 1878 the industrial and agrarian wings of the Greenback party amalgamated and in the congressional and state elections of that year exerted considerable influence. In the following period of generally falling prices of farm products the agrarian districts in particular increasingly insisted upon a currency policy which would lighten the burden of the farm mortgager and of the debtor classes in general.

In the meantime another group of interests had begun to agitate for an increase in the currency. Legislation enacted in 1873 and 1874 had demonetized the silver dollar and limited the legal tender value of silver to five dollars. This attracted little attention at the time inasmuch as there had been no silver in circulation for forty years. But almost immediately afterward the supply of available silver was tremendously increased by the exploitation of new mines in the

western states and by various factors in the international currency situation. The price of silver rapidly declined. The American silver mines found the most lucrative outlet for their product closed by what they construed as discriminating legislation. As the price of silver continued to fall this legislation was attacked by an increasingly well organized and acrimonious silver party, which by 1877 had mustered sufficient strength to swing the House in favor of the Bland Bill calling for unlimited coinage of silver at a fixed ratio to gold. Although senatorial revision had seriously restricted the scope of the original bill, the final Bland-Allison Act of 1878, by authorizing a monthly silver bullion purchase of \$2,000,000 to \$4,000,000 and by restoring in large part the legal tender value of silver, had represented a substantial gain for the inflationist movement.

The first convention of the Greenback-Labor party adopted an aggressive free silver resolution repudiating the Bland-Allison Act as an unsatisfactory compromise measure, and on a number of occasions in the same year the Greenback-Labor and silver groups cooperated in passing minor measures aimed at their common antagonist, the commercial and banking interests of the east. In the presidential elections of 1880 and 1884 the Greenback-Labor candidates voiced, incidentally, free silver sentiments, but in neither election did the party approximate the strength which it had exhibited in 1878. The post-panic depression was gradually yielding to a period of comparative prosperity. The limited coinage of silver exerted but a slight effect. The new currency tended on the whole to remain in the treasury except in periods of abnormal commercial activity, when it served the useful function of supplementing the rather inelastic banknote circulation. International bimetallic conferences, the first of which was authorized by legislation of 1878, were held at intervals, but the prospects of a binding currency agreement between nations did not appreciably improve.

Agrarian distress, which had constituted one of the mainsprings of earlier inflationist agitation, was still a palpable factor in many sections of the west and even more in the south, but it tended in general to seek relief through non-political cooperation. Farmers' alliances not dissimilar in character to the earlier granges began to spring up and spread through the agrarian sections of the south and the northwest. But it was not until the last year of the decade, under the stimulus of a returning period of depression,

that the first serious move was made toward the organization of agrarian interests on a national scale. In that year the Southern Farmers' Alliance and the Northwestern Farmers' Alliance held conventions in St. Louis and entered into negotiations looking toward amalgamation. Although this was not formally effected, both the agrarian groups endorsed the currency views in the southern platform.

More convinced than ever that his economic interests were being sacrificed by an indifferent government to the commercial and financial powers of the east the farmer was once again on the offensive. The prices of agricultural commodities continued to decline, partly because of the opening up of rich areas of cultivation in the far western states and in foreign countries. Each year the farm debt became more burdensome. Each year the farmer became more dependent for his operating capital on local credit men who charged exorbitant rates of interest. The prevailing credit system had often tended to transfer the management of the farm into alien hands and in many cases, especially throughout the south, had reduced the nominal owner to a state of virtual peonage. For the first time in the experience of the American farmer the alternative of an escape from surrounding depression to the rich acres of an unlimited agricultural frontier was closed. The farmer needed currency and credit and felt that it was the obligation of the sovereign state to provide an adequate supply. This the government had failed to do. During a period of rapid expansion in population and production along all lines the government had virtually restricted its coinage to a single metallic base, which the farmer believed was limited in supply and incapable of adjusting itself to a rapidly changing demand, and the banknote currency to a base of government bonds limited in amount and destined to disappear with the repayment of the public debt.

As to the exact remedy for this situation there was less unanimity of opinion. A number of the remedies proposed indicate unmistakably the persistent Greenbackism of many of the most active leaders in the new agrarian movement as well as their intense antipathy to the national banking system and its bond secured currency. Free and unlimited coinage of silver was likewise urged on the ground that the more plentiful metal had by its fall in price proved itself more sensitive to variations in the general price level. The Populist party of 1891, which drew its greatest strength from the agrarian population

while keeping the free silver question well in the foreground, tended to dissipate its strength on too wide a range of issues. Its somewhat quixotic platform undoubtedly alienated many potential allies, and despite the surprisingly successful showing of the Populist candidates in the elections of 1892 the hopes of the agrarian inflationists were still far from realization. It became increasingly apparent to the more intelligent leaders of the movement that in order to gain a wider following in certain influential circles, especially in the east, it was advisable to restrict their currency program to demands for free silver. Despite its continued appeal in many agrarian quarters Greenbackism rested upon a most insecure basis. The world had experienced too many disorders with irredeemable paper in the past, and there was an underlying fear that additional greenback issues might go the way of continental currency in this country and the assignats in France.

Circumstances within one of the older parties were soon to bring forth a capable leader and to give to the free silver movement an ideological integration and a general prestige which it had hitherto lacked. The Republicans in 1890, as a bid for the tariff votes of the senators from the newly admitted silver states and also to silence the threatening free silver group in Congress, had passed the Sherman Silver Purchase Act. Although this act failed almost as completely as had the Bland-Allison Act to satisfy free silver demands, one of its clauses, specifying that the Treasury certificates issued for the purchase of silver should be redeemable in "coin," involved the succeeding Democratic administration in endless difficulties. To interpret coin to mean only silver would have represented an acknowledgment of the difficulty of maintaining the gold standard. On the other hand, it was not easy to maintain sufficient gold in the treasury reserves to guarantee the exchangeability of the Treasury notes with gold. The act was repealed during the panic of 1803, but Cleveland's frantic attempts to preserve the treasury gold reserve against the steady inflow of silver certificates already outstanding involved recourse to heavy bond issues according to the terms of the Resumption Act of 1875. His unswerving resolution to maintain the gold standard and his willingness to increase still further the dependence of the government on New York banking interests alienated the growing free silver section of the party. The Democratic convention of 1896, after severely criticizing Cleveland's actions, was roused to a frenzy

of excitement by the eloquence of Bryan, who more thoroughly than any other trained political leader had assimilated the traditions of the free silver movement and who in his peroration fused twenty years of free silver agitation.

Despite the strength of this appeal the silver party of 1896 labored under impossible handicaps. Success at the polls could not be gained without complete victory in the agrarian sections of the country, wherein Republican traditions were especially strong. In the manufacturing areas a very large element undoubtedly remained convinced that the primary issue was not silver but protection. The importers and the banking interests with international affiliations were naturally opposed to a silver currency at a time when virtually all European currencies were on a gold basis. Although Bryan was not content to portray merely the abstract advantages of the bimetallic system but charged that the country's currency policy and the general price decline since 1873 were the result of a deliberate tinkering with the country's money in the interests particularly of the creditor classes, generally over the country the international prestige of gold had created an emotional sentiment hostile to free silver. Much intellectual opposition to the Bryan faction was caused by the Republican party's declaration that it would not oppose bimetallism if an effective international agreement among the leading countries of the world could be secured. Although the gold party secured pluralities west of the Mississippi only in Oregon, California, North Dakota, Minnesota and Iowa, the silver party was defeated. Its doom was scaled with the passage of the Gold Standard Act in 1900.

The general rise in prices which began in 1897 and continued during the next decade relieved the distress in agricultural districts. In 1900 the conditions regulating the establishment in rural sections of national banks with note issuing powers were liberalized. But even after 1900 silver was retained as a considerable element in the American currency system. In 1918 the Pittman Act authorizing a huge sale of silver bullion to England carried a provision for the repurchase of an equal amount from American mines; it was made effective in 1920-23. Silver coinage lost its importance, however, as a social and political issue. In the twentieth century the farmer's need for capital led to demands for provision of better credit facilities and of government assistance in marketing. The struggle between the agrarian west and the industrial east

has shifted its emphasis from the monetary to the credit system.

HAROLD L. REED

See: BIMETALLISM AND MONOMETALLISM; INFLATION AND DEFLATION; DEBT; AGRARIAN MOVEMENTS, Section on UNITED STATES; FARMERS' ALLIANCE.

Consult: Haynes, F. E., Third Party Movements since the Civil War with Special Reference to Iowa (Iowa City 1916), and Jumes Baird Weaver (Iowa City 1919); Buck, S. J., Agrarum Crusade, Chronicles of America series, vol. xlv (New Haven 1920); Arnett, A. M., The Populist Movement in Georgia (New York 1922); Bryan, W. J., The First Battle (Chicago 1896); Harvey, W. II., Coin's Financial School (Chicago 1894); Taussig, F. W., The Silver Situation in the United States (3rd ed. New York 1896); Noyes, A. D., Forty Years of American Finance (New York 1909); Laughlin, J. L., The History of Bimetallism in the United States (4th ed. New York 1900); Hepburn, A. Barton, History of Currency in the United States (rev. ed. New York 1924).

FREE TRADE now implies a commercial policy under which commodities may pass political frontiers without the payment of duties or under which duties are either charged only on commodities not produced at home or offset by corresponding duties on that part of the supply which is produced at home. The term was used in other senses by earlier writers on trade. In the first part of the seventeenth century it usually referred to the removal or drastic modification of the privileges enjoyed by chartered trading companies, such as the Fellowship of the Merchant Adventurers of England or the London East India Company. Contemporary discussion was constantly preoccupied with the possibility of "a more open and free trade." This was the issue raised by the free trade bills of 1604; in 1622, a year of acute industrial depression, the question was referred to the commissioners of trade; and again in 1650 a commission under the chairmanship of Sir Harry Vane was instructed to inquire "whether it be necessary to give way to a more open and free trade than that of companies and societies." This concern about the privileges of the trading companies was only a special aspect of the attack on monopolies. Such privileges often rested on a threefold basis: a grant from the crown, the suppression of internal competition and a protective trade policy. Whatever may be said of the royal intention, it cannot be denied that serious abuses arose in practise. The opposition was vigorous and in the course of it the principle of economic liberty was frequently asserted. Internal monopolies were practically abolished by the Long Parliament

and thus a step in the direction of freedom of trade was taken much earlier in England than on the continent. But the monopolies enjoyed by companies engaged in foreign trade survived, because in this sphere the consequences of competition seemed likely to be disastrous. To insure a favorable balance of trade contemporary opinion considered that some degree of regulation was essential.

The action dictated by the balance of trade theory gave another meaning to free trade. In the last two decades of the seventeenth century there was much discussion of the relative advantages of prohibition and free trade, especially in connection with trade with France. Here freedom meant the conversion of a prohibitory into a moderate tariff. Davenant makes the point clear when he writes "...if both Kingdoms can agree upon just and equal duties to be laid on their respective commodities, a free trade with France can never be dangerous to England." The Whigs, however, for political reasons exploited the notion that trade with France was necessarily harmful. Prohibition had first been imposed in 1678 (29 and 30 Cor. 11, c. 1) and the policy was confirmed after the accession of William and Mary. Bolingbroke's attempt in 1713 to include more liberal commercial clauses in the Treaty of Utrecht ended in failure. Joshua Gee, a leading merchant often consulted by the government at that time, had no hesitation in declaring that "France, above all other nations, is the worst for England to trade with." It is against the background of these restrictions that the writings of "the Tory Free Traders," Josiah Child, Dudley North and Charles Davenant, must be read. They rightly insisted that the Whig contention was based on the crude consideration of the particular balance of trade with France and not on a more comprehensive view. Incidentally they enunciated broad principles and from isolated passages it would be easy to suggest that they were more enlightened than they actually were. Davenant asserts that "trade is in its nature free, finds its own channel and best directeth its own course." Still it would be a great mistake to suppose that he was a free trader in the modern sense of the term.

The idea that there is a distribution of resources which makes countries interdependent was constantly expressed by mercantilist writers. They often stated it to be a providential arrangement. Gerard Malynes declared in 1601 that "God caused nature to distribute her benefits, or his blessings to severall climates supplying

the barennesse of some things in our country with the fruitfulnesse and store of other countries, to the ende that enterchangeably one commonweale should live with another." Sir William Petty adumbrated the theory of the territorial division of labor and in 1676 laid down the rule that "each country flourisheth in the manufacture of its own native commodities." But the mercantilists were not prepared to admit that unregulated trade would be of mutual advantage. The earlier writers were convinced that it would not insure the requisite accumulation of treasure in coin or bullion within their country and their successors felt that it would not maximize employment at home. Consequently the weight of opinion was against the removal of restrictions on trade. The ruling conception of the balance was not effectively challenged until the second part of the eighteenth century. Such free trade ideas as found expression were essentially criticisms directed against the hardships suffered by certain interests or against the commercial implications of foreign policy. Josiah Child, whose political convictions led him to advocate more liberal trade relations with France, was anxious to restrict the trade of the American colonies to the mother country. The regulation of all colonial trade so as to correct adverse balances with foreign countries was generally recognized as desirable. For example, by paying bounties on the production of naval stores in America it was hoped to eliminate England's dependence on the Baltic countries for such

In England the natural tendency toward economic integration was not hindered by the levying of local duties on the movement of commodities. So far as the inadequate means of transport allowed goods could be moved freely from one part of the country to the other. There is indeed much complaint in the sixteenth century of the invasion of local markets by merchants who offered for sale articles made in more distant localities. Scotland, however, was a separate country and until the union with England in 1707 there were considerable restrictions on trade between the two countries. Severe limitations on trade with Ireland survived throughout the eighteenth century despite William Pitt's attempt in 1785 to initiate a more liberal policy. In western Europe a complicated system of duties existed even within the boundaries of sovereign states. In France, for example, internal economic unity was not achieved until the revolution. There was a network of tolls, feudal dues and provincial customs duties and even of prohibitions on the movements of foodstuffs. Transport was consequently so costly, where it was permitted, that the peasants often allowed their produce to decay rather than attempt to reach a distant market. Colbert attempted to effect some reforms in this system but without any notable success.

The reaction in France against excessive government regulation led to the first definite formulation of a theory of free trade. The physiocrats, in opposition to the policy of fostering manufactures, insisted that the wealth of a country arose from agriculture and demanded that this should therefore enjoy complete freedom. In this they were primarily thinking of the removal of all restrictions on internal trade. According to their principles there was little or no advantage in foreign trade, a view which naturally made them regard the whole mercantile system as futile. So they were prepared to accept the general application of their gospel of laissez faire, laissez passer; that is, the free movement of commodities and persons without any regard to national frontiers. The whole conception of the balance of trade they regarded as absurd and mischievous and they challenged the view that a country could gain any advantage by imposing limitations on trade. It is possible to explain the particular policy advocated by the physiocrats by reference to circumstances of the time. Agriculture was unduly cramped by the restrictions which weighed heavily on the producers. The importance of the physiocrats, however, lies in the fact that they went beyond the criticisms of details and elaborated a complete system. They envisaged a natural order of society, the operation of which was frustrated by the ill advised intervention of governments. The demand for freedom of trade was no longer a protest from those individuals who felt the injustice of this or that regulation; it was the assertion of a general principle.

The reaction against the mercantile system was not so clearly marked in England. There were no internal restrictions of the kind which existed in France and contemporaries were generally satisfied that the commercial policy pursued with respect to Ireland and the American colonies was of advantage to the country. Matthew Decker, who in 1744 advocated the abolition of customs duties on imports and of bounties on exports, exerted little or no influence on opinion. The exposure of the fallacy of the balance of trade theory by David Hume had no immediate effect.

It was left for Adam Smith to subject the prevailing commercial system to detailed criticism in the Wealth of Nations (1776). While he shared with the physiocrats a belief in natural liberty, he did not content himself with the assertion of that principle. He examined all the devices of the mercantilists with obvious zest. They were accused of creeting "the sneaking arts of underling tradesmen" into "political maxims for the conduct of a great empire." To his first readers his treatment of this part of the subject must have seemed a resounding challenge to existing practise. He himself felt that the attack would be resented and that "the prejudices of the public" and "the private interests of many individuals" would rally to the defense of the system. "To expect," he wrote, "that freedom of trade should ever be entirely restored in Great Britain is as absurd as to expect that an Oceana or Utopia should ever be established in it." This sense of practical difficulties distinguishes Adam Smith from the physiocrats. The logical completeness of their system proved a stumblingblock to men of affairs. Adam Smith did not elevate the principle of laissez faire into an absolute doctrine. There was in his view a strong presumption in favor of its application to contemporary commercial questions. He does not deny that an industry may be acquired sooner by the adoption of protective measures than it otherwise would be; but he insists that the expense of such a measure is certain while the advantage is doubtful. The interest of the people as a whole, the consumers, is much more likely to be promoted by allowing capital investment to take its own course. Similarly the colonial system seemed to Adam Smith to be a great illusion, an elaborate attempt to force capital into a distant trade where it earned a smaller return than if it had been invested nearer home. His comment on the attitude toward trade with France is characteristic: "If those two countries, however, were to consider their real interest, without either mercantile jealousy or national animosity the commerce of France might be more advantageous to Great Britain than that of any other country, and for the same reason that of Great Britain to France." He did not share the contempt which the physiocrats had for foreign trade. Agriculture, industry and trade were all to the national advantage provided they were taken up in the course of things and not forced by artificial means. Any measures which prevented each country from sharing in the natural distribution of the products of the world

must necessarily be harmful, for there was a jundamental economic interdependence.

Adam Smith was skeptical about the influence of theoretical considerations in practical affairs. His arguments received powerful reenforcement from events in the American colonies. The attempt of the mother country after 1763 to enforce the laws of trade met with determined opposition. When the independence of the United States was recognized twenty years later the old colonial system was badly shaken, but by that time British merchants were coming to see that the superiority of their manufactures would insure their hold on the American market. A more liberal trade policy was winning general acceptance. In 1786 William Pitt succeeded where Bolingbroke had failed. A commercial treaty was negotiated with France in which prohibitive duties for the most part gave place to moderate duties. The general principle of reciprocity in trade and navigation was recognized. Unfortunately the outbreak of the French Revolution put an end to this arrangement before its effects could be properly estimated. It is significant, however, that a crisis was provoked in the textile areas in France which was due to the superior industrial position of Great Britain. As far as it went, the experience of the years from 1786 to 1793 served to strengthen the conviction among British manufacturers that greater freedom of trade would be to their advantage.

The almost continuous state of war in Europe up to 1815 violently interfered with the course of trade. Great Britain and France attempted to do economic damage to one another by means of blockades and other devices. The attitude of Great Britain toward neutral shipping provoked the War of 1812 with the United States of America. When peace was restored in Europe in 1815 each belligerent faced the question of what commercial policy ought to be pursued in the difficult period of recovery. In Great Britain the process of industrialization had made rapid although unequal progress and the main problem was whether the post-war dislocation could be met by finding foreign markets for manufactured goods. But the continental countries had all adopted high tariffs. In France Napoleon had deliberately done so to foster manufactures. Although the Restoration monarchy was prepared to modify the policy of prohibition it found vested interests so powerful that a tariff act was passed in 1816 which confirmed a system of high protection. Great Britain had emerged from the war with an unwieldy tariff system which had

been built up in the effort to find sources of indirect taxation for its prosecution. The landed interests had endeavored to safeguard their position by the Corn Law of 1815, which prohibited the importation of foreign wheat until the price reached eighty shillings a quarter. Public distress raised the question whether if foreign food supplies were freely admitted an outlet might be found for British manufactures. One of the banners at "Peterloo" in 1819 bore the words "No Corn Laws." A definite lead was given to opinion by the presentation of the Merchants' Petition to the House of Commons in May, 1820. It was drafted by Thomas Tooke for a group of London merchants and gave precise expression to the leading principles of free trade, "Freedom from restraint," it was asserted, "is calculated to give the utmost extension to foreign trade, and the best direction to the capital and industry of the country." The Manchester Chamber of Commerce, which was founded that same summer, registered the opinion that "to indulge an expectation that other countries will take the manufactures of this kingdom without our receiving in return such articles as they produce, is delusive and injurious to our best interests" (Manchester Statistical Society, Transactions, for December 10, 1930). These declarations may be said to have initiated a movement which made steady, if slow, advance during the next twenty years.

The advocates of free trade had the great advantage that the tariff which they were attacking could not be defended on any principle. Their difficulties arose partly from the opposition of vested interests but mainly from the difficulty of suggesting in the absence of the income tax (which had been repealed in 1816) means of obtaining revenue to compensate for any remissions in indirect taxation. William Huskisson made the first inroad upon the system in the years 1823 to 1827. His reforms were moderate and commended themselves to practical business men. Several prohibitions were removed and import duties reduced. He contended that a maximum rate of 30 percent provided sufficient protection to native manufacturers in the hardest cases. The revision of the timber duties, which had been practically prohibitive to the Baltic supply, left the colonies in a preferential position. The principle of reciprocity was introduced into the navigation acts. These reforms naturally raised the question of the revision of the Corn Law of 1815. An attempt in 1827 to introduce a sliding scale arrangement by which the import duty on wheat should vary with the home price proved abortive; but the Wellington ministry in the following year successfully carried a bill based on the same principle, although less favorable to importation. It was accepted by free traders as an improvement, and a succession of fairly good harvests prevented a vigorous agitation from arising for some years.

Huskisson had removed many of the more unreasonable elements from the British tariff, but he left it a comprehensive protective system. For ten years little progress was made in the direction of simplification. The industrial depression which followed the financial crisis of 1837 reopened the whole issue in a most acute form. There was a succession of budget deficits and the existing tax system seemed quite incapable of meeting the difficulty. The manufacturing interests indeed had largely adopted the view that the burden of indirect taxation was mainly responsible for the failure of industry to recover. In particular they felt that the corn laws operated to close foreign markets to their goods. This conviction led to the foundation of the National Anti-Corn Law League in Manchester early in 1839. Under the leadership of Richard Cobden and John Bright a great campaign was launched which by concentration on the main issue, skill in argument and resourcefulness in methods soon aroused opinion throughout the country. The ground was prepared for a thorough application of free trade principles.

But the practical steps were taken by Sir Robert Peel's ministry from 1841 to 1846. Peel had the temper and outlook of an administrator. He was more concerned with the difficulties of the moment than with theoretical considerations. A Committee on Import Duties, which reported in 1840, had drawn attention to the fact that there were nearly twelve hundred items in the list of dutiable goods and it had suggested that a drastic reduction of these would "facilitate the transactions of commerce, benefit the revenue, diminish the cost of collection and remove the multitudinous sources of complaint and vexation." Peel decided to deal with the national emergency by following these recommendations. Protecting himself against a possible temporary loss of revenue by reimposing the income tax for three years, he undertook a comprehensive revision of the tariff. The general principles of the reforms of 1842 were the removal or relaxation of prohibitory duties; the reduction of duties on raw materials to a point not exceeding 5 percent ad valorem, on partially manufactured articles to a point not exceeding 12 percent ad valorem and on manufactured articles to a point not exceeding 20 percent ad valorem.

In 1845 Peel returned to the tariff question and sought an extension of the income tax to carry reform to another stage. He now proposed wholesale remissions of duties; some 430 articles, mostly raw materials, were to be removed from the tariff list. His approach toward a definitely free trade position was obvious. But the crucial test of protection to agriculture remained. He had revised the sliding scale in 1841 with the twofold object of preventing speculative dealing and of securing a remunerative price for home grown corn. There he had left the question despite the increasing intensity of the anti-corn law agitation. The dramatic events of 1846 were precipitated by the failure of the potato crop in Ireland. Peel decided that circumstances demanded that the corn laws should go and he carried through their repeal at the cost of all his political prospects. The administration had not only greatly simplified the tariff, it had given a great impetus to the free trade movement. The principles on which rested the arguments for the free import and export of goods had been widely discussed and their complete adoption had been strongly advocated by a growing body of opinion. The navigation laws were repealed in 1849 as a necessary corollary to the abandonment of the corn laws.

While Peel had been influenced by what he felt to be practical considerations, W. E. Gladstone, who had been his lieutenant throughout, had come to the conviction that the work ought to be carried to such a point that the tariff would remain purely for revenue. In his budget of 1853 Gladstone followed the principles that semimanufactured goods should be admitted duty free and that such manufactured goods as were retained in the tariff should not be charged more than 10 percent ad valorem. His task was interrupted by the outbreak of the Crimcan War and was resumed and completed in 1860.

But the movement had now taken on a wider significance. So far it had been greatly favored by the trend of events in Great Britain. The enunciation of general principles by economists, while it had not provided driving force, had helped practical men to find justification for what they wanted and to give them a clear objective. The country was becoming thoroughly industrialized in a world where agriculture was still dominant. To change the balance in Great Britain definitely in favor of manufactures seemed

highly desirable if access could be found to foreign markets. Such access could best be secured by accepting their agricultural products. But it was not so easy to demonstrate that other countries would gain from this arrangement. If they had industrial possibilities they might not be best serving their own interests by opening their doors to British manufactured goods.

In France industry had made considerable progress but high protection was maintained until the establishment of the Second Empire, although there was a growing demand from the commercial interests for a less restrictive policy. Events in Great Britain had stimulated a movement in favor of free trade and Frédéric Bastiat had clearly expounded the teaching of the Anti-Corn Law League to his fellow countrymen. Napoleon III had been impressed by the achievements of Sir Robert Peel and made some experiments in reducing tariffs by decrees, but an attempt to remove prohibitions by legislation in 1856 met with such strong opposition that it had to be abandoned. Political considerations, however, suggested the advantage of pressing for better relations with Great Britain and he approved of private consultations between Cobden and Rouher, the minister of commerce, with a view to the negotiation of a commercial treaty. The emperor claimed the right to amend the tariff by treaty without reference to the Chamber. Cobden on his part was averse to the principle of making concessions to particular countries. In the upshot a treaty was entered upon by which France was to remove all prohibitions after October 1, 1861, and to reduce high duties to 30 percent ad valorem. It also conceded a most-favored-nation clause which was to give Great Britain the advantage of any lower duties subsequently granted to other countries. Great Britain, however, associated this treaty with the budget of 1860, which abolished all duties on manufactured articles and brought the number of commodities retained in its tariff down to forty-eight. These concessions were given to all the world and completed the scheme to which Gladstone had committed himself. The terms of the treaty with France were stated in general terms. In the detailed negotiations which followed its ratification France agreed to duties well below the maximum of 20 percent on a great variety of commodities. Moreover, France entered upon a number of commercial treaties with Belgium, the Zollverein, Italy, Switzerland and other customs areas, in which lower duties were often arranged, and under the most-favorednation clause Great Britain secured the advantage of these rates.

The Anglo-French Commercial Treaty ushered in a period which witnessed a general movement toward free trade. Cobden and Bright had always stressed the international aspect of their campaign. There were many writers on the continent who believed that universal free trade was well within the realm of practical politics. Economists considered freedom of trade as an axiom of their science. It is true that Friedrich List had in his Das nationale System der politischen Oekonomie (Stuttgart 1841; tr. by S. S. Lloyd, London 1885) contended that it was premature for a country to open its doors freely to foreign supplies before its own economic potentialities had been thoroughly explored and developed. He accepted freedom of trade as an end; but he wanted each state capable of doing so to achieve industrial maturity before adopting it. This meant in practise a long period of protection in countries which had made little industrial progress. Germany was, in his view, in this category. But his teaching had no immediate effect. The happenings in Great Britain lent prestige to free trade opinion and the balance of interests in Germany was such that an open market for cereals was attractive, while the danger from the importation of cheap manufactured goods was not widely feared. Within the German Zollverein the influence of the landowners and traders of the north was much more powerful than that of the iron and cotton manufacturers of the south. At its inception in 1834 the Zollverein, following the lead of Prussia, whose liberal tariff of 1818 showed the influence of Smith's ideas, adopted a moderate tariff; the desire to repel Austria and to attract the northwestern states of Hanover and Oldenburg confirmed this policy. The Zollverein was thus prepared to take its part in the negotiation of the liberal commercial treaties of the sixties. A similar movement toward free trade took place in Sweden, while Switzerland continued its non-protectionist tariff policy. Holland by a series of reductions beginning in 1845 and culminating in 1877 eliminated all duties except 5 percent on manufactured goods retained for revenue purposes. Belgium repealed its corn laws in 1850 and by 1857 was practically a free trade country.

But a general system of free trade was never achieved in Europe. The beginnings of a reaction appeared in the seventies and became very marked in the eighties. Among the leading causes must be placed the more violent expres-

sion of national sentiment, the growing industrialization and the improvements in transport which brought cheap American grain to the European markets. In each country there were special circumstances. A considerable body of French opinion had never been reconciled to the policy of Napoleon III. Step by step France returned to a very definitely protective position, which was finally confirmed in the Méline tariff of 1892. In Germany the situation was more complicated. The empire continued the liberal policy of the Zollverein until 1879. The iron and cotton manufacturers still complained very bitterly of the dumping of British goods. The Prussian landowners were beginning to feel the effect of the competition of cheap transatlantic corn. Bismarck was also gravely concerned about the financial requirements of the empire. He decided therefore to revise the tariff; to give a measure of protection to manufacturers and agriculturists which would at the same time increase the yield of indirect taxes. The new tariff which came into force in 1880 imposed a moderate duty on a great variety of commodities, for the main purpose was to raise revenue; but during the discussion Bismarck had definitely expressed the view that whatever the merits of the theory of free trade might be it was impossible to maintain it when other countries were surrounding themselves with customs barriers.

The reaction was also felt in Great Britain. The excess of imports over exports aroused alarm, and it was asked whether the balance of trade was not unfavorable and whether it would not necessarily remain so as long as Great Britain was a free trade country while others were elaborating protective tariffs. The critics of free trade advocated what they called fair trade, a system the essential principle of which was retaliation in tariff policy, although it also contained elements of empire free trade. They demanded a tariff on the manufactures of all countries which did not admit British goods duty free. With the revival of trade in the nineties little more was heard about fair trade. But a much more serious challenge to the free trade position was launched by Joseph Chamberlain in 1903 when he opened his tariff reform campaign. Suggestions had been made from time to time that the British Empire might be more closely bound together by means of a commercial union. The problem was a complicated one because of the variety of tariff policies which existed within the empire. The United Kingdom was free trade, the self-governing dominions had each built up a protective tariff,

while India and the crown colonies had their own systems. Chamberlain's proposals combined ideas of imperial preference with those of protection of the home market and retaliation to force open foreign markets. He had to admit that the taxation of foreign imported foodstuffs by Great Britain would have to be an essential element in any effective scheme of imperial preference. The general election of 1906 was a complete triumph for free trade principles and Great Britain entered upon the World War with her tariff system unmodified. Belgium and Holland also remained essentially free trade countries up to the World War.

The war brought with it a marked strengthening of the protectionist position everywhere. The United States, which in the tariff of 1913 had given some faint signs of abandoning its traditional high protectionist policy and of moving in the direction advocated by the strong intellectual movement in favor of free trade, entered in 1921 upon an era of increased protection. Even Holland and Belgium imposed certain protectionist duties, although they still remain with countries of relatively liberal tariffs. Great Britain imposed duties in 1915 on the importation of certain luxuries with a view to maintaining the foreign exchanges. In 1919 preference was given on practically all articles subject to existing customs duty if they came from any part of the British Empire. Two years later safeguarding rates were applied to certain foreign goods if offered for sale at prices below cost of production or below that at which similar goods could be profitably manufactured in the United Kingdom. Empire goods were exempted from these duties. The proposal for a more thoroughgoing application of protective measures was rejected in the general election of 1923, but some increased protection was instituted by the Conservatives after their return to power in 1924. Protectionist proposals failed again in 1929. Great Britain is still more liberal than any other country in its tariff policy, but the agitation for more protection is very strong. Even many of the trade unionists, including especially those whose particular industry has suffered from foreign competition, such as the textile workers, are moving toward protection, in opposition to the traditional Labour party policy of free trade.

In other countries too the peculiar problems of the post-war years have shaken the faith of many free traders—the concern about the maintenance of "key industries," the natural unwillingness to see industries which have developed

or grown large during abnormal war years decay in the face of strong foreign competition, the fear of dumping due to the collapse of continental currencies, the difficulty of finding an adequate revenue, the alarming increase in unemployment. For all these it has been suggested in turn that a remedy may be found by departing even farther from free trade principles. The world wide industrial depression has strengthened the agitation. In some cases protection is regarded as a remedy for specific ills of a temporary duration; in others it is advocated as a scientific method of dealing with economic factors.

There is, however, a general recognition of the fact that the heaping up of tariff walls since the war has been a hindrance to economic recovery. Attempts have been made by the League of Nations and other international agencies to induce countries to adopt a more reasonable policy. The International Economic Conference at Geneva in 1927 passed a resolution to the effect that "the time has come to put an end to the increase in tariffs and to move in the opposite direction." The conference recommended that "the nations should take steps forthwith to remove or diminish those barriers that gravely hamper trade." Implicit in the Pan-Europe scheme, in the suggested Austro-German customs union and even in Lord Beaverbrook's agitation for empire free trade is a recognition of the economic value of a large free trade area. But highly abnormal economic, financial and political conditions have militated against the lowering of customs duties, or even the stabilizing of the present rate, by general agreement. Impediments to trading have been multiplied by the break up of great political units in Europe, and national animosities have blinded people to the consequences for themselves as well as for their neighbors.

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See: International Trade; Economic Policy; Colonial Economic Policy; Libfralism; Economics, section on Physiocrats; Protection; Mercantilism; Balance of Trade; Tariff; Customs Duties; Customs Unions; Commercial Treaties; Corn Laws; Anti-Corn Law League.

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FREEDOM. See LIBERTY.

FREEDOM OF ASSEMBLY. See ASSEMBLY, RIGHT OF.

FREEDOM OF ASSOCIATION. The principle of freedom of association has two aspects. On the one hand, it involves the idea of a recognized legal right on the part of all persons to combine for the promotion of purposes in which they are interested; on the other, it includes the right freely to assemble for the purpose of public meeting.

Each aspect of the principle has a long and complex history behind it. Freedom of association has never been universally admitted as a legal right until the present day; and even now it is hedged about, in most countries, with important restrictions which cut at its root. The essence of the problem involved may be said to be the fact that membership in an association the purposes of which conflict with those approved by the government of a given state involves issues of allegiance which the state is not prepared to confront. Until quite modern times these issues revolved round the relationship between church and state. Protestant states tended to limit the right of Roman Catholics freely to worship in their own way, on the ground that they owed allegiance to a foreign sovereign, the pope, and hence could not be regarded as satisfactory citizens of the secular community to which they belonged. Roman Catholic states, as France under Louis xIV, took the view that national unity was impaired by differing religious views; and the revocation of the Edict of Nantes in 1685 was intended to make coincident membership of the state and the church. In general this phase of the problem is largely although, as Spain, Mexico and Italy make plain, by no means wholly obsolete; and the issues involved have been transferred to other fields.

These are in general political and industrial. On the one hand is the problem of the treatment to be meted out to groups which dissent from generally held views in a particular community. Combination to promote such views has variously been regarded as legal or as so highly illegal as to merit the severest punishment. In Great Britain, for example, there is no legal barrier to the formation of any association however widely its purposes may diverge from those normally accepted by public opinion; action to promote such purposes may nevertheless easily bring its proponents within the ambit of a rather widely drawn law of sedition. In the United States a similar general freedom to combine exists; but most states have passed laws to make illegal combinations which seek to promote syndicalist or communist opinions; the law of California has been most notoriously enforced.

In countries where the tradition of the Roman law has been dominant the case has been otherwise. In France, for example, save for brief moments of revolutionary temper, as in 1789-91 and 1848-49, freedom of association has been rigorously controlled; and its general admission dates only from 1901. While freedom of association is guaranteed to all German citizens in the Weimar constitution, the regulation of the constitutional right is left to the Reichstag to implement by suitable legislation. In Holland a general right of association was established by the constitution of 1848 with, however, the proviso that the law might regulate and limit its exercise in the interest of the public peace. Most modern written constitutions contain similar provisions.

On the industrial side the history of freedom of association is comparatively modern. Broadly speaking, it synchronizes with the coming of the industrial revolution. Once great masses of workers were aggregated into factories, it was inevitable that they should form trade unions to protect and improve their standard of life; and the formation of similar bodies by their employers was equally inevitable. In England the movement ripened early; and the repeal of the combination laws in 1824–25 gave a general right to the formation of trade unions, subject, however, to serious limitations inherent in such other branches of the law as that of conspiracy.

In the United States the general right of association has similarly been gravely restricted in labor relations by the judicial interpretation of certain constitutional provisions, notably the Fourteenth Amendment, and by the use of the injunction against trade unions which seek the normal objectives of trade unionism. In France the right of industrial association was recognized before the general right of association and dates from 1884; Belgium legalized the right even earlier in 1866. In each case, however, the existence of the general right must be read in the context of individual guaranties of protection afforded by the constitution to citizens, which in the practise of the courts considerably affect a freedom of association seeking to be more than nominal in character. It should be added that in countries where, as in Russia and Italy, the government is a dictatorship no freedom of association either industrial or political exists save where the object of a body is approved by the dictatorship.

The necessity of preserving a special discipline in the military, naval and police forces of the modern state has presented a special problem and has usually been held to justify a limitation upon the right of those engaged in them to form associations at all or to form associations having organic contact with outside bodies or to withhold their labor without the fulfilment of a unilateral contract of service. It is usual also to prohibit civil servants from activities which involve any action of the first two categories; but they are usually although, as France and Germany show, not necessarily prohibited while in the service of the state from taking part in such political activities as might prejudice the neutrality of the corps to which they belong. In some countries, further, all strikes are forbidden; in others, as in Great Britain, workers engaged in particular forms of vital public utilities are debarred from the withdrawal of their labor without due notice.

In general during the course of the last century the right to hold public meetings freely has won a slow although by no means universal recognition. Sometimes, as in Great Britain and the United States, the holding of any meeting has been legal subject only to the maintenance of the public peace; and the observance of this right has then been a matter very largely dependent upon the character of police administration. In England indeed, perhaps the historic home of free assembly, a classic case [Beatty v. Gillbanks, 9 Q.B.D. 308 (1882)] established the

right of men to assemble freely even when it was known that their lawful intention would involve illegal acts on the part of opponents. In other countries the law has been less generous; and conditions such as obtaining previous permission from the police, confining the speeches made to a given language, limiting the age or character of the persons admitted, providing a list of speakers deemed satisfactory by the authorities and so on have been normally opposed. In the post-war period it is probable that the disturbed conditions of Europe have seen larger and more intense interference with freedom of assembly than in any other epoch since 1848.

The outstanding names in the history of the theory connected with freedom of association are those of Hobbes and Rousscau on one side and, although implicitly rather than explicitly, John Locke on the other. In his classic *Levia*than Hobbes argued against any permission freely to form associations, on the ground, to use his homely metaphor, that corporations were "like worms within the entrails of a natural man." In his judgment they tended to detract from the allegiance men owe to the state and should therefore be rigorously discouraged. Rousseau took a similar view. Since for him the state embodied the general will which is by definition infallible, any lesser will must necessarily be inferior in quality and hurtful in action. He therefore urged the undesirability of associations on the ground that they interfere with the duty of the individual to give himself wholeheartedly to that general will which as embodied in the actions of the state represents his best interest. It was in accordance with Rousseau's doctrine that the French National Assembly had passed in 1791 the Loi de Chapelier prohibiting the existence of associations.

Locke took a different view. Whereas for both Hobbes and Rousseau the omnicompetent and organic character of the state was essential, for Locke its essence was that it should be both atomistic and limited in function to certain specified purposes. One of these was the maintenance of order; and he agreed that the state has the right of interference for this end. But his treatment of churches in the Letter concerning Toleration shows that in his view, so long as an association does not threaten the public peace, the state has no right to interfere with its activities. That view is the effective beginning of liberal doctrine on the subject; a view, it may be added, which has received support from men so varied as Voltaire and Adam Smith, RoyerCollard, Guizot, Benjamin Constant and William Godwin.

As a matter of social philosophy it is clear that no state charged with the maintenance of social order can admit an unlimited right to freedom of association; for that would be to tolerate the existence of bodies actively engaged in an effort to seek its own overthrow by violence. It seems therefore that the legal limit of free association should not be held to be exceeded until the body concerned ceases to promote its ends peacefully. This is the implication of Mr. Justice Holmes' well known dissent in Abrams v. United States [250 U. S. 616 (1919)]. To illustrate: a government could hardly do otherwise than interfere with such a body as the Ulster Volunteers, who in 1913-14 announced their intention of resisting the application of the Home Rule Bill of that year by force of arms; who also engaged in military training and the purchase of military equipment to enable them to carry out their purpose. It is of course important that the government should have no power to judge the validity of their case; to confuse executive and judiciary in these crucial matters is to destroy the possibility of freedom.

It is difficult in the light of history to see that anything has been gained in the long run by multiplying prohibitions upon the right of association. Where men feel passionately upon some object they will combine to promote it; and any prohibition upon their effort to do so only serves to drive their activities into secret channels where their discovery is more difficult. It may well be argued, for example, that much of the violence of French and Russian history in the nineteenth century was due to exaggerated suppression of the right to form political associations; for men who cannot persuade a government to accept their view will seek sooner or later to impose it upon that government. Prohibitions do not seem to have any long run effect save that of exacerbating the temper of the disputants. For while it may be true that more cautious spirits will be driven by fear of the law to accept its prohibitions, that only leaves the association outlawed in the possession of more daring and desperate minds. The history of the revolutionary movement in Russia is a sufficient commentary upon this thesis.

Experience shows, however, that there is solid ground for limiting the right of association within the armed forces of the state and, although less decisively, controlling the political activities of their members. The history of France and Spain shows clearly the grave damage that results from allowing the army and navy to play a large part in the disposition of political forces. In a lesser degree this is true of the civil service, although here it is fairly certain that a line can conveniently be drawn between civil servants engaged in the performance of important functions and those who may be regarded as no more than clerks who happen to serve the state rather than a private employer. The influence of the first class depends for its beneficial effect almost wholly upon public confidence in its neutrality; the influence of the second is no greater than that of any similar group of persons engaged in similar employment.

The modern state must decide upon three grave questions. How far does it propose to protect individual freedom of contract? How far does it propose, if at all, to limit the peaceful methods taken by industrial associations to advance their interests; for instance, does it propose to limit freedom to strike in vital public utilities? How far does it propose to declare illegal activities of industrial bodies which whether by reason of their purpose or their magnitude seek a change in the character of public policy; for example, a general strike to secure an eighthour day in industry? To the first problem it may be said briefly that the modern state confronts a dilemma, since it is a commonplace in an industrial society that liberty of contract begins where equality of bargaining power begins; and it is just this equality of bargaining power that freedom of association seems alone able to secure. In any save the most newly settled areas the individual worker able to protect himself in an industrial sense is a sheer illusion.

In any case the answer to this, as to the other questions, depends upon a political philosophy in which wide variations of opinion exist. Men will reply to them in terms of the kind of society they effectively want; and their effective wants will in turn depend most largely upon the distribution of economic power in any given society. Freedom of association, in short, raises issues which go to the root of the modern state. Its realization is the very essence of liberty in any society. Without it no other freedom can have very much content. With it the maintenance over any lengthy period of a social order distinguished by inequality is a matter of grave difficulty. This only can be said with confidence, that liberty of association is most easily maintained where men are agreed about the kind of society they want. But to agree means as a rule

that they have an equal interest in the results of its operations. Where that result is for long unequal it is certain to be challenged. Such challenge is a threat to order; and in the effort to maintain it there are few governments prepared to allow freedom of association to continue.

HAROLD J. LASKI

See: Association; Liberalism; Natural Rights: CIVIL LIBERTIES; ASSEMBLY, RIGHT OF; FREEDOM OF Speech and of the Press; Labor Movement; Trade Unions; Conspiracy, Criminal; Criminal Syndi-CALISM; COMBINATIONS, INDUSTRIAL; CLUBS, POLITICAL. Consult: Nourrisson, Paul, Histoire de la liberté d'association en France depuis 1780, 2 vols. (Paris 1920); Worms, Emile, De la liberté d'association au point de vue du droit public à travers les âges (Paris 1887); Crouzil, Lucien, La liberté d'association (Paris 1907); Dicey, A. V., Introduction to the Study of the Law of the Constitution (8th ed. London 1915) p. 266-79, 497-512; Webb, Sidney and Beatrice, The History of Trade Unionism (rev. ed. London 1920); Hoagland, H. E., "Association and Co-operation" in Commons, J. R., and others, History of Labor in the United States, 2 vols. (New York 1918) vol. i, p. 493-521; Barrault, H. E., Le droit d'association en Angleterre (Paris 1908); International Labour Office, Studies and Reports, ser. A., nos. 28-32 (Geneva 1927-30). For general problems see: Laski, II J, Laberty in the Modern State (New York 1930); Elliott, W. Y., The Pragmatic Revolt in Politics (New York 1928).

FREEDOM OF CONTRACT is a doctrine which came into constitutional law late in the nineteenth century. In its name courts are called upon to declare invalid statutes regulating the conduct of business and setting bounds to its domain. It is the judicial expression of the independence of the economic order from the overlordship of the state. The phrase belongs to law; its meaning is an importation from common sense and from economic thought.

As the mediaeval order gave way before the impact of business and the machine process, an unplanned industrialism came into existence. Apart from the maintenance of legal institutions, such as property and contract, there was little chance for the exercise of formal social control. The opinion came to prevail that every man could protect himself through his right of contract, that the aggregate of terms of a multitude of bargains gave order to business activity and that industrial functions were best performed by being left to the interested parties. As business came to control industry, these popular notions were elaborated into an intellectual defense of its autonomy. The philosophers laid alternative foundations in natural rights and in utilitarianism; the economists constructed the theory of a

self-regulating industrial order; and the political thinkers formulated the practical philosophy of laissez faire.

So long as individualism was unquestioned, freedom of contract was a reality rather than a judicial doctrine. Its formal expression demanded an occasion for its assertion, a personnel of judges imbued with its spirit and legal categories to serve as receptacles for its thought. The occasion came in the second half of the nineteenth century-economic problems were discovered; exceptions were noted to laissez faire; and regulation began to be employed to put industrial matters to rights. If business was not to lose its integrity, an appeal had to be taken from the legislature to the judiciary; the higher law had to be invoked against statutes. To that end the economic theory of competition had to be converted into a doctrine of constitutional

The jurists of the eighties and nineties were ready for the constructive task. They had formulated their social theories just as an agrarian was becoming an industrial society. They had experienced individual bargaining, could attest the justice in letting each man look out for himself and were conscious of how America had prospered under its free institutions. They did not easily distinguish liberty and property, for liberty meant the opportunity to acquire property; they saw the emerging business community in terms of a pioneer society which was passing. The values of a frontier democracy were to the fore in their minds; to them one man was as good as another; a first principle of government was "equal rights to all and special privileges to none." Their own views were confirmed by the teachings of the classical economists and by the individualistic social theory of Herbert Spencer and of a William Graham Sumner who had not yet discovered the folk ways. They had begun the reading of law with Blackstone's Commentaries, in which the individual is the hero and the state the villain in the piece; sampled Coke's Second Institute, which was a by-product of revolt against authority; learned from Cooley the constitutional limitations upon government; and shared Maine's discovery of the cultural significance of the replacement of status by contract. At the time the study of social maladjustment was just beginning; analyses did not exist to oppose fact to theory and to make clear in detail and with evidence wherein the industrial system did not work. The process of mind, especially in judicial circles, was still the way of dialectic.

As separate exemplifications of the efficiency of checks and balances law, economics, politics and sociology were as one, and they were in accord with the prevailing common sense.

The American constitution offered no more than the raw materials. The best verbal bridge by which economic thought might pass into law was contract; but liberty of contract is to be found neither on the parchment nor in the minds of the framers of the document. The strategic word appears only in the provision denying sanction to laws "impairing the obligations of contract." In its stead liberty had to be made to serve. The word had once meant no more than a privilege; an exemption of a town from the king's law or the right of a feudal lord to levy toll upon passing traffic was a liberty. But in the English and American revolutions conscientious men had to appeal to a higher power to justify a revolt against authority, and liberty was freed from petty associations and glorified into an abstract right of man. There was appended to the constitution shortly after its adoption a provision that no person should be deprived of "life, liberty, or property without due process of law." A like injunction was imposed by the nation upon the states at the end of the Civil War; the state constitutions contain the same self-denying ordinance. A collocation of words so evasive and compelling was an excellent verbal receptacle for current sense and reason. Moreover, the usages of the constitution meant more than its clauses; it had been drawn up when men believed in the order of nature; it recognized inalienable rights which the government could neither deny nor abridge; it was regarded as the highest law of the land; the Supreme Court had been accepted as its official interpreter; and the people had been habituated to the declaration of the unconstitutionality of legislative acts.

Although it embodies the supreme law of the land the constitution is not insulated against prevailing common sense. Almost as early as the Civil War the state courts were asserting that man wanted no sanction in law for a natural right to bargain. By the eighties they were declaring statutes unconstitutional, even though they were unable to specify the prohibiting clause or to reduce their arguments to formal doctrine. The questionable acts took away natural rights; added adult males, able to take care of themselves, to the insane, lunatics and imbeciles, who made up the common law category of persons incompetent to contract; and con-

travened a law higher than that made by the legislature.

It took time, skill and even accident for the United States Supreme Court to convert a group of constitutional ideas into a judicial laissez faire. The due process clause of the Fifth Amendment endured an interpretative obscurity of three quarters of a century. The purpose of the Fourteenth Amendment was at first understood by the public and declared by the court to be the protection of the rights of the newly enfranchised blacks. Freedom of contract had to win its province; the field was in the possession of "the police power," which might be used to promote "public health, safety, and morals" and even "the general welfare." The justices who sat during the decades following the Civil War were not disposed to depart from traditional interpretation and were loath to override the will of erstwhile sovereign states. The police power, with the help of the concepts of "public interest" and "common carrier," was employed to give the regulation of public utilities a promising start [Munn v. Illinois, 94 U. S. 113 (1877)]. The police power was invoked to sanction the legislative grant of a monopoly in the slaughtering of livestock and again to sanction the legislative revocation of the grant. In the first case the argument that the grant of the monopoly denied to persons excluded "the right to a trade" and thus abridged "the privileges and immunities" of national citizenship was rejected by a majority of one [Slaughter House Cases, 16 Wallace 36 (1873)]. In the second case the minority shifted their base to the deprivation of liberty "without due process of law," argued not that the repeal was valid but that the original grant had been invalid, and concurred [Butchers' Union Co. v. Crescent City Co., 111 U.S. 746 (1884)]. This opinion, often cited as if it had been official utterance, holds the germ of future law. But it was eighteen years after its adoption before the court invoked the Fourteenth Amendment to insure to a Chinese laundryman "the equal protection of the laws" and his right to a trade [Yick Wo v. Hopkins, 118 U. S. 356 (1886)]. In this period the men who did most to establish judicial veto were believers in the Declaration of Independence and opponents of privilege. They sought to keep the door open to personal opportunity.

As another generation of jurists came to the bench liberty of contract was discovered in the constitution. In 1886 the Supreme Court announced that a corporation was a "person"

within the intendment of the due process clause [Santa Clara County v. Southern Pacific Railroad Co., 118 U. S. 394]. In 1890 it held that the opportunity to earn income is a right of "property," with which regulatory measures must come to terms [Chicago, Milwaukee and St. Paul Railway Co. v. Minnesota, 134 U. S. 418]. In 1897 it decided that "liberty" embraced "the right of the citizen . . . to live and work where he will; to earn his livelihood by any lawful calling, and for that purpose to enter into all contracts which may be proper, necessary, and essential" [Allgeyer v. Louisiana, 165 U.S. 578]. In 1908 it declared liberty of contract to be a property right. The carry over of a philosophy from a pioneer to an industrial society is evident in this proposition: "The right of a person to sell his labor upon such terms as he deems proper is, in its essence, the same as the right of the purchaser of labor to prescribe the conditions upon which he will accept such labor" Current reason had found legal expression when the court declared: "In all such particulars the employer and the employé have equality of right, and any legislation that disturbs that equality is an arbitrary interference with the liberty of contract which no government can legally justify in a free land" [Adair v. United States, 208 U. S. 161]. The habitual use of such language imposed the legal label of "a deprivation of liberty" upon social legislation and extended protection against governmental interference from the individual to the corporation. But the justices who elevated freedom of contract to the dignity of a constitutional doctrine employed the borrowed language of economics as well as the native verbiage of the Bill of Rights. To them it was an instrument of general well being in a real, even if a vanishing, society.

The constitution brought to freedom of contract a new intellectual foundation: law speaks with authority; a principle laid down demands to be followed. After 1908 it was not necessary for justices, in its support, to argue expediency or to expound economic theory; it was enough to state the rule and to cite case and report. In its statement the practical ways of competition gave way to natural rights which demanded no apology. In "personal liberty" and in "private property," in fact "partaking of the nature of each," was "the right to make contracts for the acquisition of property." A disparity in bargaining power was an irrelevance; for it was "from the nature of things" impossible to uphold the rights without accepting as their "necessary"

corollary "inequalities in fortune" [Coppage v. Kansas, 236 U.S. 1 (1915)]. The "very purpose" of the constitution was "to prevent experimentation with the fundamental rights of the individual" [Truax v. Corrigan, 257 U. S. 312 (1921)]. The long catalogue of holdings through which a judgment of invalidity was passed upon a price fixing statute became "constitutional principles applied as they are written" [Tyson and Brother v. Banton, 273 U. S. 418 (1927)]. A powerful group in society did not want public interference with private business; a respectable body of opinion distrusted the capacity of the legislature for intelligent control. Thus, as freedom of contract shifted its ideological base, the collectivism called business passed into the province reserved as the rights of the individual.

It is impossible to indicate the scope of the doctrine by a catalogue of holdings. Freedom of contract and the police power together make up a formula of constitutionality. In its legal terms justices must strike the best balance they can between the social worth of laws and the inconveniences they impose. Judges are unlike in vision, experience and habit of mind, in regard for precedent and in response to current necessity. Their intellectual awareness ranges from an insistence that "the Constitution is not intended to embody a particular economic theory" [Lochner v. New York, 198 U.S. 45 (1905)] to an easy reading of personal views into its lines. Where values and interests clash over a period of years, no clear cut line can be drawn. Although the provisions in the state constitutions are worded almost alike, their local interpretations differ materially. The Supreme Court has vacillated in its devotion to the doctrine. From 1900 to 1916 social legislation had hard going; from 1916 to 1922 the fortunes of law broke rather evenly; from 1922 to 1930 rights were dominant and more statutes were pronounced null and void than in nearly half a century preceding; in 1930 a disposition to exalt freedom of legislation became evident. The legal basis for the regulation of railroads and public utilities was laid before the concept of property came to have judicial life, but due process has been used to justify judicial review of the acts of administrative commissions. The antitrust acts, in which contract in restraint of trade is forbidden, are an expression of the same economic theory that went into the constitutional doctrine. The zone between regulated monopoly and enforced competition has presented the great battle ground. Measures which manifestly promote health and safety,

such as the inspection of milk, the licensing of physicians, the limitation of hours of labor and the provision of work accident indemnity, have generally been upheld. Judicial disapproval has usually been visited upon statutes which fix price. In the name of public morals traffic in lottery tickets, alcoholic beverages and white slaves has been prohibited; an attempt to outlaw private employment agencies, as socially unnecessary, has been blocked by "the right to follow a distinctly useful calling in an upright way" [Adams v. Tanner, 244 U. S. 590 (1917)]. But a catalogue of instances makes hazardous even an approximate generalization. The decisions in favor of freedom of contract have usually come from a divided court attended by vigorous dissent. They serve as a very insecure basis for prediction.

The focus of criticism has been the judicial veto of statutes passed in the interests of consumers and laborers. Here the notion of a natural equality of men receives its most dramatic challenge from a society marked by great concentration of wealth and power. The large corporation produces soap, gasoline or textiles; it uses instruments of precision in devising the minimum standards of quality which vendibility makes necessary; it employs advertising and high pressure salesmanship to force its product upon an indifferent public. The consumer's mite of technical knowledge is crowded within a compact trade name; only if his personality is corporate can he match scientific test with scientific test and share in the terms of the bargain; his need is the exclusion of unworthy wares from the market. Yet statutes fixing the weight of loaves of bread, prohibiting the use of shoddy in manufacture and establishing standards of chemical composition for motor oils have been outlawed because of the buyer's ability to look out for himself.

The same impact of vested idea upon novel fact appears in a series of decisions restricting the use of the devices of trade unionism. Statutes prohibiting employers from discharging employees because of membership in labor organizations have been pronounced invalid; the employment of the secondary boycott in the unionization of a shop has been forbidden; the officials of a labor union have been enjoined from soliciting membership among working men bound by contract to remain non-union. None of these judgments came from a unanimous bench, and some state courts have refused to follow them. The laborer's lack of a choice was held to have nothing to

do with the case; in the prevailing view, if a man accepts a bargain because he possesses a family, must live and has no alternative, that is a matter of fact and not of law. In this way the courts have closed the doors to a judicial—and legislative—recognition of economic duress.

It is primarily freedom of contract which has given to the Supreme Court a place in the economic order. As modern industrialism reveals itself, there is an increasing resort to restrictive legislation. As the court separates valid from invalid statutes, it fixes the limits of the industrial province of government. Yet the Supreme Court is not an institution created for or adapted to the function of economic control. Its seat in Washington is far removed from the many localities where people must attend rather differently to their social problems; its personnel is fitted neither by profession nor by experience for the dominant role in the government of industry. Its way of decision is too steeped in reference to a text, deduction and stare decisis to be suited to an experimental task. It has no mechanism for gathering information upon economic maladjustment and the operation of corrective measures, and it lacks standards by which the relative merits of regulatory proposals may be tested. As a result judges are compelled to substitute a general tolerance of legislation or a personal preference for studied deliberation. In the absence of a reform in procedure the Supreme Court cannot act as an intelligent umpire in the continuing struggle between freedom of contract and the police power.

A chapter of judicial history still in the making may resolve the difficulty. The court as reconstituted in 1930 has subordinated liberty of contract and has rather consistently held social legislation valid. It has even, reversing a line of recent decisions declaring price fixing unconstitutional, held valid a statute regulating the commissions of insurance agents. In an opinion which leaves to the dissent the recitation of precedents the court announces a fitting procedure for the disposition of constitutional issues. No longer is "freedom of contract the rule" against which a specific statute must be proved a "proper exception" [Adkins v. Children's Hospital, 261 U.S. 525 (1923)]; instead, the statute is to be presumed to be valid, and the presumption is to be overcome only by a recitation of fact showing that the evil did not exist or that the legislative remedy was inappropriate [O'Gorman and Young v. Hartford Insurance Co., 282 U. S. 251 (1931)]. A judgment upon the validity

of a legislative act has in the past been regarded as final; but the same bench has permitted the reconsideration, in the light of "experience," of statutes upon the constitutionality of which the court had already passed [Abic State Bank v. Bryan, 282 U. S. 765 (1931); Missouri Pacific Railroad Co. v. Norwood, 283 U. S. 249 (1931)]. The current commitment to factual inquiry and realistic test is none too secure; it has the support of a bare majority. But should it continue to prevail, the due process clause could be invoked only against specific statutes proved to be arbitrary. Then freedom of contract would become a concept of the second magnitude or disappear from the constitution.

Yet, even if a change in the personnel should give a new lease of life, the days of the doctrine seem numbered. A tribunal already overbusy with judicial work must guard its jurisdiction. As evidence of industrial maladjustment accumulates and an attempt is made to make industrial activity serve social well being, all of our agencies of control are likely to be employed. Already the restriction of production, once an unholy idea, has come to be thought of as essential to prosperity; and the reduction of cotton acreage and of output in oil are legislative matters. As opportunism drives us uncertainly toward getting basic industries in order, the state seems destined to have some sort of a role in national planning. The sheer volume of work will make it almost impossible for the Supreme Court to supervise the regulatory work of Congress and the state legislatures; nor could the courts that are to be make much of the current doctrine. Its intellectual foundations are becoming increasingly insecure. The way of the eighteenth century thought with its vocabulary of "liberty" and "property," of "natural law" and "individual right" no longer suffices for a statement of the problem of economic control. The problem of "the state and industry" does not present a choice between "restraint" and "freedom"; government and business are alike schemes of control whose compulsions we must obey and within whose arrangements we may do as we will. Social legislation is not an abridgment nor free enterprise a realization of "industrial liberty"; they are alike rules of the game of making a living, alike in being of human contrivance and subject to improvement. There is no escape from taking a chance upon the best control for industry which we can devise. Freedom of contract came into the constitution to serve the prevailing common sense; the concept must be

refilled with current stuff of the mind—or cease to be a part of the supreme law of the land.

WALFON H. HAMILTON

See: Contract; Property; Contract Clause; Due Process of Law; Police Power; Judicial Process; Judicial Review; Vested Interfsts; Equality; Bargaining Power; Collective Bargaining.

Consult: Freund, Ernst, The Police Power, Public Policy and Constitutional Rights (Chicago 1904); Cases on Constitutional Law, ed. by D. O. McGovney (Indianapolis 1930); Keezer, D. M., and May, Stacy, The Public Control of Business (New York 1930); Dicey, A. V., Lectures on the Relation between Law and Public Opinion in England during the Nineteenth Century (2nd ed. London 1914); Pound, Roscoe, "Liberty of Contract" in Yale Law Journal, vol. xviii (1908-09) 454-87; Frankfurter, Felix, "Hours of Labor and Realism in Constitutional Law" in Harvard Law Review, vol. xxix (1915-16) 353-73; Powell, T. R., "Collective Bargaining before the Supreme Court" in Political Science Quarterly, vol. xxxiii (1918) 396-429, and "The Judiciality of Minimum-Wage Legislation" in Harvard Law Review, vol. xxxvii (1923-24) 545-73; Hamilton, Walton H., "Affectation with Public Interest" in Yale Law Journal, vol. xxvix (1929-30) 1089-1112; Frankfurter, Felix, Brief for Defendants in Ervor. Oregon Minimum Wage Cases (New York 1917); Interborough Rapid Transit Company against William Green, et al: Brief for Defendants (New York 1928).

FREEDOM OF SPEECH AND OF THE PRESS. Freedom of speech derives its meaning from two sources. Through the centuries it bespeaks efforts to eliminate the varying restraints placed by government upon utterance. The changing restraints thus fashion a changing concept. But also during the latter seventeenth century—an age of rationalism and natural law freedom of speech assumes the character of an ideal which, apart from particular restraints, is deemed of intrinsic merit to the progress of civilized life. In its first aspect it is primarily a rallying cry of minorities eager for expression. In its second it arrays itself as a philosophic truth to which history lends reality. Freedom of the press is an aspect of the larger freedom of speech, which since the invention of printing has presented its own peculiar problems.

The history of the struggle for free speech centers about the expression of ideas antagonistic to the existing religious, political or economic order. Greece presents an admixture of encouragement and restraint. Socrates' plea for the supremacy of the individual conscience and the public value of free discussion may be contrasted with Plato's demand for regimentation of thought. The Augustan age of Rome, careless of religious heterodoxy and social satire, was shortly followed by widespread prosecutions of

proselytizing Christians. The ascendancy of Christianity under Constantine brought the new religious heterodoxy under even severer penalties. The policy of proscribing the works of heterodox writers, begun by the Apostolic Constitutions and pushed with vigor by the Council of Niceae, culminated in the series of *indices* librorum prohibitorum that have issued from the papacy since 1559. The persecution of heterodoxy, a principle formulated by the high authority of St. Augustine, dominated Europe for centuries and created an atmosphere impossible to the freedom of expression. The Reformation shifted only the point and not the character of control. Calvin, Luther and the new English church were equally intolerant of heterodox expression.

What is termed the rise of humanism represents a period of appeal away from mere authority. Contest between philosophic truth and accepted faiths becomes inevitable and thus brings the issue of freedom of speech to the front. The effort to escape such an issue through the doctrine of the double truth—one philosophical, the other religious—as evolved by Averroes of necessity failed. In Catholic Europe until the eighteenth century the struggle for freedom of expression assumes a religious rather than a political complexion, freethinking in philosophy and science being challenged and punished as unorthodoxy. In England the growing participation of a wider public in government makes the issue, aside from the brief upheaval following the establishment of the English church, mainly a political one.

The idea of censorship is inapplicable to mere expression. Restraints upon freedom of mere speech must be achieved through punishment in the event that the bounds of the allowable liberty are passed. Censorship is applicable only when the necessity to use some means of communication affords an opportunity for government to intervene between the formulation of an idea and its expression. Restrictions upon freedom of expression are created by the offenses of libel and slander, obscenity, blasphemy and sedition. Their history is the latter day history of free speech. Together with censorship they portray the struggle for the freedom of the press.

Restrictions upon printing begin with the device of licensing and limiting the number of printers, printing being treated as a privilege to be pursued by grant from the crown. The bull of Alexander VI established censorship on a firm foundation in the Catholic world in 1501.

It was the recognized policy of England under Elizabeth. The strictness of the law of libel and sedition under the Tudor and Stuart monarchies, for a time severely enforced by the Star Chamber, stifled political criticism. It could voice itself only with difficulty through speech in Parliament and petitions addressed to the House for the redress of grievances. The punishment of blasphemy by the ecclesiastical courts, common law courts and the Star Chamber protected the tenets of the existing religion and tended to suppress publications of a freethinking nature. The Licensing Act of 1662 confirmed the principle of censoring the press. Its expiration in 1695 is commonly regarded as the beginning of the free press in England. But apart from ending the regime of censorship, years were to elapse before any significant latitude in the right of expression was acknowledged.

The eighteenth century marks the real struggle for freedom of expression. In England it is an era of large political moment, introducing a party system of government with an awake and vocal opposition. In France the era closes with revolution, and in America with the achievement of independence and the rise of a demand for liberty. Moreover, in the eighteenth century the newspaper begins to be an active agency in politics. Thus the century becomes an era of champions of freedom of speech and of the press. Milton anticipates it, but Locke, Voltaire, Rousseau, Wilkes, Paine, Camden, Erskine and Jefferson are of it, while Cobbett, Carlile and Mill carry on its issues.

The publication of news was originally regarded as criminal at common law unless done under the king's license. By 1700 this doctrine had disappeared, but publications of parliamentary debates were still punished as a contempt of Parliament. Edward Cave's attempt to report them in his Gentlemen's Magazine led in 1738 to his censure and his famous subterfuge of reporting their substance as debates in the empire of Lilliput. The next few decades saw them being reported in a more open manner as Parliament remained quiescent. Wilkes' bold attack in his North Briton (no. 45) in 1763 upon the Grenville government precipitated the issue of the extent to which government could be subjected to political criticism. The issue of free speech thus raised provoked the eloquence of Burke and the savage satire of Junius. Similar prosecutions, the chief of which were those of the publishers of Junius' letters and of Paine and his publishers, kept the issue bitterly alive. The

law of seditious libel, as expounded then by Lord Mansfield, left only the issue of publication to the jury, reserving the right to the judge to resolve the question of the libelous character of the publication. With judges mere tools of the crown, bitter political criticism was easily perverted into a libel upon the crown, the ministers or the constitution. The Fox Libel Act of 1792 altered the law to permit the jury to find both issues, but its importance as a practical remedy was for many years dulled by the deftness of prosecutors to select jurors of the requisite conservative political complexion. The thirty years following the French Revolution are marked in England by ministries fearful of acceding to the popular demands for political and economic reform and resorting to the suppression of criticism by severe and numerous prosecutions. Individual victories together with a change of ministry brought about the end of this era by 1832. Lord Campbell's Libel Act of 1843, which allowed truth as a defense to criminal libel, gave further scope to liberty of expression. With the abolition in 1855 of the "taxes on knowledge" or stamp duties on reading matter together with the repeal in 1869 of laws controlling newspaper publishers and printers through a burdensome and expensive system of registration, publication achieved release from onerous restrictions of long standing. Save for isolated acts of suppression, such as that of the Chartist agitation in 1839, freedom from prosecution for political criticism, even though of a violent nature, has characterized English polity for the past century. The achievement of freedom of speech and of the press, unlike other principles of English liberty, is hardly the product of legislative action. Perhaps as much a part of the constitution as any of them, its bases are individual victories over government tyranny resulting in a conviction of the inexpediency of setting political bounds to the right of discussion.

In France the dissemination of literature was controlled until the revolution by the licensing of printing and by strict censorship. Under such a regime the works of freethinkers, such as Voltaire, Rousseau, Raynal and the *encyclopédistes*, were banned. Freedom of expression was erected into one of the natural rights by the Declaration of the Rights of Man and the constitution of 1791. It survived, however, only a scant two years, and the policy of suppression through severe penalties and censorship was continued until 1828. Freedom of political expression in the daily press, however, begins to attain reality

only after the establishment of the Third Republic. Other European countries, following the outlines of the French methods, possess claborate regulations dealing specifically with the press. The essence of control is through administrative regulation and the affixing of responsibility on managing editors. The regulations although detailed and superficially formidable do not, in the opinion of foreign observers, appreciably curtail the liberty of the press in normal times.

The American colonies began with restrictions upon freedom of expression akin to those of England. Puritanism in New England vigorously disapproved and persecuted religious heterodoxy. Religious toleration had a beginning in Rhode Island and a precarious foothold under the Baltimores in Maryland. But as in England the struggle for freedom of expression centered finally upon political rather than religious issues. Until about 1720 the licensing of printing and censorship of the press were maintained. The first American newspaper, Publick Occurences, was promptly suppressed for want of a license in 1690. Although the records reveal prosecutions, the law of seditious libel had no such pervasive impact as in England. After 1763 the press in large measure supported the colonists in their contests with the crown. Attempts at suppression promptly allied the cause of a free press with the issue of independence. The ideals of Milton and Locke found a ready reception in the perturbed colonies, and the cause of Wilkes firm sympathy. Amid such stirrings the early constitutional bills of rights setting forth the freedom of speech and of the press were adopted. Beginning with Mason's Virginia Constitution of 1776 declarations of the right of freedom of expression found their way into other state constitutions. 'The Massachusetts constitution of 1778 failed of adoption because of its omission to include such a provision. Ratification of the federal constitution was impliedly conditioned upon the addition of a like guaranty, confirmed by the First Amendment (1791). The issue as to the import of this amendment, whether it simply forbade censorship or guaranteed a breadth of utterance akin to the rationalized ideals of Locke and Wilkes, became a justiciable one during the excitement of the World War. Judges have inclined to give it a narrower sweep than the historical evidence would seem to imply.

Under the constitution the issues of free speech have been dramatically raised on two

occasions. The Alien and Sedition laws of 1798, federalist measures engendered by fears of the spread of foreign revolutionary doctrine, punished severely writings defamatory of the government. The series of prosecutions although memorable was short lived. The laws expired with the Federalist party and indeed contributed largely to its wreckage; the prisoners were pardoned by Jefferson and reimbursed by Congress. The World War was productive of a not dissimilar experiment. Pro-Germanism, the teachings of the Russian Revolution, a distrust of the patriotism and economic outlook of the foreigner and widespread industrial unrest fanned the prevalent wartime spirit of intolerance. It produced the Espionage Act of 1917 and the Sedition Act of 1918, almost equal in severity to the Alien and Sedition laws, and with them a host of prosecutions for radical utterances. It revived a policy of expelling members from legislative bodies for the expression of ideas inimical to the more conservative patriots. In the schools it resulted in a mass of regulations governing subject matter, the manner of instruction and the professed beliefs of the teachers. It evolved the use of deportation as a means for ridding the country of alien radicals. It tolerated state trials in which the issue of radicalism tended to submerge those of the guilt or innocence of the accused. In the middle and far west a series of syndicalist statutes heavily punished the expression of ideas radically critical of the existing order. Against these restrictions resort was had to the constitution and the courts for vindication of the freedom of expression, but with scant success.

The World War and its aftermath of revolutionary doctrine have markedly affected the progress of freedom of speech. Countries theretofore dedicated to principles of extensive freedom have witnessed a series of suppressive measures reminiscent of carlier centuries. Economic heresy has been elevated to the rank of revolutionary doctrine. The post-war dictatorships in theory and practise jettisoned all principles of free speech. In Italy and Russia the strictest political censorship prevails and no opposition press exists. Such results naturally follow the rejection of the democratic idea, and the permanency of such a policy hinges upon the validity of that rejection.

The doctrine of free speech bases itself upon a conviction, fortified by experience, that "the best test of truth is the power of the thought to get itself accepted in the competition of the

market." No person or group is deemed wise enough to be trusted to discriminate between valid and invalid ideas. It recognizes that suppression of itself either tends to impart a factitious validity to the suppressed idea or that the idea, if valid, will survive such persecution. On the other hand, if opposition by speech is allowed, it will be impotent if the speech is mere fulmination; if the thought is valid it will effect the inevitable change in existing institutions by the non-disruptive process of conversion. But that the public safety demands that certain limits be set to the bounds of free speech is also recognized, premised upon the fact that for the moment "eloquence may set fire to reason." The problem lies in framing these limits as ultimate safeguards because of the tendency of legislators and judges, especially in times of stress, to regard ideas of which they disapprove as dangerous to the public welfare. In England the attempt to frame general limits was abandoned by the Campbell Committee in 1843, when it reported that "the limits of authorized discussion on political subjects are at present very undefined" but "from the mildness with which this branch of the Criminal Law has been administered . . . little practical inconvenience has been experienced from the arbitrary doctrines of past ages, though they have never been formally suspended." In the United States constitutional guaranties have necessitated the framing of limits beyond which the suppression of speech may not go. The First Amendment acts as a restraint upon national power, and in 1925 it was established that the liberty protected from state interference by the Fourteenth Amendment included freedom of expression. The test developed allowed government to penalize the use of words intended to create a clear and present danger of the happening of certain substantive evils that government may seek to prevent. As such the test is applicable both in peace and war, but war enhances the power by entitling government to regard as dangers matters beyond its ordinary peacetime jurisdiction. The test is a shadowy one, in which proximity and degree allow indefinite play for the emotions of varying judges. A significant contribution in further defining its nature was made separately in 1927 by Justice Brandeis, who insisted that the incidence of the evil apprehended by the words used must be so imminent that it might befall before there is opportunity for full discussion.

Speech offensive to religious and social morals presents still another problem. Both England

and the United States present the anachronistic spectacle of retaining upon their statute books blasphemy acts long antedating the period of religious liberty. In both, the statutes, although nominally dead, have been employed in sporadic instances to make criminal the use of language less blasphemous than critical of existing social institutions. The circulation of obscene publications is penalized by the criminal laws by barring them from the mails and by forbidding importation. In some cities a virtual censorship is exercised through threats of prosecution by states' attorneys, assisted by unofficial societies for the suppression of vice. Again the issue of the standard of obscenity raises crucial problems. Many recognized classics have been or are still under the ban of such regulations, as their administration tends to fall into the hands of officials incompetent to discriminate between literature and salacity.

Extralegal controls over the publication of news as well as opinion are again a natural outcome of a press organized upon the same basis as giant industry. Financial and political pressure not only colors current reporting but closes the avenue of expression to undesired ideas. The World War's demonstration of the power of organized propaganda brought in its wake the use of similar mechanisms for the promotion of private ends. Such factors tend to transform the struggle for the freedom of the press into one for its independence.

J. M. Landis

See: Civil Liberties; Assembly, Right of; Bills of Rights; Declaration of the Rights of Man and the Citizen; Agitation; Censorship; Intolerance; Dictatorship; Blasphemy; Libel; Antiradicalism; Sedition; Alien and Sedition Acts; Contempt of Court

Consult: Schroeder, Theodore, Free Speech Bibliography (New York 1922); Chafee, Zechariah, Freedom of Speech (New York 1920); Dicey, A. V., Introduction to the Study of the Law of the Constitution (8th ed. London 1920) p. 202-79; May, T. E., and Holland, Francis, The Constitutional History of England since the Accession of George the Third, ed. by F. Holland, 3 vols. (London 1912) vol. ii, chs. ix-x; Paterson, James, The Liberty of the Press, Speech and Public Worship (London 1880); Duniway, C. A., The Development of Freedom of the Press in Massachusetts, Harvard Historical Studies, vol. xii (Cambridge, Mass. 1906); Wickwar, W. II., The Struggle for the Freedom of the Press 1819-1832 (London 1928); Dawson, Thomas, The Law of the Press (London 1927); Hale, W. G., The Law of the Press (St. Paul 1923); Bury, J. B., A History of Freedom of Thought (London 1913); Freedom in the Modern World, ed. by H. M. Kallen (New York 1928); Haynes, E. S. P., The Decline of Liberty in England (London 1916) ch. v; Whipple, Leon, The Story of

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Civil Liberty in the United States (New York 1927); Selected Articles on Censorship of Speech and the Press, compiled by Lamar T. Beman (New York 1930); Ryan, J. A., Declining Liberty and Other Papers (New York 1927); Collet, C. D., History of the Taxes on Knowledge, 2 vols (London 1899); Bell, Clive, On British Freedom (London 1923); Lippmann, Walter, Liberty and the News (New York 1920); Great Britain, Foreign Office, The Press Laws of Foreign Countries, ed. by Montague Shearman and O. T. Rayner (London 1926); Salmon, L. M., The Newspaper and Authority (New York 1923); Warren, Charles, "The New 'Liberty' under the Fourteenth Amendment" in Harvard Law Review, vol. xxxix (1925-26) 431-65; Hatin, L. E., Manuel théorique et pratique de la liberté de la presse, 2 vols. (Paris 1868); Potulicki, Michel, Le régime de la presse (Paris 1929); Buell, R. L., Contemporary French Politics (New York 1920) ch. ix; Berner, A. F., Lehrbuch des deutschen Pressrechts (Leipsic 1876); Zimmermann, Friedrich, Die Grundbegriffe des französisch-belgischen Press-Strafrechts, Strafrechtliche Abhandlungen, vol. lxxxi (Breslau 1907); Mannheim, H., Pressrecht, Enzyklopädie der Rechts- und Staatswissenschaft, Abteilung Rechtswissenschaft, vol. xxiiⁿ (Berlin 1927), which contains a good bibliography of continental literature.

American Judicial Decisions: Schenck v. U. S., 249 U. S. 47 (1919); Abranis et al. v. U. S., 250 U. S. 616 (1919); Gitlow v. People of New York, 268 U. S. 652 (1925); Whitney v. California, 274 U. S. 357 (1927); Stromberg v. People of the State of California, 283 U. S. 359 (1931); Near v. State of Minnesota, 283 U. S. 697 (1931).

FREEDOM OF THE SEAS, as a term of international law and politics, has accumulated through three thousand years of usage a rich and varied content. It has come to refer, first, to navigation, fishing and indirectly to trade on the high seas and in coastal waters, if not on interoceanic canals and international rivers, in time of peace; and, second, to similar activities on the part of both neutral and belligerent vessels, naval or mercantile, in time of war as well as to the conduct of naval hostilities themselves. At different times different aspects of the question appear to constitute the whole problem of the freedom of the seas, but neither of the two main aspects of the problem may be regarded as entirely settled.

During antiquity various efforts were made by piratical individuals and groups as well as by Greek and Roman governments to close or open various portions of the Mediterranean basin; these activities were vigorously discussed in the political life and the literature of the time. During the Middle Ages Venice, Genoa, Spain and England put forward claims to territorial sovereignty over various portions of the Mediterranean, the Atlantic Ocean and the narrow seas of northern Europe; such claims seem to have

been acknowledged from time to time by navigators of various nations and by their governments. At the end of the fifteenth century, however, the claims began to be denied. Grotius' Mare liberum of 1609 marks the culmination although not the ultimate triumph of this denial; the last great assertion of the case for dominium maris was made by the Englishman John Selden in his magistral work Mare clausum (1635).

On the other hand, the wartime phases of the question had begun to grow in importance from the fifteenth century onward, and by the beginning of the nineteenth century assertions of neutral rights and of belligerent rights of visit and search, blockade, capture for carriage of contraband, and unneutral service had taken the place occupied two centuries before by the other aspect of the problem. In proportion as neutral rights were extended and respected a greater freedom at sea was provided; in proportion as belligerent rights of blockade and capture for carriage of contraband were extended that freedom was restricted-at least for the neutral. These controversies continued until 1914 along with persistent discussion of modern versions of the problem of territorial waters—marginal belts, gulfs and bays, straits and other questions. During the World War the conflict between neutrals and belligerents became very acute and revived discussion of the freedom of the seas. Since that time the question has been allowed to slumber except for some discussion of smuggling.

The national interests at stake in these various questions are numerous. In earlier days governments and individuals and trading companies desired opportunities for exploration, colonizing activities and trade or desired to prevent such activities on the part of rivals; monopolistic schemes of colonial trade reenforced these desires. Later the dominant naval power—such as Great Britain -came to demand recognition of its rights: at first to maritime dominion and, later, apart from any claims to territorial jurisdiction over the sea, against trade calculated to aid its enemies in time of war. Smaller naval powers, shipping nations and neutrals have demanded freedom from such authority; the United States belongs traditionally to this group and went to war over the question with France in 1798, with Great Britain in 1812 and with Germany in 1917. Today these same interests impel the various nations to oppose or advocate naval disarmament.

International law has registered the net results of the conflicts and controversies just mentioned

with greater or less exactitude and clarity, depending upon the state of the science of the law and also the state of the art of international government. Prior to 1500 no science of international law existed to register prevailing practise and agreement upon the subject. In the next three hundred years the students of international practise (Gentilis, Grotius, Selden, Bynkershoek and others) succeeded in discovering and setting forth the law to a certain extent, but international legislation and adjudication upon the question was still lacking. Beginning in 1800 the science of maritime law grew considerably and the law itself was developed not merely by practise but by international treaty agreements many in number and extensive in scope.

With regard to the wartime aspect of the problem the high water mark in international legislation was thought to have been reached in 1909 in the Declaration of London, which purported to complete and perfect certain Hague conventions of 1907 and thus bring to a close many previous controversies regarding belligerent and neutral rights-mostly to the benefit of the neutrals. Unfortunately for this view the Declaration was never ratified and the Hague conventions also lacked support in some quarters. This situation, coupled with the appearance of the submarine and the airship, new scientific and industrial processes and government control of industry and trade in belligerent countries, rendered the older rules of maritime war and neutrality somewhat obsolete. The preexisting law was rather freely disregarded during the World War and no effort has been made since that time to redefine the rules. Indeed, the problem has been carefully-and wiselyavoided by responsible statesmen on several occasions.

The future of the problem must be affected by several factors. A nation's freedom on the seas and its share in the writing of sea law defining that freedom depend upon its ability to match the naval power of rival nations or upon its opportunity to share in the benefits of action by the international community intended to control the dominant naval powers and write a just law of the sea. It is the former alternative which in large part lies back of the rivalry in naval armaments which led to the conferences in Washington in 1921-22, Geneva in 1927 and London in 1930. The rise of the United States to a position of naval parity with Great Britain enables her to demand maritime rights which in the past she could never be sure of obtaining, although

whether she will make such demands depends upon various factors. Franco-Italian naval rivalry in the Mediterranean, on the other hand, is not so much a struggle for relative influence in writing maritime or prize law defining the freedom of the sea as for sheer physical dominance in terms of potential naval combat. No attempt to rewrite the law of maritime war today could succeed in view of the technological factors as well as political factors such as the disarmed position of Germany and the pacifist opposition to any recognition of a "law of war." Any such attempt could be productive only of harmful controversy, although neglect or inability to revise the prize law of 1914 will result in unlimited confusion and controversy if war does break out again among the maritime powers.

Finally, much depends upon the possible development and actual use of international government, particularly international sanctions. The peacetime aspect of the problem will persist, of course, as long as nations are nations. And mere limitation or reduction of armaments can have no effect in regard to wartime freedom of the seas until reduction reaches a point rendering belligerent power over neutral shipping negligible and inequalities among naval strengths unimportant, a point not likely to be reached very soon. Elimination of war by renunciation or any other method would remove one whole branch of the problem at a stroke, but if elimination of war is to be accomplished by a system of sanctions or if a system of international military sanctions is ever accepted and invoked for this or any other purpose, the whole problem is altered and reopened in new form. A League which closed the seas as a police measure would destroy freedom at sea even though the surrender of freedom was voluntary on the part of the participating nations. The United States by remaining out of the League and insisting-prospectively—on its neutral rights has threatened to nullify any such League action; the British dominions and Great Britain herself, in part because of the attitude of the United States but also because of a reluctance to serve as policeman of the Europe of 1919, have taken a similar position. If, on the other hand, the United States abandons the neutral position in order to help maintain peace under the Briand-Kellogg Peace Pact she must thereby voluntarily surrender her cherished freedom of the seas. How much maritime freedom any one nation will be able to enjoy in the future is thus likely to depend not merely as heretofore on its own power but

largely upon its relation to the League and to organized sanctions of international peace and order—in other words, upon the establishment and working of international government. In the absence of such developments freedom at sea for most nations will depend as always on the moderation of the great naval powers in writing and enforcing the maritime law of peace and war or in exercising their power at sea without law.

PITMAN B. POTTER

See: MARITIME LAW; INTERNATIONAL LAW; NEUTRALITY; BLOCKADE; CONTRABAND OF WAR; SEARCHES AND SEIZURES; SMUGGLING; DECLARATION OF LONDON; LIMITATION OF ARMAMENTS.

Consult: Potter, Pitman B., The Freedom of the Seas in History, Law and Politics (New York 1924), for discussion prior to 1924 and extensive bibliographies; Garner, J. W., Prize Law during the World War (New York 1927); Jessup, Philip C., The Law of Territorial Waters and Maritime Jurisdiction (New York 1927); Masterson, William E., Jurisdiction in Marginal Seas (New York 1929); League of Nations, Preparatory Committee for the Codification Conference, Conference for the Codification of International Law, Bases of Discussion . . . Territorial Waters, C. 74. M. 30, 1929, V. 2 (Geneva 1929); Kenworthy, J. M., and Young, G., The Freedom of the Seas (London 1929).

FREEHOLD when used originally in English law designated an interest in land held by a freeman by a free tenure; in more modern times it has signified an interest in land for an indefinite period of time. The distinction between free and unfree tenure is historical rather than logical, the former comprising non-service estates which in quantity were neither tenancies at will nor for terms of years. In England by the thirteenth century the distinction became hard and fast. The real actions of the king's courts for the protection of seisin were given only to those who were seised of a free tenement. Between free and unfree tenures it was often necessary to draw a fine and somewhat arbitrary line.

In Bracton's day the free tenures were of four types: frankalmoign, military service, serjeanty and free socage. Frankalmoign was an exceptionally privileged tenure by which religious persons or bodies held land but without any obligation of fealty. Such services as may have been due were religious in character, enforceable by spiritual censures. Since one of the characteristics of this tenure came to be the absence of any obligation to perform secular services, it has been looked upon as the type of freehold tenure most closely approximating free ownership. While in the twelfth century jurisdiction over frankalmoign land had belonged to the ecclesiastical

courts, in the thirteenth this supervisory control was assumed by the king's courts through the development of the assize of utrum. Two statutes of the period, of Mortmain (1279) and Quia emptores (1290), diminished the importance of frankalmoign and brought about its obsolescence, the former by prohibiting all sales or gifts of land to religious houses without the king's license and the latter by preventing subinfeudation and by providing that in grants in fee simple the religious house should hold of the lord paramount by fealty.

Military tenure or knight service was introduced into England by the Norman kings, who enfeoffed their followers with sizable tracts of land and obliged them to perform in return a certain amount of military service. According to Round the unit of the feudal host was the Norman constabularia of ten knights, and the number of knights due under military tenure was generally some multiple of this figure. The minimum unit for military purposes was known as the knight's fee; while varying greatly in size it was normally about four hides, or 480 acres. Under active military feudalism knight service was the typical feudal holding; but the Angevin rulers preferred a paid army as more effective in coping with baronial disorder and encouraged the commutation of military services for a money payment, which came to be known as scutage. Commutation, which soon became a fixture, permeated the entire military hierarchy, extending to the services due from the subvassals. When in the fourteenth century Parliament assumed control over scutage, military tenure was no longer a source of either soldiers or pay but was distinguished merely in the revenue provided in such feudal incidents as wardship and marriage. Scutage and the incidents of knight service were formally abolished by statute in 1660, when military tenure was converted into free and common socage.

Serjeanty was the type of freehold tenure requiring personal services. Serjeanty indeed meant service. The services might range from the duties of the royal household, positions of great dignity, to obligations to perform military services or to furnish military supplies. A tenure held directly from the king for personal service was called a grand serjeanty. Any other was a petit serjeanty. The serjeanties performed by the nobility came to be considered similar to tenure by knight service and the smaller military serjeanties virtually socage tenure. When in the fourteenth century the practise developed of

substituting contracts with hired services for the tenancy by serjeanty, the employment of this tenure to secure the performance of a great mass of small official duties gradually declined in popularity. Serjeanty, however, has not succumbed entirely; in England it has sturdily survived the sweeping land reforms not only of 1660 but also of 1922.

Socage was the great residuary tenure for all freeholds which were not held in frankalmoign, by knight service or by serjeanty. The term evolved from an expression used in Anglo-Saxon charters to concede jurisdictional rights. In the eleventh century socage was the tenure of the socman, or the peasant proprietor, but with time came to be less and less identified with a distinct social class. The relationship of tenure and status was a source of much confusion in the Middle Ages. While status was defined earlier, it did not determine tenure and gradually lost much of its significance as tenurial relations developed. The freemen of Domesday are not necessarily freeholders; for although only a freeman could hold in free tenure, servile lands were frequently held by freemen. Just as with the advance of the Middle Ages the tenants in military tenure were no longer knights in practise, so those holding in socage were not necessarily to be considered humble socmen but might come from a much higher social and economic station.

As opposed to spiritual, military and serviential tenure socage was essentially economic and specifically agrarian. The services due were indefinite: in some cases they were merely nominal—a pound of pepper or a rose annually; in others a substantial rent might be fixed. In addition, the charter might provide that certain labor services be performed on the lord's land, and to fulfil the obligation the tenant frequently employed subvassals. In the fourteenth and fifteenth centuries it became customary for the fixed manorial dues in kind to be commuted into money payments. The more indefinite obligations of free socage gradually disappeared and the modern economic rent paying freehold evolved. Socage tenure owed its increasing popularity to the desire of military tenants to rid themselves of such oppressive mediaeval incidents of their holdings as military services and scutage and the even more persistent incidents of wardship and marriage. Least encumbered by troublesome feudal obligations, socage gradually superseded other forms of freehold tenure.

The line separating the manorial tenants in

villenage from their neighbors holding in fee was often a very shadowy one. Where the labor services were uncertain or where such services were exacted as the merchet—the payment for leave to give one's daughter in marriage or to send one's son to school—the court would hold that villein tenure was indicated and would deny the legal remedies available in free socage. The social distinction was even more subtle than the legal, for both the frecholders of moderate estate and the substantial customary tenants have generally been placed in the same category of yeomen with common social and economic interests.

At common law freehold tenures descended according to the rule of primogeniture. This and other customs intrenched in feudalism were not, however, universally applicable to free and common socage. In commercial regions such as Kent, where manorial husbandry apparently did not make important inroads and where money payments were generally preferred to feudal dues, certain customs antedating the common law survived until modern times. These are grouped under the general term gavelkind, associated with the old English word gafol, signifying rent or a customary performance of agricultural services. Among the most notable of these customs was the one providing that land descended equally to all the sons. There was no villenage in Kent, nor did land escheat for felony. The New England colonists in deference to these customs and in the belief that their charters introduced the special socage tenure of Kent transplanted it to America but reserved a double portion of the succession to the eldest son out of respect for the Old Testament precedent. Other customary rules different from the common law grew up in many of the boroughs. While partible descent was the rule, in some there existed the custom known as borough English, providing descent to the youngest son, probably on the ground that he was least able to care for himself. Both gavelkind and borough English have been abolished by modern statutes. Burgage tenure has often been described as but a form of socage tenure in the towns; but the former possessed far greater mobility and was distinguished by a freedom of devise.

The incidents of the free tenures were feudal in origin. The tenant became his lord's man by doing homage and swearing fealty in a solemn ceremony. Homage implied a reciprocal obligation; and with the breakdown of feudal jurisdiction it spread to all the free tenures in the modern guise of the covenant of warranty. The

relief, or the sum paid by the heir to the lord for permission to succeed to his ancestor's property, gradually extended from knight service to all freehold tenures, and the amounts due were soon fixed. Of great pecuniary value both to the king and the barons were the incidents of wardship and marriage which attached to knight service and grand serjeanty. The sons and heirs of the military tenants together with their estates were in the custody of the lord until majority. The lord also possessed the power of disposing of the female ward in marriage, of collecting a fine for an unlicensed espousal and of assessing a penalty where the ward declined the match proposed by the lord. With the gradual obsolescence of subvassalage as a result of the operation of the statute Quia emptores, wardship and marriage tended to become exclusively royal rights and were abolished in 1660. In addition, a lord had the right to call upon his tenant to help in certain emergencies, specifically defined in Magna Carta as the ransoming of the lord's person, the knighting of his eldest son and the marriage of his eldest daughter. These "aids" were likewise abolished in 1660. Furthermore, the tenant was bound to appear as an assessor in the lord's feudal court of justice. Since all feudal land is conceived to be held of some suzerain, if the tenant of a fee simple estate died without heirs or committed a felony his land escheated, or reverted, to the landlord. Finally, as an incident of feudal tenure various restrictions were imposed upon alienation in the form of fines. Prior to 1200 a vassal could alienate his land either by subinfeudation or substitution. As a result of the statute Quia emptores the latter method alone was legalized. Shortly thereafter it was settled that the lord could not charge a fine upon alienation in an attempt to evade the statute. The result was free alienation by substitution, but the depreciation of the incidents of escheat, wardship and marriage was halted. With the rapid disappearance of military service and the change in the money rates which brought about a decline in the value of rents due from socage tenants, the burdens imposed by such of these freehold incidents as were not abolished became appreciably lighter. Suit and service in the feudal courts disappeared when the judicial functions of these bodies fell into desuctude. With the enlarged power of testamentary disposition escheat for lack of heirs has become a rare occurrence, while escheat for felony is no longer enforced by law.

As a result of modern legislation the freehold

has been modified and simplicity substituted for complexity. Practically all tenure is now socage tenure. Knight service was converted into socage by the Statute of Tenures in 1660 (12 Chas. II, c. 24) and the remains of copyhold, originally the tenure of the unfrec tenants, was similarly treated under the Law of Property Act of 1922 (12 and 13 Geo. v, c. 16). In England today the only survivors of this assimilative process are frankalmoign and the services attached to grand and petit serjeanty.

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In England in the later Middle Ages the freeholders constituted an influential social and political group. In Domesday they comprised a very small percentage of the total population and less than 30 percent of the landed tenantry, and it is this minority whose rights and privileges were safeguarded in Magna Carta. According to the estimates of Tawney the freeholders of the sixteenth century comprised about one fifth of the landholding population, the customary tenants nearly two thirds and the leaseholders between one eighth and one ninth. While the substitution of large pastoral estates for small agricultural farms rapidly undermined the economic position of the customary tenant in this period of enclosures, the freeholder's well-being was increasing. The vast majority of landholders were socage tenants whose payments were fixed. With the fall in the value of money this fixed rent yielded a small income to the manorial lord, and in many cases the payments disappeared entirely by the end of the century. At the same time the rise in prices increased the freeholder's income. For two centuries longer the freeholders withstood rack rent and eviction, to which leaseholders and copyholders were subject. In this period the only way to eliminate them was to buy them out, an unusual procedure. The eighteenth century marked the beginning of the end. The enclosures of this period pitiably thinned their ranks and drove them from the villages or compelled them to stay as laborers on the verge of poverty. In modern times the tenant farmer and the agricultural laborer have largely supplanted the freeholder in the agricultural life of England.

The mediaeval common law was careful to restrict its rights and privileges to the *liber homo*, or freeholder. This distinction between freeholder and villein was clearly brought out in Magna Carta, which excluded the latter from most of its broad benefits. At times *liber homo* was used to signify a landowner with a manorial court—in other words, a large feudal tenant.

Only gradually did the servile tenants come to share with the freeholders a substantial portion of their rights at private law. In mediaeval England property qualifications determined attendance at the county court and service on juries, although many villeins were likewise obliged to serve in leet, tourn and hundred court and to act as jurors. It seems likely that in the first two centuries of parliamentary representation the knights of the shire were elected by the freemen of the respective counties. With the decline of the business of the county court attendance was not generally representative and frequently elections fell into the hands of the sheriff and a small clique. In 1430 an act (8 Hen. VI, c. 7) was passed which determined the county franchise for four hundred years, limiting its exercise to residents possessing a freehold worth forty shillings a year, this being also the qualification of a juror. This act does not seem to have effected a social revolution or to have altered the character of representation in the mediaeval Parliament. In the course of time the qualification was extended to include annuities, rent charges and leases for life in addition to realty. The decline in the value of the shilling was counterbalanced in part by the shrinkage in the number of freeholders in the eighteenth century. As a consequence Parliament down to the nineteenth century was controlled by the substantial landed interests, and the freeholders, being brought into working alliance with the gentry, represented a political interest which was frequently at cross purposes with the common economic interests of freeholder and villein. The freehold was not the exclusive test for the suffrage franchise in boroughs and corporations, where the suffrage might extend to householders, to a restricted group of landowners or to pot-wallopers-persons furnishing their own diet.

Tenure in free and common socage was generally established in the English colonies in America by the colonial charters. In some colonies, such as New York and Maryland, where manorial systems existed, this tenure appeared in somewhat more feudalized form than in New England. Feudal services were generally limited to the reservation of a specific quit rent; but during and after the War of Independence most feudal incidents, including quit rents, were abolished by statute and a fee simple was vested in the freehold tenant. Feudal incidents were not extended to the states of the Northwest Territory. Where socage tenure does exist it partakes of the essential qualities of alodial, or non-

feudal, estates. In New York, for example, estates of inheritance and for life are still termed estates of freehold, and the former are regarded as fees simple. Today the holding of such an estate is marked by the absence of all feudal incidents with the exception of escheat to the sovereign, and the owner has the fullest powers of legal disposition over his land.

In America a great impetus to the creation of a large freeholding class was the opening of the public domain to settlers at the beginning of the federal era. As a result of the land acts of 1800 to 1820 the economy of the west rested mainly upon a system of freehold farms. This process was greatly facilitated by three great enactments during the Civil War: the Homestead Act, the Morrill Land Grant Act and the Union and Central Pacific grant, as a result of which small freeholders secured a great portion of the new tillable lands.

The purely arbitrary English suffrage qualification was extended to the American colonies, where it underwent minor modification. By the eighteenth century the property qualification was universal in the colonies. A minimum freehold estate of forty shillings obtained in New England and much higher requirements in numerous other colonies, where the freehold was often expressed in acreage rather than in value or income. At the close of the colonial period six colonies had alternatives to the real estate qualification in the form of holdings of personalty or the payment of taxes. With the growth of the commercial interests in England and America sentiment rapidly favored the substitution of a general property qualification for the realty requirement. Although the liberalization of the suffrage took place first in the United States, general property or tax paying qualifications still exist in several states. The substitution of a general property qualification in place of the freehold was not effected in England until the Reform Bill of 1832, according to which the holdings of copyhold land or leasehold of a stated yearly value were made additional qualifications, and the stated values were substantially reduced in the suffrage acts of 1867 and 1884. Twentieth century reforms have swept away the last property qualifications in England.

RICHARD B. MORRIS

See: Land Tenure; Manorial System; Feudalism; Aids; Escheat; Alienation of Property; Inheritance; Primogeniture; Enclosures; Homestead; Suffrage.

Consult: Round, J. H., Feudal England (London 1895);

Maitland, F. W., Domesday Book and Beyond (Cambridge, Eng. 1897); Vinogradoff, Paul, The Growth of the Manor (3rd ed. London 1920), and English Society in the Eleventh Century (Oxford 1908); Pollock, F., The Land Laws (3rd ed. London 1896); Tawney, R. H., The Agrarian Problem in the Sixteenth Century (London 1912); Pollock, F., and Maitland, F. W., The History of English Law before the Time of Edward I, 2 vols. (2nd ed. Cambridge, Eng. 1899); Holdsworth, W. S., A History of English Law, 9 vols. (3rd ed. London 1922-26) vol. iii, and An Historical Introduction to the Land Law (Oxford 1927); Hemmeon, M. de W., Burgage Tenure in Mediaeval England, Harvard Historical Studies, vol. xx (Cambridge, Mass. 1914); Anson, W. R., The Law and Custom of the Constitution, ed. by M. I., Gwyer (5th ed. Oxford 1922); Stubbs, W., Constitutional History of England, 3 vols. (5th ed. Oxford 1891-98) vol. iii, ch. xxi; McKinley, A. E., The Suffrage Franchise in the Thirteen English Colonies in America (Philadelphia 1905); Stimson, F. J., The Law of the Federal and State Constitutions of the United States (Boston 1908).

FREEMAN, EDWARD AUGUSTUS (1823-92), English historian. After receiving his university degree at Oxford Freeman spent the remainder of a long life in the study of political history, topography and architecture. In addition, he was a voluminous contributor to periodicals, especially the Saturday Review and the Fortnightly Review. The greatest of his historical works is a History of the Norman Conquest (6 vols., Oxford 1867-79; vols. i-ii, rev. ed. 1870). This monumental achievement supplemented by two additional volumes on The Reign of William Rufus (Oxford 1882) gave him a secure place among English historians and largely led to his appointment in 1884 as regius professor of modern history at Oxford. The last years of his life were spent on an incompleted History of Sicily (4 vols., Oxford 1891-94).

The central point of Freeman's conception was the "unity of history." He deplored the effect of the revival of learning in so far as it made classical times the object of an almost exclusive idolatry. He urged that all distinctions of ancient and modern be thrown away: "European history from its first glimmerings to our own day is one unbroken drama." To Freeman the great unifying element in history was Rome, "the true Eternal City." This accounts for his deep interest in Sicily, the "ecumenical island," where diverse civilizations had met and struggled.

Freeman's conception of the unity of history was largely confined to its political aspect, as expressed in his well known dictum, "History is past politics, and politics is present history." He had little interest in any art save architec-

ture and but slight concern with the industrial, social and religious activities of the past. He cared little for the times subsequent to the eleventh century nor did his "unity" comprehend other than southern and western European development.

Possibly his greatest contribution to modern historical method in England was a constant emphasis of the study of sources. Yet here again he seemed to fall short of his ideal, since he was ignorant of palaeography and refused to work with anything but printed sources. His slavery to exactitude was so unremitting that within the range of his political interests he was remarkably accurate, although tending to be prolix in his transcription of chronicles. Freeman's account of the Norman invasion has been much criticized; on account of his partiality for things Teutonic he found the conquest to be but a foreign infusion that was speedily absorbed. To Freeman the great hero of eleventh century England was Harold, not William. The very bulk of his writings, the thoroughness and honesty of his craftsmanship and the widening horizon that he opened to historical students account for his conspicuous place among the historians of his day.

HOWARD ROBINSON

Consult: Stephens, W. R. W., The Life and Letters of Edward A. Freeman, 2 vols. (London 1895), with a full list of Freeman's works; Bryce, J. B., Studies in Contemporary Biography (London 1903) p. 262-92; Harrison, Frederic, "The Historical Method of Professor Freeman" in Nineteenth Century, vol. xliv (1898) 791-806; Gooch, G. P., History and Historians in the Nineteenth Century (2nd ed. New York 1913) p. 346-52.

FREEMASONS. See MASONRY.

FREETHINKERS. Free or autonomous thought is the contrary of thought, research, science and philosophy fettered by the dogmas and principles of religion. Free thought recognizes no restriction but that imposed upon its progress by the rules of logic, scientific methodology and epistemology.

The term freethinkers, translated franc-pensants by Voltaire, was first used in England in the eighteenth century and was applied to those trusting to the guidance of their own intelligence in all moral and religious questions and rejecting all belief in external revelation, inspired Scriptures and the supernatural authority of the church. It was used in 1711 by Lord Shaftesbury, who calls the freethinker "the noblest of

characters" (Characteristics, 2 vols., ed. by J. M. Robertson, London 1900, vol. ii, p. 349), and especially by Anthony Collins in A Discourse of Freethinking Occasioned by the Rise and Growth of a Sect Call'd Freethinkers (London 1713).

Man is indebted to the genius of the Greek, the least priest ridden, most artistic, most intellectual people in history, for the development of what freedom of thought exists in the modern world. The De rerum natura of Lucretius, a thoroughly Hellenized Roman, imbued with the teaching of Epicurus, is a magnificent attack on supernaturalism, "a paean in hexameters to the spirit of rationalism." Epicurean and other Greek influences are responsible for the spirit pervading the fatalistic and pessimistic yet hedonist atheism apparent in the authentic part of the Hebrew book of *Ecclesiastes*. It was the narcotic influence of oriental religious speculation on the later development of Hellenistic culture in the Roman Empire that gradually refastened the old fetters on the activities of human intelligence. The attempts of writers like Severianus of Gabala, Mar Abba of Nisibis, and Cosmas Indicopleustes to discredit the Ptolemaic system in favor of the Biblical cosmology are typical examples of the same tendency which centuries later led to the condemnation by the church of Galileo's renovation of the heliocentric system of Aristarchus of Samos. The practise of astrology and the survival of the stoic belief in astral fatalism saved the remains of ancient cosmological science from total oblivion in the Christianized Roman Empire.

To a greater extent than on the western soil, desiccated under the influence of arid Roman political utilitarianism, Greek science continued to thrive in the eastern regions in the sphere of that half Hellenistic, half Iranian culture which succeeded in permeating the orthodox Islam of the Arabic conquerors. No freethinker of any country-not excepting Voltaire-is more celebrated in the English speaking countries than Omar Khayyam, the "highpriest of free-thought and agnostic pessimism." The works of Arabic philosophers like al-Kindi and Averroes which were leveled against the futilities of theological speculation were fiercely attacked by the mediaeval defenders of Christian orthodoxy. Spain governed by an Arabic dynasty and Jews grown wealthy and cultured under Saracen rule preserved the sparks of the unextinguishable Greek fire of learning and science from being permanently buried under the ashes of scholasticism. The history of the translation of Greek scientific

and philosophic literature into Arabic and into Latin (either directly or through the medium of Hebrew) is the history of the survival and diffusion of free thought during the Middle Ages. The humanists by their scientific study of the original texts of the Scriptures gradually brought about the fatal conflict between the traditional authoritative interpretation and a new, free, more or less scientific philological interpretation and thus a clash between personal and institutional religion. The Protestant revolt, although not in itself immediately concerned with the question of free thought, by its accentuation of multiplicity and variety in religious beliefs and practises eventually called forth the need for the existence of freedom of thought and conscience.

Modern philosophic speculation concerning free thought finds its first most important representatives in Hobbes, who in his Leviathan contended against the "captivity of the understanding," and in Spinoza, who in his Tractatus theologico-politicus devoted a whole chapter to the demonstration of man's "natural right freely to think what he likes and to say what he thinks." Spinoza's conception of man's natural right to free thought was strongly influenced by the revival of Greek sophistic and cynic speculation about natural right (jus) as opposed to historic, written or traditional law (lex), which was initiated by Hugo Grotius. This philosophic speculation culminated in the formal Declaration of the Rights of Man of the French Constituent Assembly in 1789, which enjoined that "no one is to be interfered with on account of his opinions, even on the subject of religion, so long as their manifestation does not disturb public order as established by law." This doctrine Pope Pius vi immediately declared to be a monstrous and mad law destroying reason itself, but it was taken over into the constitutions of the United States and other republican states.

In modern France and Italy free thought has always been associated with democratic and revolutionary activities. The remarkable development in eighteenth century France of what Aulard and Augustin Cochin have called les sociétés de pensée—thinking, or more exactly freethinking, associations—was one of the chief instruments for the diffusion of both free thought and democratic ideas. Not in vain had Voltaire suggested to the disciples of Enlightenment that they form friendly groups, dine together regularly for the purpose of discussion and mutual information of the faithful and carry on a steady correspondence with similar groups, resuscitat-

ing in this way the political hetaireiai of Athens, the philosophic order of the Pythagoreans and the symposia of the Platonic Academy. It is hardly an exaggeration to say with Cochin that a direct line of evolution leads from the enlightened drawing rooms in which Voltaire shone over the Academy of Moral and Political Sciences of Condorcet to the terrorist clubs of the Jacobins.

Except for the humanistic academies of the Italian Renaissance and their various imitations in Germany and other countries and such bodies as the English Royal Society, the world had not known until the eighteenth century any societies organized for collective thinking and discussion. There had been religious sects, guilds of merchants and artisans, colleges of doctors and parliaments of lawyers; but there had never been, in spite of many projects and abortive organizations of people like Comenius, Andreae and Jung, anything like societies, let alone a whole network of societies, for the avowed purpose of collective thinking and talking. It is the century of Enlightenment and the classicist intellectual movement, called by its enemies the heresy of philosophism, which started the beginnings of that vast movement. Throughout the country in each rural market place and town there were organized cabinets de lecture (public reading rooms), in which people met in order to talk, to read the various papers or occasionally a booklet about the new philosophic, political and economic ideas of incipient liberalism. Even more significant were the numerous local academies and more or less secret debating clubs (sociétés populaires or sociétés patriotiques), which provided a public for the rhetorician of the day even as the reading rooms provided a public for the philosophic writers. These freethinking societies between 1750 and 1780 had a deep and lasting influence on the spirit of the French countryside and market town. The superficial apothecary's and medical practitioner's materialism, which Flaubert has so vividly portrayed in the celebrated character of Homais in Madame Bovary, and the radical anticlericalism of the modern French provincial middle class and peasantry were created by these sociétés de pensée, which had no counterpart anywhere in Europe. There has been no other epoch in which pagan Greek philosophy, Socratic, cynic and stoic rationalist ethics, the religion of Socrates, Cicero and Marcus Aurelius together with the classic ideals of the direct, rhetorical democracy of the Athenian agora and the Roman forum

and the Platonic utopianism of the best possible state were popularized to such an extent. "Tribunes" of the people in classic costume taught the yokels the constitutional rights which they were to claim in the ideal state, and country parsons began to officiate as "chief pontiffs of the *Temple de la Patrie*" trying to transform their traditionalist easy going Catholicism into the rhetorico-philosophical deist "Cult of the Supreme Being."

The leading Thermidorians and the leaders in the Directory, the Consulate and the empire were freethinkers almost to a man; every regiment of Napoleon's army had its Masonic lodge; the most famous generals, such as Lafavette, Hoche, Kleber, Joubert and Kellermann, were active Freemasons. The emperor himself was a partisan of Volney's and of Charles Dupuis' astromythical explanation of the Gospels and was highly astonished to hear that Herder, Wieland and Goethe still believed in the historicity of Jesus. The conclusion of the concordat between the pope and Napoleon, strenuously opposed and bitterly ridiculed by many commanders of Napoleon's army, was a move inspired by the purely political motive to further everything that would renew the respect for authority and thus consolidate the new regime. Even the restored Bourbon monarchy with all its official show of piety and its consistent clericalism did not change the mentality of France as profoundly as is generally believed. Charles x was a thoroughgoing Voltairian skeptic; Joseph de Maistre, the father of the new reactionary "traditionalism," who pretended to derive all human knowledge from a primitive divine revelation, had been a very active Freemason before the revolution; Chateaubriand's correspondence shows the profound melancholy skepticism of the author of the celebrated Génie du christianisme, who had been a professed materialist in his early youth.

In spite of this persistent undercurrent of rationalist eighteenth century thought it cannot be denied that the monarchic restoration in France and the growth of romanticism there and in Germany carried in their wake a revival of religious feeling, a marked advance of Catholicism, a renewed worship of authority and tradition, a deeper understanding of the irrational side of the human mind and its important role in the growth of all human institutions. The idealization of the prerevolutionary past favored by the Restoration, the high tide of national feeling aroused through the reaction against Napoleonic universalist imperialism, favored the

remarkable development of historical research which distinguished the nineteenth century from the rationalist age of d'Alembert, the mathematician and philosopher who was so devoid of historical sense that he would have gladly consigned to oblivion the whole memory of the irrational past of humanity. Yet this development of the historic sense not only restored the respect for tradition and authority but also fostered movements which gave in due time a new and most powerful incentive to free thought. Historical research could not progress without historical criticism, and the critical methods developed through a closer study of profane documents could not fail to be increasingly applied to the analysis of the sources of Biblical history. The belief in divinely inspired Scriptures embodying traditions based on divine revelations concerning the origins of the world and of mankind was shattered not only through historical criticism but also through the progress of oriental philology, which gradually unveiled the documents of other religions of a very different character yet equally claiming divine inspiration. Anquetil-Duperron had made accessible to the learned world the books of the Zend-Avesta; Jones and Colebrooke initiated the West into the studies of Sanskrit and the Vedas; Champollion had deciphered the Egyptian hieroglyphs; Grotefend and Rawlinson disclosed the secret of the cuneiform script. After having for many centuries dominated the various sciences as so many handmaidens religion (and its pseudo-scientific rationalization called theology) became in the nineteenth century more and more an object of scientific study and analysis: psychology helped to explain its roots in the mind of the individual; anthropology and sociology contributed to a better understanding of its collective aspect; comparative mythology starting with Fontenelle in the seventeenth century developed rapidly in the nineteenth and was popularized to the extent that Jefferson could dare to compare the dogma of the Immaculate Conception to the myth of Minerva springing full grown and armed out of the head of Jupiter.

But the greatest change in the attitude of man toward the traditional doctrine of a supernatural (i.e. magic) origin of the world and of life in it was worked through the gradual supplanting of the belief in creation by the hypothesis of evolution, which aimed at eliminating altogether the teleological point of view in favor of a purely causal explanation. Voltaire's deism still rested on the argument that the existence of a clock

proves the existence of a clock maker. That this argument completely vanished from the arsenal of nineteenth century metaphysics was due to nothing so much as to the growth of evolutionism. More than Darwin's own works the general reader was influenced by the writings of Ernst Haeckel in Germany and T. H. Huxley in Great Britain. Darwin had always been extremely reluctant to discuss the consequences which his theories might have for other people's religious convictions. While he and Huxley would not go beyond what the latter called, in his frequent controversies with Darwin's and his own theological adversaries, agnosticism (i.e. a wisely expectant attitude in all metaphysical questions), the German followers of Darwin inclined to a much more dogmatic materialism. With the combative Ludwig Feuerbach (1804-72) the extreme left wing of Hegelians had given up idealism as but another form of theology. In his Das Wesen des Christenthums (Leipsic 1841) Feuerbach developed the idea that uncultured man cannot conceive of the universal reason of the human race otherwise than under the anthropomorphic form of a personal god. Man personifies and separates from himself the element in his own nature which gives him moral laws and projects it into reality as something opposing his own will. Feuerbach showed the evolution of the idea of God, created by man in his own image, and denied energetically the belief in an immortality of the soul. The popular vogue of crude materialism had begun in Germany in 1854 when a lecture Menschenschöpfung und Seelensubstanz (Göttingen 1854) by the physiologist Rudolph Wagner of Göttingen, directed against the zoologist Karl Vogt's Köhlerglaube und Wissenschaft (Göttingen 1854), caused great excitement far beyond academic circles. A year later appeared Ludwig Büchner's Kraft und Stoff (Frankfort 1855) denying the possibility of creation because of the laws of the conservation of matter and energy. It was soon translated into many languages, republished in Reclam's library, sold in millions of copies and was thus raised to the dignity of a materialistic bible for the half-educated dabblers in applied science who had outgrown the tutorship of the church and its theology but were too lazy and obtuse to submit their minds to the discipline of epistemological studies. Jakob Moleschott's Der Kreislauf des Lebens (Mainz 1875) vied in popularity with Büchner's book, although Schopenhauer said not altogether unjustly—that it seems to have been written by a barber's apprentice. In Ernst

Haeckel's Welträtsel (Bonn 1899) superficial materialism appeared under the new name of monism (as opposed to the dualism of Descartes and Kant). It was the first attempt of a synthetic philosophy on the basis of Darwinian evolutionism, a book full of anti-Christian polemic and cheap sarcasm, lacking the grace and spirit of Voltaire and disfigured by a great number of gross mistakes. The heated polemic with theologians of all denominations in which this book involved Haeckel induced him to organize the Freethinkers' Congress of Rome in 1904 and to found in 1906 the Deutsche Monisten-Bund.

This was by no means the first attempt at collective organization of the partisans of free thought. The most important of previous freethinkers' organizations was the International Freethinkers' League founded 1880 in Brussels, over the German branch of which, founded in 1881, Büchner presided until 1899. Since 1908 there has existed a Zentral-Verband der Proletarischen Freidenkern Deutschlands, reorganized in 1927 as a Verband für Freidenkertum und Feuerbestattung, with 500,000 members and a journal called the Freidenker. Since 1927 there has existed a German Volksbund für Geistesfreiheit, which publishes the Geistesfreiheit. The various organizations are loosely united in a cooperative Arbeitsgemeinschaft der Freigeistigen Verbände der Deutschen Republik. The working class freethinkers are united in the Bund Sozialistischer Freidenker, the communist atheists in the Internationale Proletarische Freidenker, which has had its center in Moscow since 1925. France has its Union de Libres Penseurs et de Libres Croyants and Société Rationaliste.

In England the free thought movement has been intimately associated with the movement for social reform. Paine, Owen, Hetherington, Holyoake, Bradlaugh and many other leading freethinkers were active in both fields. In 1852 Holyoake called a conference at Manchester for the organization of freethinkers' groups and in 1866 these were combined under the presidency of Charles Bradlaugh as the National Secular Society. This organization and the Rationalist Press Association, founded by Charles Albert Watts, counting many of the foremost leaders of English thought as members, have been the chief agents for the propagation of free thought in Great Britain. In the United States the tradition of Thomas Paine, the liberal heterodoxy of Emerson, the wide vogue of Colonel Robert Ingersoll and the scientific labors of Lester Ward

have been important stimulants to the development of freethinking. The American Rationalist Association, the American Secular Union and the Freethinkers of America all carry on a freethinking propaganda, but the movement as such has never been as powerful as similar movements in Europe.

All these existent, flourishing, entirely secular societies of freethinkers are now entirely nonpartisan organizations for the diffusion of free thought among the people by means of tracts, pamphlets, books and lectures. The center of attack of freethinkers has, however, shifted from primary concern with the divine foundations of religion and the historical accuracy of the Bible to a more militant onslaught upon the Christian elements in contemporary politics, morality and social questions. Their activities will remain necessary and beneficial as long as the hard won liberty of scientific research continues to be threatened by the religious instinct or by other herd instincts of the uncultured masses; as long as state religions and established churches continue to try to control elementary, secondary and even university education and to oppose on religious grounds urgently needed reforms of the state laws concerning marriage, divorce, birth control and the like, even as they opposed cremation, anaesthetic obstetrics and vaccination. Very often the freethinkers' clubs are frowned upon by scholars and the cultivated classes in general, not only because of the often shallow, coarse and superficial character of their propaganda but also because of the widespread tendency of the ruling classes to keep the proletariat under the influence of a religion of resignation and submission to social inequalities, a creed which Karl Marx has not inappropriately called an "opiate for the people." Ever since the philosopher Critias, one of the thirty tyrants of Athens, cynically taught that the gods had been invented by some "wise and sly man" in order to deter the people from doing secretly what the law forbade them to do in the open, a tendency has been prevalent among the ruling classes to preserve religion among the masses by means of a socially conservative clergy subservient to vested interests and to the powers that be, to limit the education of the lower classes to elementary--at the utmost to technical-instruction and to treat science and philosophy as esoteric privileges. The more the bourgeoisie fears social upheaval, the less willing will its press and publishing concerns, even the so-called liberal organs, be found to help in the fight for

the most precious of civic liberties, freedom of thought and word. In many republican countries big business has shown in recent days a marked tendency to favor the authority of the various churches; its deliberate fervor is not dissimilar from that which the Bourbons and the Hapsburgs displayed in the post-Napoleonic period.

Very different from these specifically propagandist organizations for the freedom of thought are the church and chapel-like associations of so-called freethinkers (more exactly free believers-libres croyants), who represent in reality nothing but the extreme, most radical development of Protestant freedom of conscience. Thus English deism (q.v.) was but a direct development of Socinianism, and English Unitarianism, pantheism and French positivism were directly descended from English deism. This genealogy explains the persistent tendency of these free believers to associate in a common cult and some sort of worshipful communion. Thus Toland in 1720 had proposed to found a deist Sodalitas socratica, for which his Pantheisticon was to serve as a liturgy. English Freemasonry (see Masonry) developed on the continent into a Société de pensée, an anticlerical society for the propagation of tolerance and of a "natural religion" of humanity with an elaborate ritual. There have been and still are in Germany numerous chapel-like organizations of former Protestant freethinkers, such as the Lichtfreunde and the Bund der Frei Religiösen Gemeinden, trying to create something like a rationalist church with a symbolical, philosophical cult and ritual as a visible frame and expression of a humanitarian religion. In England, America, the Netherlands and Germany there is but a vague border line between the most liberal Protestant sects, such as the Unitarians, and the ethical societies of professed freethinkers, like the International Order for Ethics and Culture, founded in 1908 in Berne.

In France Rousseau had expressed the desire that natural religion should become an official and compulsory faith, within which, however, the individual would be free to cultivate his distinctive tenets as he chose. Auguste Comte gave a churchlike organization, the Church of Humanity, to the faithful adherents of his philosophical system, the Société Positiviste, founded in 1848, with a calendar of the great benefactors of humanity instead of the Catholic saints, with a catechism of positive religion and even with a renewed tendency to restrict the freedom of

scientific research by forbidding "useless speculations." A Positivist church survives to this day in London and the movement has had a great influence on the ideology of English trade unionism and on liberal political movements in various countries.

Church and chapel-like associations of this kind rest on the assumption of the English deists that Christianity freed from irrational dogmas and from all supernatural elements is identical with a self-evident ethical system which must of necessity be recognized as a valid obligation by all men. This naïve idea was not challenged until the great immoralist Friedrich Nietzsche revived the polemic arguments of antiquity against Judaeo-Christian democratic, humanitarian ethics, based on pity and sympathy with human suffering, on humility and renunciation; this he characterized as a slave morality invented to protect the sickly and unfit poor against the beneficial rule of the strong, rich and noble, who will in due time give birth to the superman. Whatever may be said for or against this haughty thesis, the class conditioned character of the Jewish prophets' "cry for justice" and of the teaching of Jesus is now patent to all, as is the conservative social tendency of the age long interpretation and adaptation to which these teachings have been subjected by the theologians of the different churches. No one today will consider the particular ethical doctrines of modern, or for that matter of ancient, Christianity as self-evident or natural or as the morality common to all men. The modern relativist theory of values has definitely shattered the basis on which such artificial churches as the various ethical societies or orders rested.

ROBERT EISLER

See: ATHEISM; RATIONALISM; DEISM; ENLIGHTEN-MENT; SECULARISM; EVOLUTION; MATERIALISM; DE-TERMINISM; ANARCHISM; SOCIALISM; HIGHER CRITI-CISM; SACRED BOOKS; ETHICAL CULTURE MOVEMENT. Consult: Robertson, J. M., Short History of Freethought, 2 vols. (3rd ed. London 1915), and A History of Freethought in the Nineteenth Century (London 1929); Bury, J. B., A History of Freedom of Thought (London 1913); Mauthner, Fritz, Der Atheismus und seine Geschichte im Abendlande, 4 vols. (Stuttgart 1920-23); Troeltsch, E., and Blakeney, E. H., "Free-Thought" in Hastings' Encyclopaedia of Religion and Ethics, vol. vi (Edinburgh 1914) p. 120-24; Voelkel, Titus (Verus, S. E.), Einführung in die Geschichte des freien Gedankens (Frankfort 1914); Perrens, F. T., Les libertins en France au XVIIe siècle (Paris 1896); Cochin, Augustin, La crise de l'histoire révolutionnaire (Paris 1909), La révolution et la libre pensée (Paris 1924), and Les sociétés de pensée et la révolution en Bretagne (1788-1789), 2 vols. (Paris 1925); Benn,

A. W., The History of English Rationalism in the Nineteenth Century, 2 vols. (London 1906); Gould, F. J., The Pioneers of Johnson's Court (London 1929); Laski, H. J., "On the Need for a Militant Rationalism" in Rationalist Annual, 1931 (London 1930) p. 10-16.

FRENCH REVOLUTION. There are many approaches to the cataclysm which overturned the institutions of France and degenerated rapidly into a bitter warfare of twenty-three years between the young democracy and its monarchical neighbors.

There is the purely French approach, such as that of de Tocqueville or Taine. For the former the revolution in unifying France was but the achievement of the work of centralization begun by the absolute monarchy; the Committee of Public Safety was the legitimate heir of Francis I, of Richelieu and of Colbert. For Taine, concerned more with ideas than events, the revolution was the product of the classic spirit—of that lucidity of analysis and abstraction which characterized the golden age of French literature but which subsequently became crystallized and emptied of all real content.

For present day historians, more disposed to emphasize the European angle and more conversant with the doctrines of historical materialism, the French Revolution is merely the outstanding episode of a much vaster tragedy, whose protagonist is the bourgeoisie. Such is the thesis of Jean Jaurès. While skilfully using the authority of the Feuillant, Barnave, as a cloak for his own conception of the close and inevitable parallelism between the economic and the political movements, Jaurès succeeded in orienting the French Revolution in terms of contemporary Europe, in explaining clearly why the crisis broke out in France rather than in England or Germany or Italy.

The English bourgeoisie, which for a century had been in possession of political power, was enjoying the fruits of the industrial revolution, then in its first flush. It was not bothered by the crown and had nothing to gain from attacking the feudal orders either lay or ecclesiastical since both had been dispossessed. There were no class discriminations in the levying of taxes, no restrictions on circulation within the country, no abusive regulations. Individual liberty went hand in hand with religious toleration. The freehold tenant, accorded the franchise, was essentially conservative in temperament. Satisfied interests make poor revolutionaries. Alarmed by Burke as to the possible consequences of the French Revolution, English landed proprietors arrayed themselves behind Pitt to meet the threat by war.

In Germany and Italy the minute parceling out of land and the particularism of the small princes were sufficient to prevent a concerted movement of any vitality. The faint beginnings of industrialism in Germany were confined to three or four localities, and the German bourgeoisie had as yet no conception of its strength, no ambition to power. It was content to vegetate in the shadow of the royal or princely houses.

The outbreak of the revolution in France rather than elsewhere may be attributed not only to the fact that the French bourgeoisie had become increasingly powerful because commerce had quadrupled since 1714, that monarchical centralization facilitated a concerted movement, that the writings of the philosophes, especially of the physiocrats, had kindled discontent and formulated in advance a program of reforms, but primarily to the fact that the resistance of the nobility, which had become increasingly powerful throughout the entire century, had produced a situation where the prerequisite of progress was force. In an age characterized by enlightened despotism France alone clung to the outworn tradition of autocracy.

The feudal reaction, which began as far back as Louis XIV, continued throughout the eighteenth century. The *parlements*, whose members had come to constitute the dynamic force within the nobility, took the lead. Now that they had become nobles themselves and owners of fiefs they perverted the arrêts de justice, which had formerly been instruments for protecting the rights of the king or the public interest, to the service of the feudal lords, sanctioning their encroachments on the common property. In the second half of the century especially, there was a multiplication of hunting preserves and triages with a correspondingly increased number of peasants deprived of their traditional rights. In the place of the older monarchical maxim, "Fief and jurisdiction have nothing in common," the new feudal jurists-Boutaric, Fréminville, Renauldon-substituted a maxim purely feudal, inspired by Montesquieu: "Fief and jurisdiction are one."

The feudal reawakening manifested itself not only in changes in jurisprudence but also in the increasingly arrogant claims of the provincial estates, whose encroachments on the royal power proceeded with remarkably few pauses. In the province of Brittany, for instance, the administration of the tax passed almost entirely from

the hands of the intendant to those of the estates. The offensive of the nobles eventuated in the reconstitution, which ordinarily accompanied augmentation of feudal dues, of the officials known as *chartriers*, or guardians of title deeds.

But above all else the opposition of the parlements to every share of reform completely enfeebled the monarchy and drove it to bankruptcy. The magistrates not only set the bad example of resisting the orders of the king but in their remonstrances formulated a program of representative monarchy which was later to be turned to profitable use by the insurgent bourgeoisie.

While the nobles of the robe were thus undermining confidence in the very foundations of absolute monarchy the economists and especially the physiocrats were waging against the time honored economic institutions an increasingly ardent and fruitful campaign. Organs of agrarian and industrial capitalism with a veneration for private property, they advocated the suppression of all regulations and corporations and the establishment of absolute commercial liberty. The ancient artisan class, which had been the symbol of the union between the petty bourgeoisie and the king, tottered under the assaults of ministers won over to the new doctrines. But the large manufacturers, who for a century had been fighting the corporations and who were practically exempt from public burdens, were still unsatisfied with the partial reforms made in their behalf. Now that they were meeting with the nobles in the councils of administration of the new joint stock companies they felt themselves their equals since they enjoyed the same rights. Their ambition was kindled and they were no longer to be content with half measures. It is an eloquent commentary that the first revolutionary assembly in 1789 was held in the chateau of the great metallurgist Périer at Vizille in Dauphiné and that noble, bourgeois and priest plotted together to change the social order.

The campaign of the physiocrats combined with the anti-administrative assaults of the parlements had seriously impaired the royal prerogatives in the economic sphere. Hitherto the king as the personification of the public interest had been able to issue decrees whenever an economic crisis seemed to necessitate recourse to such measures, limiting the exercise of property rights—even to the extent of imposing a tax on prices. The rights of the individual were subordinated to the rights of society. But now the situation was

reversed. The right of property appears as prior and superior to the state—to the king. The duty of the state consists solely in protecting liberty and property; it has no other justification. In the past, law had been no more than the expression of the personal will of the king. The physiocrats succeeded in transforming it into an eternal impersonal truth of the natural order, which independent of the monarch limits his sovereignty. The ideal government is that which is reduced to its simplest expression and which leaves the maximum of control to the great social forces. Physiocratic utilitarianism was the antithesis of the old Christian morality—a point of contact with the philosophes, who in addition welcomed from the physiocratic program all those elements conducive to the rise of capitalism.

The revolution existed in the realm of ideas from the middle of the century. It was carried over into the realm of actuality not only by the intransigency of the *parlements* and the partial application of the program of the physiocrats but also by the incoherence of the king's political policy.

The feudal reawakening seconded by the arrêts de justice subjected the peasants more grievously to the seigniorial yoke. The nobility attempted to reestablish itself in rural society in the midst of its former serfs. The aristocracy which the revolution had to fight was not a detached, passive class, but on the contrary a class which was awake to the economic life going on around it and swayed by new and mounting ambitions. The succession of edicts between 1761 and 1785 dealing with enclosures, with the old pasturage lands, with the dividing up of the commons, with the clearing of land, made it obvious to the peasants that the king was deliberately abandoning them in favor of their natural enemies.

The intermittent freedom of grain exportation caused an increase in the price of bread at the very time when royal taxation was increasing. In the single bailliage of Reims royal taxation tripled or quadrupled during the period from 1704 to 1788. From 1765 to 1789 prices doubled, while salaries averaged only a 10 to 20 percent increase. The growing overpopulation produced a huge proletariat both rural and urban, which furnished the revolution with the man power for its mobs.

Hitherto the monarchy had rested upon the traditional docility of the French artisanry, on the fidelity of the army, on the loyalty of the intendants, on the gospel of resignation preached by the clergy. One after another these supports

crumbled. The artisans, especially after Turgot's taxation of them, considered themselves sacrificed to the manufacturers. The army became permeated with the spirit of reform, which was still heightened, especially among the young nobles, by the American Revolution. The intendants, no longer men of the people as under Louis XIV but instead recruited from the nobility, to whose interests they catered, displayed less and less zeal. The lower clergy instead of counseling submission began to advance claims.

Brienne's very attempt to counteract the feudal claims of the parlements and of the provincial estates by the creation of provincial assemblies —hybrid bodies, more consultative than representative—precipitated the crisis which was generally expected. This crisis continued for at least a dozen years. It described an ascending curve toward democracy until the fall of Robespierre, o Thermidor, year 11. Thereupon it descended again to the bourgeois oligarchy of the Directory, to eventuate finally in the Napoleonic dictatorship, which endured despite its suppression of public liberties by reason of its consolidation of the material and legal accomplishments of the revolution. It is a question really not of a single revolution but of a series of different revolutions bound together by an inner logic.

In the first of these revolutions, which extended from the convocation of the Notables by Calonne in 1787 to the assembling of the Estates General in 1789, only the privileged classes were involved. It was begun by the nobility of the robe, who were joined immediately by the nobles of the sword and the higher clergy. In order to safeguard their fiscal immunities against the threat of the new schemes of taxation these privileged orders struck a blow at the royal government, thereby setting a bad example to the lower classes. The significance of this prelude to the revolution is too often ignored. It is extremely important to note that the monarchy was threatened by its own agents. The revolt was not yet the work of a political party or the outgrowth of a conspiracy. Political parties did not exist. There was no plot, no secret organization planning a sudden overthrow of secular institutions and the substitution of others. On the contrary, it was in the name of the past through invocation of time honored customs—of the rules of feudal law-that the parlements unleashed resistance and revolt.

The role of conspiracy which is sometimes attributed to Freemasonry is pure legend. The lodges in the period before 1789 bore no resem-

blance except in their ritual to continental Freemasons' lodges of the present day. They were composed of grands seigneurs, of officers, of priests, of rich bourgeois. Salons rather than clubs, they were frequented by the flower of the army, by men of the world, by champions of the status quo. Their members celebrated the Feast of St. John the Baptist by a solemn mass. Their activities were never, as is evidenced by the reports of the intendants, a source of disquietude to those in authority. Louis xvi and his brothers, Marie Antoinette herself, participated in the ceremonies at the Loge des Trois Frères in the Versailles district. More than three fourths of the French Freemasons, especially those in the military lodges, became émigrés. The smallness of the minority which aligned itself on the side of the revolution eliminates the possibility that the movement of 1780 was the result of a Masonic conspiracy.

The insurgent forces at the outset were the constituted bodies of the states—the parlements and the Notables. The revolution was cast within the existing mold. These judges, these Notables, were the representatives of a class which was no longer satisfied with its privileges and which desired through the attainment of dominant political power to rejuvenate them.

But this first revolution, superficial and ephemeral, soon brought in its train a second, more profound and utterly different Behind the judges, behind the nobles, behind the priests, was the bourgeoisie, which toward the end of 1788 pushed its way to the front. It became aroused for a variety of reasons. Royal absolutism constituted as grievous a burden to the bourgeoisie as to the privileged classes, while the imminent bankruptcy of the government threatened to engulf bourgeois property. Finally, the bourgeoisie felt itself capable of assuming in its turn the direction of the state in order to free itself from those legal encumbrances which held it down as a vassal and prisoner of the unpro ductive and privileged classes It was suspicious of a revolution by the noble and feudal class and in order to forestall such a contingency it went into action under the banner of unwritten natural law, which it opposed to feudal law.

From the outset the bourgeoisie possessed the double advantage of wealth and intellect. Since most of the writers were in its ranks, control of public opinion was guaranteed. In addition it controlled the army, for the soldiers, to whom the higher ranks were closed, perceived in the revolution the path to opportunity. This

bourgeois revolt, which followed on the heels of the revolt of the nobility, was not apparently the result of long premeditation or the outgrowth of a conspiracy. It was for that reason all the more vigorous. It was the expression of reflections stored up from the reading of authors who for fifty years had been criticizing existing institutions, and it was infected with the contagious enthusiasm of the American precedent.

The influence of abstract thinkers on great social crises has sometimes been denied. "The most eloquent dissertations on revolution," writes Georges Sorel, metaphysician of revolutionary syndicalism, "have no practical issue, and the course of history is not altered by literature." If this statement implies simply that literature alone is incapable of bringing about a social movement it is on firm ground; but if it pretends that literature is an utterly negligible factor it lays itself open to serious question. The great majority of men are unaware of injustice until it is pointed out to them. The denunciation of abuses is an essential preliminary to a demand for reform; a clearly formulated ideal, the prerequisite of a loyal following. It is extremely doubtful whether without the writings of the philosophes the bourgeoisie would have risen in 1789 with the same unanimity, the same resoluteness; whether without the writings of Karl Marx the Russian Revolution would have been the same. Robespierre without Rousseau remains an enigma; so does Lenin without Marx.

The revolt of the judges and the Notables, being essentially a revolt of officially constituted bodies, did not have to build up a special organization. The bourgeoisie faced an entirely different problem. Almost from the outset the nucleus of the organization consisted in meetings sponsored by the "Américains" at the homes of Lafayette and the councilor Adrien Duport. It was from these centers that the Société des Trente despatched orders to the barristers and lawyers who carried them into effect in their respective local provinces. In Burgundy the detection of the movement of the corporations and the supervision of elections were in the hands of the lawyers. In Brittany the law students of Rennes under the leadership of Moreau, the future general, took up arms against the nobles and in the course of the fighting were supported by reenforcements sent from youthful bourgeois in adjoining towns.

Proof that the entire movement was the execution of a carefully coordinated and matured plan may be found in the universal application of the same tactics and in the formulation—even in the cahiers de doléances drawn up on the eve of the election—of the same general claims. From the east to the west, from the north to the south, the revolutionary bourgeoisie extended one hand to the peasants, the other to the curés and the lower clergy, with a view to binding together, as in a fascis, all the potential forces of renovation. So permeated were they with a jealous class spirit that in accordance with the counsels of the abbé Sieyès they elected the deputies who should represent them in the Estates General aimost exclusively from the third estate.

At Versailles the leaders became aware almost immediately of the necessity of a compact organization in order to present a solid front to the court and to the privileged classes. On the eve of the opening they assembled at the Club Breton, which became the cradle of the Club des Jacobins. Victory depended, it was felt, on their remaining in close contact with the masses and on their ability to match force with force. Accordingly they entered into endless correspondence with their constituents both to stimulate their zeal and to keep them posted concerning the difficulties encountered at Versailles. Several of these correspondences have been published, and constitute --especially those of the lawyer Bouchette, of the curé Barbotin and of Duquesnoy from Lorraine-documents of great interest. When the king called out the troops following the tennis court oath, the correspondents encouraged the bourgeois of Paris to form the national guard, which was to become the military force of the revolution. After the fall of the Bastille permanent committees, i.e. revolutionary and dictatorial municipalities, which spread as if by magic through France, hastened to distribute arms to their partisans. From that time on the ancien régime was defeated, inasmuch as the bourgeoisie had taken possession of both the municipal administration and the public forces. By the side of the permanent committees and the national guards were shortly created the clubs which formed a federation under the direction of the Jacobins. The club was the organ of surveillance. It was wide awake to the dangers that threatened the revolution. At the time of the convention there were no fewer than four or five thousand clubs at work. In all this activity the French were merely following the example of the permanent committees, the militia and the clubs which had been such significant factors in the prosecution of the American Revolution. Revolutions are contagious.

Vaulting into power on the fourteenth of July the bourgeoisic proceeded to intrench itself. It restored the king to the helm by a constitution which guaranteed his political power. It lowered the clergy and the nobility to its own level by writing large into the constitution equality before the law. Deviating from the real spirit of the Declaration of Rights it refused the franchise to the unpropertied classes, who were rated as passive citizens. To save the property owners threatened with bankruptcy it confiscated church property and offered it for sale by the ingenious system of assignats. An immense transfer of property resulted.

The work of reconstruction proceeded parallel to the work of destruction. Above the débris of the privileged classes and the suppressed orders the Assembly erected a logical and harmonious structure. Its foundation was the Declaration of the Rights of Man and the Citizen (q.v.)—the document which was to instal individualism as the dominant feature of the modern world. This cloquent apostrophe to personal initiative, to the force of individualism, was heard from afar and provided for the revolution itself a magic spring of energy endlessly renewed. The dawn of romanticism was already coloring the horizon.

But the Assembly would not have been victorious if it had not in accordance with Sieyès' theory on the constituent power constituted itself a veritable dictatorship. The fundamental distinction between constitutional laws, exempted from royal sanction, and ordinary laws, which were alone subject to veto, provided a means of nullifying the evils of the royal will and of raising the new order.

The committees governed and at the same time administered by methods which the Convention was to do no more than take over and expand. They corresponded directly with the new authorities, gave them instructions which were tantamount to orders and treated the ministers as their agents.

The Comité des rapports and the Comité des recherches, which were in charge of political policing, kept themselves informed regarding the various municipalities, conducted investigations, issued orders for arrests and brought those apprehended before the Châtelet, which at the outset of the revolution served as the seat of the High Court. The renowned Comité de sureté générale of the Convention was to do no more. The Comité diplomatique, formed after the king had been shorn of his prerogative of declaring

war and making peace, received communications from ambassadors and was the dominant force in the direction of foreign policy. After December 19, 1789, the Comité des finances had its own special treasury called the Caisse de l'Extraordinaire, which was distinct from the royal treasury and filled with special contributions such as the contribution patriotique. Its chief responsibility, however, was the administration of the assignats and of the receipts accruing from the sale of national property. The Comité de l'aliénation des biens nationaux, charged as its name indicates with the sale of church property, divided France into twenty territorial districts and at the head of each of these placed one of its members. The active correspondence published by Raymond Delaby between Camus, head of one of these districts, and the department of Côte-d'Or indicates in a striking manner that contrary to a widely held opinion the locally elected authorities enjoyed no initiative in the interpretation or application of the laws. Camus insisted on being consulted in reference to all decisions made by the administration of the department which concerned national property. No anonymous notice of auctions could be published without his consent and his visa, and he concerned himself with the most minute details. The Comité des droits féodaux did noc confine its activities to drawing up laws on the redeeming of the feudal dues of the nobles, but carried on an active correspondence with the local authorities, guiding them and making decisions on the practical difficulties submitted by them. Nor did the Comité ecclésiastique limit itself to elaborating the civil constitution of the clergy, which harmonized the older ecclesiastical organization with the new organization by departments. In addition it supervised at close range its actual application and made final decisions on all contentious points in the legislation affecting religion. The aristocrats could with some justification accuse it of having usurped the status of a conciliar body. One of its notable accomplishments was the inventories which it took of confiscated ecclesiastical furnishings in order to exempt from sale rare and precious objects. The Comité militaire from the outset worked in close touch with the Ministry of War and kept a sharp eye on the administration of the army in all its ramifications.

As a result of this elaborate system of committees the great principle of the separation of powers, which the Constituent borrowed from Montesquieu and wrote into the constitution of

1791 as the corner stone of essential liberties, was never applied or observed as long as the great assembly continued to function. Moreover, its members did not believe that they were going back on their own doctrines in vigorously usurping the dictatorship and in applying it on a large scale. Sieyès had taught them that they were the constituent power. Consequently the constitution would function only after their exit, when the powers which they had constituted would begin to be applied. Their dictatorship was justified by the obligation of clearing the way for these new powers. They were forced to remove all obstacles beforehand.

If Louis XVI had resigned himself to the position of constitutional monarch, the bourgeoisie would have kept him at the helm. All it asked of him was not to take the side of the privileged classes. But Louis XVI began to conspire. He was disgruntled at the curtailment of his power. He sought the aid of foreign kings. Within France he precipitated religious war. He fled to the frontier and was brought back humiliated. From that time on a new revolution was in process. I'he first had been that of the aristocracy; the second, of the bourgeoisie; the third was to be, in part at least, of the people both urban and rural.

The first revolution had forced the king to summon the Estates General. The second had suppressed the institutions of the ancien régime. The third overturned the throne. The first had been provoked by the resistance of the privileged classes to fiscal reforms. The fundamental cause of the second had been the fear of bankruptcy. The third sprang from foreign war and invasion. It was at once a patriotic and a popular revolution. It resulted in the liberation, at least partial and provisional, of the peasant and the worker.

Since the fall of the Bastille the peasants had been attacking the chatcaux and had forced the nobles to surrender and burn the title deeds which authorized the collection of feudal dues. The artisans of the town had on their side burned the customs barriers and forced a reduction in prices. These disorderly popular outbursts had surprised and annoyed the bourgeois membership of the Constituent. Their permanent committees and their national guards were designed as much against the threat of the jacquerie from below as against that of the aristocracy from above. It was with bad grace that they granted concessions to the peasants. The legislation of August 20 and the following days

constituted but a very superficial suppression of the feudal regime, abolishing personal servitude but maintaining all the rest. The most immediately felt feudal dues, those in kind or in money, continued to be paid by the tenants, until they redeemed them. At the same time the Constituent deprived the people of the franchise. The new constitution handed over France to an oligarchy of men in possession.

If the bourgeoisie, victorious over the peasants as well as over the nobles, had remained united, the revolution would have been over. The discontented peasants continued to create sporadic disturbances, but in default of concerted action they were incapable of overturning by their own efforts the remnants of the feudal order or of dispossessing the bourgeoisie.

But after the flight of the king the bourgeoisie split into two factions. The Feuillants frightened by the possibility of democracy fired upon the republicans on the Champ de Mars, July 17, 1701. After the massacre they found themselves in the position of being forced to consolidate the royal power and, because of class egotism, of restoring to the crown a part of the force which it had lost. The other great faction, the Girondists, took the opposite course; defiant of the king and fearful of the reestablishment of absolutism, they opposed any backsliding. As a method of solving the internal difficulties of the country, of checking the priests and the aristocrats, of reissuing the assignats, of forcing the king to entrust them with power, they plunged the revolution into foreign war, despite the warnings of Robespierre and the Montagnards.

The war was the decisive event which underlay the third revolution, that of August 10, 1792. It brought in its train not only the fall of the monarchy, which trafficked with the enemy and worked for its victory, but also the confiscation of the property of émigrés serving in the Austrian and Prussian armies. And the confiscation of émigré property following the confiscation of church property completed the dispossession of the older ruling class. Moreover, the war resulted in the suppression without indemnification of those feudal dues which the Constituent had allowed to stand. The revolutionary bourgeoisie was forced to offer this bait to the peasants in order to interest them in victory. It was likewise forced in the same spirit and from the same necessity finally to abolish amid the booming of cannon directed against the Tuileries the distinction between active citizen and passive citizen—in short, to grant universal suffrage to

the proletariat. It marked the arrival, as yet more theoretical than real, of the fourth estate.

But the Girondists, who flattered themselves that they could manage the people just as earlier they had flattered themselves that they could manage the king, perceived to their amazement and irritation that in the aftermath of August 10 the people were turning from them to follow the Montagnards, who had been the true authors of the overthrow of the king and of the emancipation of the peasants. In their declaration of war the Girondists had promised that it would be short and victory rapid. They had nourished illusions regarding the strength of the Declaration of the Rights of Man as a rallying cry. They had predicted that the people in foreign lands would rise against their tyrants at the call and example of the French people. But the foreign people seemed asleep or subdued, and the war prolonged itself endlessly, waxing in its proportions. The rapid fall of the assignat, issued in increasingly large amounts to keep pace with the enormous aggravation of expenses, produced a colossal rise in the prices of all merchandise. The salaried classes began to murmur. The Girondists, committed to commercial liberty, turned a deaf ear to their complaints and rejected the remedies proposed by the Montagnards—remedies borrowed from the interventionist legislation of the ancien régime, such as censuses, regulations, requisitions, control of prices, economic and administrative centralization. A vast agitation began, born of suffering and misery. The Girondists fearing the proletariat held out their hands to the reactionaries. They were ready to give pledges. They incited the provinces against Paris, the citadel of the Montagnards. They attempted vainly to save the king as they had tried carlier to save the throne. They brought Marat to the bar. They called in the generals to help them. They overlooked the insubordination and intrigues of a Dumouriez.

The Montagnard minority in the Assembly drew its strength from the communes of the large cities and from the Jacobin clubs, which were rapidly being purged of rival elements. Since the Montagnards had opposed the war the people could not hold them responsible for the grievous economic crisis which it had precipitated. Their social program kept them in close contact with the populace. The defeats of the spring of 1793, the treachery of Dumouriez, the revolt in the Vendée, allowed them at last to assume power. Their coup de force, extending from May 31 to June 2, purged the Convention

of their adversaries and was followed up shortly by the organization of a dictatorship—the collective dictatorship of the Committee of Public Safety and the Committee of General Security supported by a Convention which had become provisionally Montagnard in spirit. This event was equivalent to a new revolution—the fourth. The dictatorship of the committees was the dictatorship of the Montagnard party and to a certain extent the dictatorship of the sans-culottes.

This dictatorship, which lasted a little over a year, sprang much less from a preconceived theory than from the immediate necessities of the military situation at home and abroad. The enemy had to be pushed back from the borders, the royalist and Girondist insurrections had to be suppressed. Food had to be supplied to the armies and cities starved by the English blockade. The millions of soldiers that were being shipped off to the frontier had to be clothed. Terror became the order of the day. For the enemies of the regime the guillotine was set up. Elections were suspended. Resistance was beaten down by the medium of commissaires de la Convention armed with unlimited power. To the generals went out the order, "Victory or death." In place of liberty authority was enthroned. The Montagnard revolution rested upon principles which had little in common with those of the, individualistic revolution. In the name of public safety, as formerly in the name of the king, individual wills were over-ridden and when necessary the rights of property. Necessities of life were communized; provisions and merchandise were requisitioned for the defense of the nation and the revolution. Municipal bakeries and butcher shops were set up. In short, there arose under the pressure of circumstance an embryonic collectivism. The emergency character of the experiment is indicated by the fact that the very ones who were resorting to it considered it as a temporary expedient, all traces of which should be wiped out as rapidly as possible.

The new dictatorship contrasted strikingly with that exercised by the Constituent. The latter had been accepted, even welcomed, while the success of the new was detested or at best condoned. The Constituent was supported by public opinion, which urged it on to more and more severe measures against the enemies of the revolution. Its committees had been obeyed without complaint by the elected authorities, who met its desires. By 1793 a profound change had taken place. The foreign war had its counterpart in civil war. The revolts of the

Vendée and of the federalists, the execution of the king, the military defeats, the requisitions, the misery consequent on inflation, official repudiation of Christianity and the closing of the churches, the regime of the suspects and the overworked guillotine, all these terrifying manifestations of the crisis brought discouragement to large sections of French society and pushed them into the opposition, desirous above all of peace even at the price of the reestablishment of the ancien régime.

It was no longer possible to justify the new revolution as Sievès had the old by the single theory of the pouvoir constituant. It was too obvious that it was no longer an application of the sovereignty of the people but rather the exact opposite. Accordingly, in rebutting an attack of the Dantonists Robespierre justified the dictatorship by drawing a fundamental distinction between a state at war and a state at peace, between the constitutional regime and the revolutionary regime. His speeches of 5 Nivôse and 17 Pluviôse expounding this thesis contain the theory of the revolutionary government, which was already an adumbration of the dictatorship of the proletariat. The constitutional regime according to Robespierre is capable of functioning only in time of peace. In time of war it must give way; otherwise it would destroy liberty. "The aim of constitutional government is to preserve the Republic; that of revolutionary government, to establish it. Revolution is the war carried on by liberty against its enemies; constitutionalism, the regime of liberty victorious and at peace." Revolution being essentially civil war, "revolutionary government entails an extraordinary activity for the very reason that it is at war . . . and forced to endlessly deploy new and rapid resources to meet new and pressing dangers." Whereas the theory of constituent power had grounded dictatorship upon the unanimous will of the people, the theory of revolutionary government grounded it upon the political and patriotic necessity growing out of the war. Robespierre admitted the dangers of such a regime. What would become of the state if the dictators should selfishly capitalize their power? There was only one protection, as far as he could see—the moral virtue of the dictators.

The revolutionary groups in France had believed that as soon as they acquired political power they could immediately settle the social question. They perceived quickly enough that they were mistaken. Their work was thwarted by the wealthy classes, who coalescing against

the revolutionary legislation impaired its effectiveness. They did not entertain the idea, however, of recasting their principles. They had no inclination to introduce limitation of property as the normal and abiding foundation of the social order. Private property still seemed to them sacrosanct. They wished only to correct its momentary abuses and they were reduced to this expedient of a revolutionary dictatorship, which they conceived as being provisional. They imagined that it would be sufficient merely to strike terror into the aristocrats, to imprison them, to banish them, and that then the social question—which they continued to regard as a political rather than an ethical question-would be solved. Their attitude is readily understood if it is borne in mind that a good number of them were property owners-well to do bourgeois, lawyers and professional men. The terrorist dictatorship was popular in its aims, but it was carried out by bourgeois.

Only a small minority composed of those who had been taught by experience understood that the maintenance of the sans-culottes in power could not be perpetuated except by means of a progressive and lasting limitation of individual property. Robespierre, Saint-Just and Couthon proposed in the laws of Ventôse to turn over the property of the suspects to the poor. But their colleagues turned a deaf ear to the proposition. The Committee of Public Safety had already refused to nationalize the food supply. Carnot had opposed the taking over of manufactures, even of those which had been founded by the representatives on mission. The Committee of General Security, in concert with certain members of the Committee of Public Safety, blocked the laws of Ventôse and their authors were driven from power, 9 Thermidor.

The great majority of the members of the Convention were individualists bitterly opposed to anything that savored of communism. The true communists, those who were convinced that the reign of the fourth estate is possible only on condition of the suppression of individual property, were isolated figures without influence and in the main not looking beyond a communism of provisions and, by implication, of land. When Babeuf attempted in the post-Thermidor period to bring them together into one large party, it was too late. The dictatorship had collapsed and Babeuf was powerless to reestablish it. He paid with his life for his experiment-a belated experiment and at the same time premature; belated because it was advanced

at a time when the Montagnard party had already fallen from power and was already decimated by the Thermidorian proscription; premature because public opinion had not been prepared for communistic ideas.

The revolution of July, 1789, which had brought the bourgeoisie into power, was the child of eighteenth century philosophy, a philosophy liberal and individualistic to its roots. The revolution of June, 1793, which swept the Montagnards into power, was the work of circumstance and necessity. It was not the product of a campaign of education, of a systematic view of government and society or of a penetrating analysis of economic evolution. It could scarcely have been otherwise at a time when machinery was in its infancy and its fatal offspring, industrial concentration, not yet manifest. The most daring of the revolutionary thinkers, Babeuf himself, hardly conceived of communism other than in an agrarian context. The majority of the communists of the time distinguished clearly between industrial property, which they wished to respect as being the product of labor, and landed property, which alone their program affected.

This fact clarifies not only the basic difference between the Jacobin dictatorship and more recent dictatorships but also the fundamental reasons for its frustration. Although the Bolshevist dictatorship is similar to the Jacobin in that it sought justification in the circumstances of war, it at least rested in contradistinction to the latter on the coherent doctrine of Marxism, which it proposed to put into practise. The Bolshevists had no qualms about destroying either individual property or even the structure of the state which they had usurped. The Jacobins, on the contrary, tampered only timidly and partially with the system set up by the Constituent. They merely superimposed their economic dictatorship on the older individualistic legislation without destroying it. Their requisitions and their taxes did not abolish private property. They merely restricted the use of it. Their communism, which was never more than provisional and relative, was only an expedient. They themselves made apologies for being forced to resort to it.

In the political realm similar differences are apparent. The Russian communists, loyal to the ideology of Marx, have been anxious from the first to transfer power to the proletariat. The government which they have set up is consistently a government by a class The Montagnard

Jacobins, on the contrary, although they were obliged to lean upon the sans-culottes and to govern in their behalf and in their interests, never really grasped the idea of class. They hounded the royalists, the Feuillants, the Girondists, not as members of a hostile class but as political adversaries and as accomplices of the enemy. This is readily explicable. The Montagnard leaders who sat in the committees and in the Convention were not members of the proletariat but merely its friends and allies. They still clung to eighteenth century philosophy—a philosophy which is the negation of class, which ignores social groups in favor of the individual.

That is why the Montagnards, in contrast to the Bolshevists with their basic doctrine of class antagonism, remained fundamentally individualistic and never developed a thoroughgoing, organic dictatorship. Lenin and his associates realized that the establishment and perpetuation of the proletarian dictatorship were handicapped by the separation and division of the powers of the state. The Council of the Commissaries of the People legislates and at the same time executes. In France under the Terror it was different. Unity was never entirely realized in the revolutionary government. The Convention, to be sure, was purged. Theoretically it combined the legislative and the executive. But actually the Committee of Public Safety was responsible for the prosecution of the war, for the handling of diplomatic relations and for general administration, while the Committee of General Security directed political policing and the suppression of conspiracy. Thus there was a division of the executive and the legislative power: the Convention on one side, the committees on the other. There was a dualism even in the executive power, which was divided between two separate committees. The revolutionary machine of the Montagnards was infinitely more complicated and its manipulation correspondingly more delicate than the revolutionary machine of Soviet Russia.

With the fall of Robespierre individualism reasserted its rights to the full. The system of requisitions and taxes passed with the Terror. The bourgeoisie after a momentary curtailment of its power sprang up again fully triumphant. The Girondists, freed from prison, resumed their seats in the Convention. The last Montagnards were exterminated in abortive risings. Their agents, who had had the courage to organize and to operate the revolutionary government, were branded with the name of terrorists and disarmed en masse. There is no record of those who fell, massacred during the white terrors. The proletariat sank again into silence and subjection. If it later welcomed the dictatorship of Bonaparte it was because he gave them work and bread. The revolution by and large had done no more than replace one class with another, an aristocracy of birth with an aristocracy of wealth, but it had flung out to the world the idea of social justice.

The French Revolution succeeded, it would seem, only to the extent that it had been prepared for. The work of the bourgeoisie, it redounded to the profit of the bourgeoisie. This class, possessed of wealth and intellectual superiority, was destined to triumph over a nobility which, despite the significant attempt at rehabilitation undertaken during the last days of the monarchy by the higher ranks, was essentially impoverished and already half dispossessed. It was destined to triumph over the people, because the people, still untrained, was dependent upon it for its leaders. The bourgeoisie alone was endowed with a sufficiently developed class spirit to seize and maintain power.

It is a most striking fact that during this period the artisan classes of France entered the struggle only in a political sense, even when the struggle was directed toward social demands. Corporations were suppressed. Syndicates did not yet exist. The guilds were weakened by division. Strikes were forbidden. It was in the clubs and the popular societies, in the communes and in the sections, that the sans-culottes, thrown in with the advance party of the bourgeoisie, were forced to fight for their interests. They were bent on getting complete control of public power. To get control of the state they did not hesitate to resort to the mobs which were being organized in the political societies and which were achieving results only because the armed force, the national guard, was on their side, as were frequently the communal authorities as well. July 14, for instance, was mapped out by the assembly of electors which had appointed the deputies from Paris to the Estates General, and this assembly of electors sat in the Hôtel de Ville next to the legal municipality. August 10 similarly was the work of the sections and of a part of the commune. The same is true for May 31.

After Thermidor the bourgeoisie once more came into its own. It purged the national guard and soon afterwards disarmed it; the mobs, which no longer had the support of the communal authorities, suffered a succession of failures. The clubs were closed, robbing the famished

and disarmed mobs of a place of meeting and of a point d'appui. They drifted helplessly. The situation would have been different if the proletariat of this period instead of borrowing its political organization from the bourgeoisie had succeeded in working out a class organization. But as it was, when the sans-culottes lost political power they lost everything.

The triumph of the bourgeoisie was perhaps too complete. Hounded mercilessly by the *lois d'exception*, the last democrats disappeared or took refuge in surly abstraction. The Thermidorians remained isolated, surrounded by a hostile nation.

The great majority of Frenchmen, surfeited with politics, their spirits broken by the sufferings of war, pined only for peace. They no longer bothered to perform their duties as electors when the suffrage was restored to them. Only the professional was interested in politics. The average Frenchman no longer mentioned public affairs except with irony and disgust. Dictatorship, which under diverse forms had been continuous since 1789 and which was perpetuated by the coups d'état of the Directory, forced the individual to withdraw into himself. Idealism was dead among the royalists as well as among the republicans. Generous enthusiasm gave way to egoism. The time was ripe for Bonaparte with his reassurances and consolidation of interests. In default of political liberty he brought to the French the assurance of civil liberties. In his code he preserved equality, their most cherished possession. He maintained the greater number of the institutions of the revolution, fusing them at times with adaptations made from those of the ancien régime. So forceful was his work that the door was forever closed to an integral restoration of the past.

The influence of the French Revolution on France and on Europe was so important that it is no exaggeration to say that it marks the beginning of a new era in the history of the world. France found herself greatly strengthened by the destruction of the ancien régime. No other state was so homogeneous. The suppression of orders, of bodies, of privileges, the unification of legislation, the standardization of institutions, the decisive advancement of the national language, had already generated a tremendous élan. It was only in France that for a long period of time the all powerful state ruled over citizens endowed with equality.

The individualistic program of the physiocrats was in a large measure realized. The right

of property, recognized as absolute, allowed the French full enjoyment of economic and civil liberties. The road was wide open to the rise of capitalism, and it was not simply a coincidence that the great capitalists were in the majority of cases ardent revolutionaries.

In principle the revolution proclaimed itself peaceful. It solemnly renounced all conquesta spontaneous gesture which won many sympathizers abroad—but the violent clash of the revolutionary program with the monarchical rendered the maintenance of peace impossible. War changed the aspect of the problem. The kings of neighboring countries were forced to resort more and more to French methods as a war measure. In 1794 the king of Spain inaugurated a confiscation of the church treasury. The following year he appropriated the revenues of vacant ecclesiastical benefices and at the same time began the issue of paper money. The Austrian emperor was reduced to the same necessity. Confronted with a shortage of troops, he resorted in the third year of the war to the device of the levée en masse. Pitt kept in power only by loans. Fortunately the crowned heads of Europe did not dare prescribe universal military service, which saved France, because as Mallet du Pan has pointed out they were almost as afraid of their subjects as they were of the enemy.

Victory intoxicated the French. Under the pretext of bringing liberty to their neighbors they brought conquest in the form of a rejuvenation of the old theory of natural frontiers. They became a perilous threat to the liberty of Europe. Napoleonic militarism brought into being nations which had hitherto had no national consciousness. Thus the nationalistic struggles so numerous in the nineteenth century were the direct offspring of the French Revolution. In the past, wars had been purely dynastic; the people had played but a passive role. The wars of the future in direct contrast were to put into the field larger and larger armies recruited according to the French system of military service extended progressively to the entire nation. In 1793 France had equipped 1,200,000 men. It was the first time since antiquity that an equal number of effectives had been assembled together. Never had there been recruited an army equally nationalistic in spirit, which went out not only to defend its national independence but to impose on others its political and religious credo.

With the progress of the nineteenth century the struggles between peoples became increas-

ingly bitter. Europe was split up into hostile nationalistic systems. But early in the century conditions were different. The conflict was as yet more social than political. In all nations there were minorities of varying strength, which shared the French ideal and more or less secretly expressed their wishes for its success. In order to prevent these minorities from expanding and contaminating the rest of the subjects, monarchs were forced to grant increasingly important concessions. Thus the efflorescence of nationalism was accompanied by a liberal movement which gradually undermined the walls of France's neighbor states. Moreover, both nationalists and liberals belonged to the same social class-to that enlightened bourgeoisie which had reformed France and subsequently become the model for Europe.

At the outset the revolutionaries in France although tinged with the spirit of Voltaire had nourished little hatred against the church and still less against religion. They dreamed, on the contrary, of securing the collaboration of the clergy in the defense of their political work. Their union with the lower clergy had been very close. But the refusal of the pope to ratify their religious reforms, the schism within the clergy, which was divided into juring and non-juring priests, their ineffective efforts to repair this schism—all of these factors led them gradually to a policy of hostility toward the church. They wound up by secularizing the republic through the separation of church and state. The Concordat of Bonaparte, designed primarily to reassure the classes which had acquired national property during the revolution, was powerless to reestablish the former close alliance between throne and altar. The civil state remained in the hands of civil magistrates. Anticlericalism, which before 1789 was nothing more than a point of / view, became a program which was to be adopted by the majority of liberals throughout Europe.

Similarly the divine right of kings had received a fatal blow in the proclamation of the principles of 1789. The idea of sovereignty had undergone a change of meaning. From the king it had passed to the people, and the scaffold of January 21 had shorn it of all supernatural prestige. When Charles x at his coronation made for the last time the gesture of touching the scrofulitic he was greeted with laughter.

The American Revolution had been primarily a political revolution. It had respected the privileges of the wealthy classes and had established without exception an electoral system based on the census. It had not even struck at the remnants of the feudal system which here and there were still in evidence. The seigniorial rents in the state of New York, for example, were not suppressed until the middle of the nineteenth century.

The French Revolution was profound in a different sense. It thoroughly exterminated without indemnification feudal dues and the dîme. It nationalized the property of the church and the property of the émigrés. It completely remodeled the commercial industrial regime. It revealed itself almost from the beginning as imbued with a keen sense of equality, which reached its apogee in 1793-94. Under the stress of necessity rather than theory a social democracy made its début and attempted to take its place in the world of men. The attempt was premature and failed. But it did not disappear without leaving traces, at least in the realm of ideas. The de facto collectivism realized by the terrorist regime, the control of prices, the requisitions, the communizing of all the resources of the nation, were cited over and over again by the social reformers during the century after Babeuf.

If the Terror continued to freeze the blood of nineteenth century bourgeois it kept alive the hope of champions of social justice. It acted upon their imaginations like a grandiose myth, a breeder of devotion and sacrifice. The historian Gabriel Monod in his preface to Mathiez' Contributions a l'histoire religieuse de la Révolution recounts that at Nantes toward the middle of the last century the woman at whose house he was boarding was singing the praises of her father, who had enthusiastically welcomed the revolution and had fought for it in his youth against the Vendeans. "He sorrowfully witnessed the extermination by the imperial regime of the democratic liberties which had been bought so dearly. At each new revolution—1814, 1830, 1848—he had believed that the ideal republic, dreamed of in 1793, was about to reappear. He died under the Second Empire, more than ninety years old; at the moment of death, raising his eyes ecstatically toward the sky, he murmured, 'O sun of '93, I shall then die without having again seen thy rays!" He was no exception, this old Breton. The sun of '93 which had illumined his youth had ill succeeded in cloaking itself behind the darkened horizon, for in his heart he had kept bright its undying rays.

Mankind has need, in the course of its trying and discouraging march forward, to have its illusions rekindled by the warm rays of the past.

The revolutionaries of 1789 drew sustenance for their struggles from the memory of the republics of antiquity or from the more recent example of the American Revolution. Plutarch was before their minds and his spiritual elevation served to exalt their courage, to increase their faith in the revolution. They imitated the heroes of Greece and Rome and like them gave up their lives for their faith—becoming in their turn heroes. For their descendants they became what Aristides, Brutus and Cato had been to them-martyrs who by their lives and their deaths bear witness to the abiding strength of devotion to justice and selfless love of humanity. The republicans of France have faithfully nourished their memory, and the revolution has served in contemporary history as a spring, ever fresh, of precedent and inspiration.

Albert Mathiez

See: Introduction, section on The Revolutions; Revolution and Counter-Revolution; Dictatorship; Class Struggle; Babouvism; Absentee Ownership; Agrarian Movements, section on France; Jacobinism; Clubs, Political; Estates General; Declaration of the Rights of Man and the Citizen; Encyclopedistes; Social Contract; Economics, section on Physiocrats; Equality; Liberty; Liberalism; Nationalism; Democracy; Secularism; Property; Assignats.

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FRENEAU, PHILIP MORIN (1752-1832), American poet and editor. Graduating from Princeton when it was a hotbed of radical Whig ideas and caught up in the revolutionary movement, Freneau employed his poetic talents in celebrating the exploits of the patriot armies, heartening the American public and lampooning the British. Particularly after his release from a British prison ship in 1780 he poured out a flood of verse dealing with every phase of the war and driving home the doctrines of the revolutionary leaders. Continuing to write political satires and joining the anti-Federalists, he attracted the attention of Madison. The latter in 1701 made an arrangement with Jefferson's aid by which Freneau received the post of translating clerk in the State Department with the understanding that he should launch an anti-Federalist newspaper. The resulting organ, the National Gazette, undertook not only "the chastisement of the aristocratical and monarchical writers" but the criticism of Washington's administration and particularly of Hamilton's share in it. Freneau dealt vigorously with the government's neutrality policy, defended the operations of Genet and harshly attacked Hamilton's financial measures. He assailed the extension of federal powers under the "general welfare" clause of the constitution as a dangerous move toward centralization and denounced the supposed monarchical tendencies of both Hamilton and John Adams. In October, 1793, the National Gazette ceased publication. Freneau continued his contributions to the press and in 1795 established the Jersey Chronicle, followed two years later by the Time-Piece and Literary Companion. These continued to disseminate the ideas of Jefferson, Paine and Rousseau and to exalt libertarian and egalitarian ideas at the expense of aristocracy and centralized efficiency. Although the Time-Piece was short lived, Freneau's use in it of poems, skits, dialogues and epigrams was a notable contribution to journalism. Retiring to his New Jersey farm in 1807 he ceased to write; but before he died his poems went through five editions.

ALLAN NEVINS

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FREQUENCY DISTRIBUTION. Like many terms in statistics frequency distribution is used in a dual sense: it refers both to a finite collection of phenomena of the same general type but varying from case to case, which are tabulated and arranged in groups, and to the properties of the objective reality which give rise to such phenomena. These two notions, whose contrast has been so little emphasized that much confusion has resulted, are often described by the terms "sample" and "hypothetical infinite population." This terminology brings out the analogy with the simpler but rarer operation of sampling from a limited population for the sake of finding out something about this limited population only, not as an indication of broader tendencies. In more scientific studies any available data, even the complete record for a whole nation, are regarded as a mere "sample" of what the underlying forces might produce; and these underlying forces, with the further samples to which they may give rise, constitute the real goal of investigation. The infinite character of the hypothetical population is merely an expression of independence among the members of a sample; in a finite population, for example of colored balls in a bag, the constitution would vary in the course of the sampling by reason of the removal of some of the balls.

The concept of a frequency distribution as a property of a set of conditions is identical with that of mathematical probability as applied either to discrete classes or to one or more continuous variables. Two types of problem occur: the direct problem of finding the probability of a particular type of sample when the population is fully specified, and the inverse problem of inferring a population from a sample. While the solution of a direct problem is fully determinate and may be worked out by a competent mathematician

accurately on the basis of unquestioned principles, inverse problems can be solved only on the basis of assumptions or criteria upon which no universal agreement has yet been reached, and which possibly vary from one problem to the next. The discussion of these criteria constitutes the theory of statistical estimation, to which the chief contributions have been made by R. A. Fisher.

The type of frequency distribution of chief interest is that of a single, sensibly continuous variable. To investigate such a variable a number of observations are collected and arranged in the order of values which the variable assumes in each observation. It is useful to divide the range of the variable into definite classes, taking particular care to adopt a convention as to the disposition of marginal and otherwise doubtful cases. Thus when an observation falls exactly on the boundary between two classes, each of these classes may be credited with one half, giving rise to fractional frequencies. A list of the number of observations falling into each class may then be prepared; the result is a frequency distribution in the sense of a sample. An illustration of such a frequency distribution is presented below.

GROSS PROFIT MARGINS IN RETAIL HARD-WARE STORES

CLASS INTERVAL (in percent)	Number of Cases
Less than 4	3
4 to 8	10
8 to 12	16
12 to 16	30
16 to 20	20.5
20 to 24	15.5
24 to 28	5
Over 28	
Total	100

A frequency distribution of this sort may be treated graphically by measuring the continuous variable horizontally and constructing rectangles with areas proportional to the frequencies, yielding a block diagram, or histogram. If the class intervals are of unequal length it is important to observe that it is the areas and not the heights of the rectangles which are proportional to the frequencies. The frequencies are often graphed as the ordinates of points which are connected by a broken line; this type of figure is perhaps simpler and smoother but leads to confusion when the class intervals are unequal.

A cumulative frequency distribution gives the number or sometimes the proportion of cases for which the variate takes a smaller value than each value considered. It may be obtained from an ordinary frequency distribution by writing down the first frequency, then the sum of the first two, then that of the first three and so on. The graph of a cumulative frequency distribution is called an ogive. It rises continually, or at least never falls, in passing to the right.

In the foregoing illustration the frequencies in the extreme classes are small, and as a central value is approached from either side the frequencies in the class intervals gradually increase. This is typical of nearly all frequency distributions and for a good reason. The variable is generally affected by a large number of more or less independent causes, some accidental circumstances tending to increase its value, others to decrease it. The effect of each of these varying causes may be very slight. In order that the variable may have an extremely large or small value it is necessary that a large number of these fluctuating conditions shall concur in influencing it in the same direction, and this will seldom happen.

If the class intervals chosen are so short as to produce only small frequencies in each class, the truly continuous and single peaked nature of the frequency distribution may be masked by the irregular fluctuations associated with the small frequencies. On the other hand, excessively long class intervals are to be avoided because of the loss of information when the position within the group is unknown. The larger the sample, the finer becomes the appropriate grouping. The frequency distribution of the population may be depicted by a continuous curve, which may be regarded as the limit of the histogram when the size of the sample is increased and the grouping simultaneously made finer.

The problem of statistical estimation becomes in this leading case the problem of frequency curve fitting. Such fitting may be done either by free hand drawing or by assigning definite values to the constants of some analytic equation. The curve fitted by free hand drawing should have as few sharp turns as possible and should enclose the same area as the graph of the observations. Much is to be said for this method, particularly in the early stages of an investigation. Indeed, the importance of continual ready resort to graphic methods throughout a statistical study cannot be overstressed. When an analytic curve or equation is to be fitted, the procedure falls into three parts: the selection of a type of equation, which will involve disposable constants or parameters; the assignment to these parameters of values dependent on the data with a view to obtaining a fit which on some criterion will be as good as possible; and the testing of goodness of fit, or of agreement of observation with hypothesis.

Of the types of frequency curves which have been proposed, those of paramount importance are the Gram-Charlier series and the system of Karl Pearson. The former is an infinite series, of which the first term is the ordinate of a nor-

mal distribution,
$$y = \frac{1}{\sigma\sqrt{2\pi}}e^{-\frac{(x-m)^2}{2\sigma^2}}$$
,

multiplied by a constant, and the later terms are the derivatives of the first with respect to x, also multiplied by disposable constants. Only the first few terms of the series are used, their number depending on the number of constants which can be evaluated dependably by means of the data at hand. For distributions far removed from the normal form the convergence is slow, and the sum of the first few terms may give negative frequencies, which are inadmissible.

Pearson proposed the use of frequency curves obtained from the following differential equation: $dy/dx = y(x + a)/(b_0 + b_1x + b_2x^2)$. These curves have each a single maximum, for which x = -a, since the tangent becomes horizontal only here and at the ends of the range, where y = 0. The form of the curve depends on the values of the constants, particularly on the real or imaginary nature of the factors of the denominator. The constant of integration is determined in fixing the area under the curve, leaving four parameters upon which depend the location, dispersion and shape of the curve. There are, however, certain transitional types involving fewer than four constants. The normal distribution mentioned above is one of these transitional types, having two parameters, m and σ . A transitional form having three parameters is Type III, which may be written as follows:

$$y = \frac{1}{p!a} \left(\frac{x-m}{a} \right)^p e^{-\frac{x-m}{a}}.$$

In addition to continuous curves many methods of smoothing data are in use, particularly among actuaries, which replace observed by theoretical frequencies in the classes originally adopted, without providing analytic equations. A considerable number of these have been described by Whittaker and Robinson. A method of difference equation graduation has been devised by II. C. Carver (in the *Handbook of Mathematical Statistics*, ch. vii).

Other types of frequency curves may be derived from the Bernoulli, or binomial, distribution, which is a discrete distribution arising directly from theory. If in independent trials, such as the tossing of a die or the spinning of a roulette wheel, the probability at each trial of a particular type of outcome, which may be called a "success," is p, then the probability of x successes in n trials is $\lfloor n!/x! (n-x)! \rfloor p^x (1-p)^{n-x}$. When the number of trials increases indefinitely, the binomial distribution approaches the normal form in the sense that, putting $t = (x - np) / \sqrt{np(1-p)}$, the probability that t lies between t_1 and t_2 approaches

$$\frac{1}{\sqrt{2\pi}} \int_{t_1}^{t_2} e^{-\frac{t^2}{2}} dt.$$

The significance of t will become clearer if it is realized that in a binomial distribution the mean value (corresponding to m in the equation of the normal curve above) equals np and the standard deviation equals $\sqrt{np(1-p)}$. This expression for the probability integral, usually ascribed to Laplace or Gauss, seems to have been obtained by A. de Moivre in 1733.

Another limiting form of the binomial distribution arises when there are many opportunities for a very improbable event to occur. If p approaches zero at the same time that n increases, in such a way that their product retains a fixed value m, the successive terms of the binomial approach e^{-m} , me^{-m} , $m^2e^{-m}/2!$, . . . This is the Poisson distribution. A soldier is not likely to be killed in a given year by the kick of a horse, but there are many soldiers in an army corps; consequently Bortkiewicz was able to show that ten Prussian army corps, whose records for twenty years constituted 200 trials, supplied for the numbers 0, 1, 2, 3 and 4 of soldiers killed in this way frequencies approximately proportional to the terms of a Poisson distribution (Das Gesetz der kleinen Zahlen, Leipsic 1898).

The normal distribution, often called the Gaussian law of error, will be approximated by a variable which is a linear function of a large number of independent quantities, all making approximately equal contributions to its variation. It is this property which gives the normal distribution its chief importance, since most frequency distributions encountered in practise represent the resultants of large numbers of more or less independent causes. Extensions of the derivation of the normal distribution to cases in which the contributory variables are not entirely independent have been discussed by the

Russian mathematicians A. Markov, S. Bern stein ("Sur l'extension du théorème limite du calcul des probabilités aux sommes de quantités dépendantes" in *Mathematische Annalen*, vol. xcvii, 1926-27, p. 1-59), and others.

The wide use of the normal distribution in statistics rests upon its property as the limit of the distribution of a linear function of many variables as well as upon considerations of convenience in mathematical operations. It is particularly to be noted that the arithmetic mean is a linear function, and that consequently the mean of a number of values from any distribution will usually have a distribution more nearly normal than the original. Hence the mean of the squares or of the powers of any order of n random values of an arbitrary variable will have a distribution very close to the normal form when n is large.

When the type of distribution to be fitted to empirical data has been chosen, the determination of the parameters presents the next problem. The method of fitting advocated by Karl Pearson for his curves, which was also adopted by the Scandinavian mathematicians who developed the Gram-Charlier series, is the method of moments. This term, like frequency distribution, is used in a dual sense. The kth moment of a sample is the arithmetic mean of the kth powers of the observed values. The kth moment of a hypothetical infinite population is the mathematical expectation of the kth power of the variable studied; that is, the sum or integral of the products of the probabilities of particular values by the kth powers of these values. In determining, say, four parameters the method of moments consists in equating the moments of orders 1, 2, 3 and 4 of the sample to the corresponding moments of the theoretical population, thus obtaining four equations for evaluating the four unknowns. Since the distribution of means is likely to be much closer to the normal than the original distribution, the distribution of sample moments is for large samples approximately normal. Hence the probable error of a moment may be given the usual interpretation of a probable error, provided the sample is moderately large.

R. A. Fisher has proposed the method of maximum likelihood for fitting curves. The concept underlying this method is that of the likelihood of a particular set of values of the parameters of the infinite population on the basis of the given sample. It is defined by Fisher as any quantity proportional to the probability of pb-

taining exactly the sample which has been obtained on the assumption that the values which have been assigned to the parameters are the true ones. Likelihood is a measure of degree of rational belief but is distinct from mathematical probability and is not subject to its laws. In particular, likelihood is not to be multiplied by the differential of the parameter and integrated, as has been done with inverse probability.

For determining the mean m and variance σ^2 of a normal distribution the method of moments and the method of maximum likelihood give the same result. In other cases the estimate obtained by maximum likelihood has a smaller probable error than that by moments. For determining the parameter m which fixes the location of a Pearson Type III curve, for example, the variance is $a^2(p-1)/n$ when the method of maximum likelihood is used with a sample of a large number of observations and $a^2(p + 1)/n$ when the method of moments is used. Thus increased accuracy, which is measured by diminished variance, may be obtained either by increasing the size of the sample when the method of moments is used or by resorting to the more accurate method of calculation by the method of maximum likelihood. In fitting a Type III curve for which p = 2, for example, a degree of accuracy in location obtainable by the method of maximum likelihood with 100 cases requires 300 cases when the method of moments is used. Against this advantage must be set a greater labor in calculation, since the equations are not, like those involving moments, linear.

In connection with the method of maximum likelihood Fisher developed the concept of the efficiency of a method of curve fitting-the extent of utilization of the total information in the sample regarding the value of the parameterand of the amount of information in the sample relevant to the value of the parameter. Efficiency is measured by the ratio of variances of the values of a parameter obtained by different methods. Fisher has given a proof, applicable in the limit to large samples, that if the optimum estimate (i.e. that obtained by maximum likelihood) has a normal distribution, its variance is less than that of any other normally distributed estimate of the same parameter. It appears likely that with increasing size of sample the distribution of optimum estimates approaches normality for a rather wide class of parameters (see Hotelling, Harold, "The Consistency and Ultimate Distribution of Optimum Statistics" in American Mathematical Society, Transactions, vol. xxxii, 1930, p. 847-59). In such cases the method of maximum likelihood has the maximum possible efficiency. The amount of information is measured by the mathematical expectation of $(\delta L/\delta m)^2$, where L denotes the logarithm of the likelihood and m the parameter. In a considerable class of cases the reciprocal of this expectation approximates for large samples the variance of the optimum estimate.

The propositions regarding the efficiency and amount of information of the method of maximum likelihood have not been proved valid except in the limit for large samples, and even there the proofs are possibly vulnerable from the standpoint of strict mathematical rigor, How far the theorems are dependable in dealing with small samples is still a matter of guesswork. Moreover, for the location of discontinuous distributions the theorems on maximum likelihood are not applicable. Nevertheless, a review of the proofs which have been given suggests strongly that for the samples ordinarily dealt with the method of maximum likelihood has a marked advantage in accuracy. The method is applicable not only to the fitting of continuous curves but also to discontinuous distributions of many sorts and to the joint distributions of several variables.

After values have been assigned to parameters the goodness of fit must be tested. The best known method of testing is that devised by Pearson. Consider a population with a grouping into k classes, with probabilities p_1, p_2, \ldots, p_k of an individual falling into the several classes. For a sample of N the most probable numbers to be expected are Np_1, Np_2, \ldots, Np_k ; let these expected numbers be denoted by m_1, m_2, \ldots, m_k . If in an actual sample of N the numbers observed to fall into the several classes are m_1', m_2', \ldots, m_k' , an appropriate measure of the

total discrepancy is
$$\chi^2 = \sum_{i=1}^k \frac{(m_i' - m_i)^2}{m_i}$$
.

Pearson showed that if the frequencies in all classes are large enough to permit the replacement of the binomial by the normal distribution, the probability of any value χ being exceeded by chance is

$$P = \frac{\int_{\chi}^{\alpha} \chi^{n-1} e^{-\frac{1}{2}\chi^2} d\chi}{\int_{0}^{\alpha} \chi^{n-1} e^{-\frac{1}{2}\chi^2} d\chi}$$

where n = k - 1. As χ increases P declines. When P is very small the frequency curve fitted must be rejected.

This method directly applies only to the relatively unusual cases in which the exact proportions among the expected numbers in the several classes are specified completely on the basis of a theory which does not depend at all upon the sample. Commonly there are disposable constants, and the "expected" frequencies are therefore to some extent dependent upon the observations. R. A. Fisher has shown that the χ^2 test is applicable in this case, at least as an approximation, but that the value of n must be diminished by the number of constants determined from the data. Thus if a normal distribution is fitted to the table of profit percentages of retail hardware stores given above, which has 8 classes, the value of n to be used in finding P is 5; for the normal distribution involves as parameters the mean and the standard deviation in addition to the total number N, and all three of these quantities are determined from the observations.

In this modified form the χ^2 test may be applied to a great variety of problems, including that of testing whether two samples grouped in a particular manner may reasonably be considered to have been drawn from the same unspecified population. In this connection a contingency table is used; that is, an array in rows and columns of cells in which observed frequencies are entered. The division into rows represents a classification according to one property and that into columns according to another. If the two modes of classification are independent, the probability of falling into any cell is the product of a number pertaining to its row by a number pertaining to its column. When the observed marginal totals are distributed among the cells in a proportional manner, the result is a set of hypothetical frequencies which may be compared with the actually observed frequencies by means of χ^2 to test the hypothesis of independence. If there are r rows and c columns, the number of degrees of freedom, or n, to be used is (r-1)(c-1). In general n is to be taken as the number of cells which can be filled in arbitrarily without conflicting with the marginal totals. A particularly important case is the double dichotomy into a fourfold table. Thus if persons are classified roughly as rich or poor and also as black or white, the numbers in an observed sample may be represented in a table of the following form:

 $\begin{array}{cccc} & \text{Rich} & \text{Poor} \\ & \text{White} & a & b \\ & \text{Black} & c & d \\ \chi^2 & \text{in this case may be shown algebraically to} \end{array}$

have the value
$$\frac{(ad + bc)^2(a + b + c + d)}{(a + b)(c + d)(a + c)(b + d)}$$
.

where a, b, c and d stand for the observed frequencies. Since only one cell may be filled in arbitrarily without conflicting with the marginal totals, the value used for n is 1. Lexis' method for testing homogeneity among different districts of sex ratio of births and similar variables is really a special case of the use of contingency tables. An immense variety of comparisons important in the social sciences may be made in this way.

Apart from the general problem of testing the goodness of fit of a frequency curve, it is of constant importance to compare samples with each other and with theory in particular respects corresponding to the values of particular parameters of distributions. Chief among these comparisons is that of central values, of which the arithmetic mean is the most important for normal distributions. For the arithmetic mean of a sample x_1, \ldots, x_N from a normal distribution the variance is that of the population, divided by N. Since the variance of the population is usually not known, it is estimated from the sample by the expression $\sum (x_{i} - \bar{x})^{2}/(N - 1)$, where \bar{x} is the mean of the sample. The possible deviation of \bar{x} from the true mean of the population accounts for the use of N-1 instead of N in the denominator. To test the significance of the deviation of the mean from a hypothetical value this deviation is divided by the estimated standard error of the mean (square root of the variance); if the sample is very large, the result of this division may be considered approximately normal in distribution, and tables of the normal probability integral applied. But for small samples this would be inaccurate; the correct distribution was discovered in 1908 by "Student" and proved rigorously correct by Fisher, who has shown how the use of Student's distribution may be extended to a large variety of other statistical tests, including the comparison of two sample means and of least square solutions.

Measures of dispersion are second in importance to those of central value. That most commonly used is the standard deviation, whose square, the variance, may be estimated by means of the preceding formula. Very often N is used instead of N-1 in the denominator, but this tends to bias the estimate in the direction of making it too small. Other common measures of dispersion are the mean deviation, the arithmetic mean of the absolute values of the devia-

tions from the mean, and the semi-interquartile deviation. The last is defined by means of the quartiles—the values of the variable, of which one is just greater than the least fourth of the cases and the other is just less than the largest fourth.

HAROLD HOTELLING

See: STATISTICS; PROBABILITY; AVERAGES; CURVE FITTING.

Consult: Fisher, R. A., "On the Mathematical Foundations of Theoretical Statistics" in Royal Society of London, Philosophical Transactions, ser. A, vol. cexxii (1921-22) 309-68, and "Theory of Statistical Estimation" in Cambridge Philosophical Society, Proceedings, vcl. xxii (1923-25) 700-25, and Statistical Methods for Research Workers (3rd ed. Edinburgh 1930); Elderton, W. P., Frequency Curves and Correlation (2nd ed. London 1927); Whittaker, E. T., and Robinson, G., The Calculus of Observations (London 1924) ch. viii; Handbook of Mathematical Statistics, ed. by H. L. Rietz (Boston 1924) chs. ii, v-vii.

FRÉRET, NICOLAS (1688-1749), French historian. Fréret was a pupil of Rollin and protégé of the count of Boulainvilliers. He was made a member of the Académie des Inscriptions in 1714; he published most of his works in the proceedings of this society and became its permanent secretary in 1743. His studies, the importance of which was not recognized during the first part of the ninetcenth century, anticipated the results reached by the scholarship of recent times. His first memoir, De l'origine des français (1714), in which he developed the view that the Franks penetrated into Gaul through peaceful agreements with the emperors rather than through conquest, is very similar to the theory later made famous by Fustel de Coulanges. He devoted a large number of works to ancient chronology and to the metrology and geography of the ancient world. He founded the scientific study of mythology, basing it on a comparative and systematic study of the stages through which the various myths passed before they were recorded by historians. With the aid of Galland and especially of manuscript works of the Jesuits he even ventured to study the language, chronology and poetry of the Chinese. His last works treated of the most ancient peoples of Europe and their migrations; he endeavored to make use of linguistics and possibly glimpsed the unity of the Indo-European languages. Fréret almost entirely neglected epigraphy and archaeology but his works are remarkable for their display of vast erudition, for the careful chronological classification of sources and for the emphasis upon the scientific study of origins.

He would have contributed more to the progress of ancient history if his work had not remained in part unpublished; even today the Académie des Inscriptions possesses unpublished memoirs of Fréret. His memory suffered through a singular fraud: philosophers (the real culprit appears to have been Naigeon) issued under his name from 1766 to 1776 some anti-Christian works which gave him a posthumous celebrity he had not desired.

André Piganiol

Works: Oeuvres complètes, ed. by N. LeClerc de Septchênes, 20 vols. (new ed. Paris 1799), incomplete and containing some apocryphal works; Oeuvres complètes, ed. by J. J. Champollion-Figeac, of which only one volume was published (Paris 1825).

Consult: "Rapport . . . au sujet de la publication des manuscrits inédits de Fréret . . . " in Académie des Inscriptions et Belles-Lettres, Mémoirs, vol. xvi, pt. i (1850) 253-329; Bougainville, J. P. de, in Académie des Inscriptions et Belles-Lettres, Histoire, vol. xxiii (1756) 314-37; Maury, L. F. A., Les académies d'autrefois: Pancienne Académie des Inscriptions et Belles-Lettres (2nd ed. Paris 1864); Flint, R., Historical Philosophy in France and French Belgium and Switzerland (New York 1894) p. 246-49.

FRÉRON, ÉLIE CATHERINE (1718-76), French journalist. Fréron was born at Quimper of a humble family of goldsmiths and was educated at the Collège Louis-le-Grand. For a time he taught in the same school until literary ambitions impelled him to abandon both the priesthood and teaching. He became a journalist, published various studies in Abbé Desfontaine's collection and eventually launched a literary review which from 1754 on was known as the Année littéraire. Not only was the Année littéraire from 1754 until Fréron's death the most vigorous and best written review of its kind in France but it became the prototype of French literary journalism and inaugurated the modern type of French literary criticism. In a century avid for gossip and anecdote Fréron had the courage to introduce a journal serious in approach and encyclopaedic in the breadth of its interests. This journal he used as a medium for the defense of traditionalist ideas against the philosophes and the encyclopédistes. Voltaire was the particular victim of his attack; and for years the two engaged in polemics in which the great poet seems to have displayed less dignity than his adversary. In general a reactionary, "respecting religion, morality, the state and his superiors," Fréron was not entirely lacking in constructive ideas. He conceived of a social and political reform which should consist not in extending high powers to selected members of the bourgeoisie—as the *encyclopédistes* would have wished—but in ameliorating the condition of the artisan and peasant classes. Education, redistribution of taxes, abolition of the corvée and of internal customs, improvement and freedom of the arteries of communication, removal of the tyranny of the guilds, were elements in his program. After 1765 Fréron's success suffered a gradual eclipse. When in 1776 the government finally acceded to the persistent entreaties of his enemies and suspended his review the blow killed him within a few hours.

His only son, Stanislas-Louis-Marie (1754-1802), politician and journalist, left the Collège Louis-le-Grand six months after his father's death and continued the Année littéraire for several years. In 1789 he suddenly assumed the attitude of a violent revolutionist. In May of the following year he founded the Orateur du peuple (1790-92; 1794-95), one of the most extreme revolutionary newspapers ever to appear in France. Fréron, who introduced the use of headlines, had journalistic talents of the first order. He possessed to a high degree the art of inflaming the masses, but with this he failed to combine either any real sympathy for them or any rational program for their relief. His political record is one of opportunistic vacillation. In the Orateur du peuple he was one of the first to attack the king and as a member of the Mountain he conducted with Barras a terrorist campaign of unexcelled violence in Toulon and Marseille; returning to Paris in January of 1794 he joined the anti-Robespierrists and helped to organize the events of the tenth of Thermidor, after which he appeared as a moderate and a leader of the jeunesse dorée. Eventually he offered his allegiance to Napoleon, who in order to be rid of him sent him as subprefect to San Domingo, where he soon died.

BERNARD FAŸ

Consult: Cornou, F., Élie Fréron (Paris 1922); Dudon, P., "Fréron et Voltaire" in Études, vol. clxxi (1922) 567-83; Chauvin, P., "Un journaliste au XVIII" siècle" in Revue des Pyrénées, vol. xvii (1905) 46-74; Green, F. C., Eighteenth Century France (London 1929) p. 111-54; Arnaud, R., Le fils de Fréron (Paris 1909); Kuscinski, A., Dictionnaire des Conventionnels (Paris 1919) p. 273-75.

FREYCINET, CHARLES DE (1828-1923), French statesman. During the war of 1870 Freycinet's aid was enlisted by Gambetta in the organization of the national defense, but his political career really began in 1876 with his

election as senator from Paris. As minister of public works in 1877 he carried through the Freycinet plan, which created a state system of canals and harbors to serve the entire country and of railroads for the less developed districts of western France to supplement the systems of private companies. This program, subsidized by the state on the one hand and the local departments and communes on the other, was brought to a successful conclusion. Freycinet now became minister of foreign affairs and devoted himself to the solution of two important problems, the relations with Great Britain in connection with Egypt and the relations with Russia. He attempted in various ways to bring about England's evacuation of Egypt but without success. Disturbed by Bismarck's resignation and the possible schemes of William II, he made secret overtures to Russia and finally in 1890 and 1891 concluded with it an alliance, which he strengthened three years later by a defensive military convention between the two countries. Meanwhile Freycinet had become minister of war, which post he held from 1888 to 1893. He put through the military law of 1889, which reduced the barrack service for the active army from five years to three. Besides the active army he developed the reserves, which formed distinct regiments, and completely organized the headquarters staff. Freycinet was four times president of the council-in 1879, 1882, 1886 and 1890. His candidature for the presidency of the republic in 1887 was unsuccessful. Although after 1893 he became less and less active because of his age, he still remained chairman of the army committee in the Senate and became minister again for a short time during the World War. Freycinet wielded great power in parliament: his ability as a speaker, his uprightness, his capacity for work, his organizing genius, made him a statesman of the first rank, although he has at times been reproached for a lack of energy.

GEORGES WEILL

Works: Souvenirs, 1848-1878 (Paris 1911); Souvenirs, 1878-1893 (Paris 1913).

Consult: Schefer, C., D'une guerre à l'autre (Paris 1920) p. 74-97, 128-75; Der Nationalismus im Leben der dritten Republik, ed. by J. Kühn (Berlin 1920) p. 22-38; Welschinger, H., "Les souvenirs de M. de Freycinet" in Revue des deux mondes, vol. xxii (1914) 313-41.

FREYTAG, GUSTAV (1816-95), German historian and litterateur. Freytag was born in Silesia and began his career as a poet and dramatist.

The Revolution of 1848 turned his attention to politics and in July of that year he assumed with Julian Schmidt the direction of the *Grenzboten*, which became the leading liberal journal in Germany. In 1870 Freytag severed his connections with this paper and until 1873 contributed regularly to *Im neuen Reich*. Although between 1848 and 1870 he was one of the leaders of the German liberals his parliamentary career was limited to but one term as a member of the Reichstag of the North German Confederation in 1867.

In the development of German nationalist ideology Freytag occupies a place midway between the humanitarian and cultural nationalism of Herder and the realistic political nationalism of Bismarck. He had a clearly defined concept of nationality as an organic unit with common language, traditions and customs and possessed of a folk character which remains fairly constant and continuous throughout the ages. The hourgeoisie, however, is the mainstay of the national state; it is its most healthy element and the bearer of all progress, culture and civilization. In his dramatic work, Die Journalisten (Leipsic 1854), concerned with the life of the bourgeois journalists, in his Soll und Haben (3 vols., Leipsic 1855), concerned with the merchant class, and in his Die verlorene Handschrift (3 vols., Leipsic 1864), dealing with the learned classes, Freytag extolled the virtues and made himself the champion of the German bourgeoisie. It was this essentially middle class liberalism which made him a bitter opponent of the reactionary absolutist tendencies of the nobility on the one hand and the radical democratic tendencies of the revolutionary tradition on the other. He was a strong advocate of German unification under the hegemony of Prussia with the exclusion of Austria and made this the corner stone of the program of the Grenzboten. His deep scated liberalism, however, led him to oppose the policies of Bismarck in both Prussia and the empire.

As a historian Freytag is most famous for his Bilder aus der deutschen Vergangenheit (4 vols., Leipsic 1859-07). It is one of the most important of the earlier types of Kulturgeschichte and aims at giving an intimate picture of German social and cultural development from the earliest times to Freytag's own day. The popular style of this book with its nationalist coloring gave it a tremendous appeal and made it one of the most popular household books in Germany.

KOPPEL S. PINSON

Works: Gesammelte Werke, 22 vols. (Leipsic 1887-88);

Vermischte Aufsätze, ed. by Ernst Elster, 2 vols. (Leipsic 1901-03).

Consult: Lindau, H., Gustav Freytag (Leipsic 1907); Classe, K., Gustav Freytag als politischer Dichter (Hildesheim 1914); Ostwald, P., "Gustav Freytag als Politiker" in Westermanns Monatshefte, vol. exxxviii (1925) 253-59; Schridde, G., Gustav Freytags Kulturund Geschichtspsychologie (Leipsic 1910); Bieber, H., Der Kampf um die Tradition (Stuttgart 1928) p. 460-68.

FRICK, HENRY CLAY (1849-1919), American capitalist. Frick correctly estimated the importance of the coking process, started a small coke business, which expanded rapidly, and early set out to secure strategically located coal lands. He was aided by funds from his mother's family, the Overholts, who were prominent distillers, as well as by extensive borrowings, especially from the Mellon bank of Pittsburgh.

During the panic of 1873 he bought the interests of distressed partners and competitors. The much expanded and reorganized H. C. Frick Coke Company improved its already favorable position by the sale of its majority stock to the Carnegie interests in 1882-83. Except for a period of six months in 1887 Frick continued as manager of the coke company until in January, 1889, he was taken into full partnership with Andrew Carnegie as chairman of Carnegie Brothers and Company (later the Carnegie Steel Company).

Frick was instrumental in establishing the anti-union policy of the Carnegic partners. In 1890 he annihilated the union in the coke fields and in 1892 with Carnegie's approval directed the anti-union policy which brought on open warfare at Homestead. This strike started on July 1, 1892. Six days later 300 imported Pinkerton detectives, brought up the Ohio on barges, clashed with the unionists. After a bloody battle the detectives were escorted from town. On July 23, Alexander Berkman, an anarchist, attempted unsuccessfully to assassinate Frick. By fall hunger, dissension and the repressive action of about 8000 Pennsylvania guardsmen had broken the strike.

Expansion of the Carnegie holdings was rapid under Frick's policy of integration, the company acquiring plants, large ore deposits in the Mesabi Range and essential transportation lines, often in spite of Carnegie's objections. Frequent personal disputes between Frick and Carnegie came to a climax in 1899 with the latter's forced resignation and bitter litigation. A compromise agreement gave Frick about \$31,000,000 of stock and bonds in the newly organized Carnegie

company. In 1901 this company was taken into the United States Steel Corporation, of which Frick became a director. Business ventures with Andrew Mellon, large railway investments and participation in the International Banking Corporation were the chief features in Frick's later life. At his death most of his fortune of \$50,000,000 went to art museums and for other public uses.

COLSTON E. WARNE

Consult: Harvey, G. B. M., Henry Clay Frick, the Man (New York 1928); Autobiography of Andrew Carnegie, ed. by J. C. Van Dyke (Boston 1920) ch. xvi; Perlman, Selig, A History of Trade Unionism in the United States (New York 1922) p. 132-35.

FRIED, ALFRED HERMANN (1864-1921), Austrian pacifist. Fried was the son of an Austrian radical and an Italian countess. He studied philosophy, practised law and held a post in the Austrian diplomatic service. In more than seventy pamphlets and books and two thousand newspaper articles he enthusiastically advocated international peace, warned of the approach of a world war as the result of international anarchy and reproached European intellectuals for their militarism and nationalism. From 1899 on he worked chiefly through his monthly, the Friedenswarte, published in Leipsic until 1914, when he transferred it to Zurich as the Blätter für internationale Verständigung und zwischenstaatliche Organisation. In 1912 he published a book (Der Kaiser und der Weltfrieden, Berlin 1910, and ed. Zurich 1918; English translation London 1912) which condemned the mutual suspiciousness of European diplomats and argued that the kaiser had only pacific intentions. In 1920 he attacked the forced peace of Versailles in Der Weltprotest gegen den Versailler Frieden. He strongly influenced the study of international law in Germany and such scholars as Heinrich Lammasch, Walther Schücking and Hans Wehberg. He sought to secure peace through organization; starting from ethical conceptions he contributed to the development of pacifist thought with his advocacy of international judicial organization depending upon increasingly perfect international cooperation based on economic realities. In 1911 he was awarded the Nobel Peace Prize, in 1913 an honorary degree by the University of Leyden.

WALTHER SCHÜCKING

Important works: Handbuch der Friedensbewegung (Vienna 1905; 2nd ed., 2 vols. Leipsic 1911); Die Grundlagen des revolutionären Pacifismus (Tübingen 1908; 2nd ed. with title Grundlagen des ursächlichen Pazifis-

mus, Zurich 1916); Die moderne Friedensbewegung (Leipsic 1907); Das internationale Leben der Gegenwart (Leipsic 1908).

Consult: Alfred II. Fried, ed. by R. Goldscheid (Leipsic 1922); Kitchin, Darcy B., "Pacifist Portraits: Herr Fried" in New Europe, vol. ii (1917) 244-48.

FRIEDBERG, EMIL ALBERT (1837-1910), German jurist. Friedberg taught successively at Halle, Freiburg and Leipsic, and acquired a reputation as a canonist. It was Hinschius who awakened his interest in ecclesiastical law, and he turned to the problems arising from the increased legal demands made upon the state by the Catholic church in the Europe of the middle of the nineteenth century. An adherent of the historical school, like Eichhorn and like his teacher, A. L. Richter, Friedberg was the first to distinguish the purely juristic from the dogmatic aspects in the historic materials of the canon law, to strip ecclesiastical jurisprudence of its romantic and mystic veils and to transform it into something approaching his ideal of a purely juristic science. In his many articles in the period from 1869 to 1876 dealing with the problems of the relation of church and state in the Middle Ages and also with civil and ecclesiastical marriage Friedberg discovered the juridical foundations of ecclesiastical rights, at the same time, however, stressing their limitations and proving himself a scholarly champion of the positive rights of the state against the church. His keen, clear, objective judgments, based upon a profound scholarship, even influenced the religious policy of the German government of his time. He turned to new tasks after the conflict between the Catholic church and state in Germany, particularly as it concerned Prussia, had been settled. He published his famous edition of the Corpus juris canonici (2 vols., Leipsic 1879-81), in which he provided a critical commentary on the texts of the laws then in force in the Catholic church. He also collected the constitutional laws of the Protestant state churches in Germany as a preliminary to treating their constitutions systematically. Of his works the classic Lehrbuch des katholischen und evangelischen Kirchenrechts had the greatest circulation; it went through six editions and was translated into Italian, extending Friedberg's influence far beyond the borders of Germany. The distinguished Italian school of canonists was founded by his pupils.

GOTTFRIED LANGER

Important works: Das Veto der Regierungen bei Bischofswählen (Halle 1869); Die Geschichte der Civilehe (Berlin 1870, 2nd ed. Berlin 1877); Sammlung der Aktenstücke zum ersten vaticanischen Concil (Tübingen 1872); Die Gränzen zwischen Staat und Kirche und die Garantieen gegen deren Verletzung, 3 vols. (Tübingen 1872); Das geltende Verfassungsrecht der evangelischen Landeskirchen in Deutschland und Österreich (Leipsic 1888); Lehrbuch des katholischen und evangelischen Kirchenrechts (Leipzig 1879, 6th ed. 1900).

Consult: Sehling, E., in Deutsche Zeitschrift für Kirchenrecht, vol. xx (1910) i-viii.

FRIEDJUNG, HEINRICH (1851-1920), Austrian historian and publicist. Friedjung was born in Moravia of a Jewish merchant family. He studied at the universities of Prague, Berlin and Vienna and taught in the Handelsakademie in Vienna from 1873 to 1879. In his Der Ausgleich mit Ungarn (Leipsic 1877) Friedjung sharply criticized the constitutional agreement of 1867 which, he held, tore Austria in two; he was as a result dismissed from his academic position. Friedjung's work, both as historian and as politician, was characterized by a strong emphasis on the political state; a highly developed German national feeling, with the belief in the enduring community of interest between Austria and Germany; and a moderate form of centralized liberalism. In 1880 he collaborated in the formulation of a program for the organization of the German Volkspartei and in 1882 with Schönerer, Viktor Adler and Pernerstorfer he drafted the Linzer Programm which called for the closest union with the German Empire. He edited the Deutsche Wochenschrift from 1883 to 1886 and for nine months in 1886-87 the organ of the German Volkspartei, the Deutsche Zeitung. As a result of attacks by fellow members of his party, because of his race, he was forced to give up his position.

VIKTOR BIBL

Important works: Kaiser Karl IV. und sein Antheil am geistigen Leben seiner Zeit (Vienna 1886); Der Kampf um die Vorherrschaft in Deutschland, 2 vols. (Stuttgart 1897-98, 10th ed. 1916-17); Oesterreich von 1848 bis 1860, 2 vols. (Stuttgart 1908-12), unfinished; Historische Aufsätze (Stuttgart 1919); Das Zeitalter des Imperialismus 1881-1914, completed and edited by A. F. Pribam, 3 vols. (Berlin 1919-22).

Consult: Srbik, H. von, in Deutsches biographisches Jahrbuch, vol. ii (Berlin 1928) p. 535-45.

FRIEDLÄNDER, LUDWIG (1824–1909), German historian. Friedländer studied with Lobeck, Lehrs and Hermann and taught at the University of Königsberg from 1847 to 1892. He devoted his attention at this time to studies on Homer and the Homeric scholia and on the

history of Homeric criticism from F. A. Wolf to G. Grote. Under the influence of Mommsen and the Kulturgeschichte of W. H. Riehl, Gustav Freytag and Jacob Burckhardt he began to devote all his energies to his life work, Darstellungen aus der Sittengeschichte Roms (3 vols. Leipsic 1862-71, 10th ed. 4 vols. 1921-23; tr. from 4th German ed. by L. A. Magnus and J. H. Freese as Roman Life and Manners under the Early Empire, 4 vols., London 1908-13), which is one of the best known studies of the Roman imperial epoch. From constantly accumulating material, which he always worked over anew and elucidated by various parallels from the Middle Ages and modern times, he made exceedingly interesting and universally intelligible portrayals seeking to set forth as a whole the time from Augustus to Commodus, covering the civilization of two hundred years of Roman imperial history. He ventured to treat so long a period as a unit because he maintained that in Rome the stability of the civilization was greater than in the modern period, that there human life was more intimately bound up with nature than in the north and, finally, that since historical transmission is not always sufficient and often but scanty it lets finer distinctions escape through its meshes. Friedländer sought to avoid all subjectivity and to describe the facts of the various forms of life in a realistic and objective manner. The colorful life of the city of Rome, the imperial court, the classes, society, the life of women, travel and communications, drama and music, literature and luxury, arts and religion, philosophy and the belief in immortality, as well as many minor features and oddities of life, are surveyed with keen insight; he paints the condition rather than the development, the actual antiquarian facts rather than the deepest intellectual grounds. Friedländer did not aim to write a profound systematic history of the civilization of Rome and its empire; but his work presents pictures from the life of Rome and its empire which make Rome seem so near and yet so glorious that the work achieved immense popularity, was translated into many languages and strongly influenced the conception of Rome of the last generation.

WILHELM WEBER

Consult: Ludwich, Arthur, in Biographisches Jahrbuch für die Altertumswissenschaft, vol. xliii (1911) 1-24.

FRIEDLÄNDER, MAX (1829–72), Austrian journalist. A member of the same Jewish family as Ferdinand Lassalle, Friedländer was a leading

publicist of the young "Forty-eighters" in Germany. After working on a liberal German daily, the Breslau *Oder*, in 1850 he went to Vienna and became a leading contributor to the *Presse*, the foremost liberal Austrian daily. When in the fall of 1864 reactionary moves to curtail the freedom of the press as guaranteed by the constitution frightened the publisher of the *Presse*, Friedländer with Michael Etienne and Adolphe Werthner launched the *Neue freie Presse*, which advocated constitutional liberties and German preponderance in Austria.

As editor in chief of the new paper Friedländer led a vigorous fight against the Belcredi cabinet which suspended the constitution. The liberal party rallied around the *Neue freie Presse*, which, expressing the liberal philosophy of the upper bourgeoisie, fought both reaction and really radical trends. Friedländer defended Austrian centralization, in which lay the germ of dissolution of the Austrian monarchy, against the idea of federalism advocated by Adolf Fischhof.

Friedländer's chief interest was not political, however, but journalistic. His was the first modern European journal of opinion and the leading literary and economic paper of the world. He introduced the feuilleton, that specifically Viennese production which won his paper great popularity and influence. This type of popular light articles about grave matters or grave articles about nothing in particular later degenerated into mannerism, and even the political and economic articles of the *Neue freie Presse* became glossy and velvety, attuned to the mood of a decadent and reactionary country. With the break up of the Austrian Empire the Neue freie Presse lost all but its local importance and became distinctly less liberal than it was under Friedländer.

A. CORALNIK

Gonsult: Zenker, E. V., Geschichte der Journalistik in Österreich (Vienna 1900) p. 66-67.

FRIENDLY SOCIETIES. Mutual aid in providing against the commoner risks of life—sickness, invalidism, death—took the form in Great Britain of friendly societies. These societies can claim a long lineage. In ancient Greece and Rome there existed clubs and unions of artisans and other workers whose purpose was to promote good fellowship among their associates and to assure them material help in time of need and eventually decorous burial. The true prototype of the modern English friendly society,

however, will be found in the early religious guilds, which were formed for social and secular as well as devotional purposes. Between the eighth and tenth centuries not only was the organization of the guilds completed and widely extended among the Anglo-Saxons but they were formally recognized in legislation. Still more directly the friendly society can claim descent from the craft guilds, which gained their greatest influence four or five centuries later. It is possible that no definite gap occurred between the English guilds, of which the last known survived until 1650, and their offspring, and that friendly societies simply carried on the work of the guilds after the old foundations had been confiscated by Henry VIII. The earliest known society in Great Britain still exists in an incorporation of carters founded at Leith in 1555. Other Scottish societies go back to 1634 and 1643. Daniel Defoe in the preface to his Essay upon Projects (1697) speaks of "friendly societies" as being at that time "very extensive." Eden, who traveled through England between 1795 and 1797 inquiring into the condition of the poor, found in the north "clubs of this kind which have existed above an hundred years." Several small societies established by the Huguenot silk weavers who settled in Spitalfields late in the seventeenth century are known to have been successful.

The friendly societies were an outgrowth of the times, which were hard for the working population, still predominantly agricultural. Since the reign of Elizabeth the civil authorities had granted poor relief to the destitute. But those in a position to help themselves eagerly adopted the idea of mutual aid in providing for emergencies. Local clubs were encouraged by two types of sponsors: the gentry, who partly through public spirit and partly with an eye to keeping down the poor rate became honorary members and guiding spirits in many a rural club; and the public house keepers, who profited from the numerous friendly societies, whose members often spent freely on drinks instead of paying rent for a meeting place.

As the industrial revolution hastened the growth of towns and separated the workman from his native parish, which owed him support, friendly societies multiplied, especially in the flourishing north. The clubs were small, often being limited to from sixty-one to one hundred and one members, attracted as much by the fellowship as by the protection afforded. Annual feasts were held in addition to the monthly

meetings. Eden with surprising insight for that time pointed out that the women's clubs would be sporadic as long as wives' earnings belonged to their husbands. The subscriptions and fines were kept in a strong box until needed for funeral or sickness payments. The financial principles on which business was transacted were of a rule of thumb order. The money benefits were small, but so also were the contributions, and there were doctors willing to attend members for a nominal fee.

The friendly society movement developed for some years before it attracted legislative attention. Defoe's prophetic suggestion of a national pension office passed unheeded. Eden, however, reports that from 1757 to 1770 an Act for Relief of the Coal-Heavers working upon the Thames provided for compulsory inclusion of all heavers in their benefit society with deduction of 10 percent of their wages for that purpose. In 1792 a similar law applied to the skippers and keelmen of the river Wear. John Acland, perhaps influenced by the experience of certain Devonshire parishes that had guaranteed local friendly societies' funds, proposed in 1786 a system of compulsory social insurance.

The government, although no longer able to ignore friendly societies, anticipated Eden's view that voluntary association would be most effective. Accordingly the Rose Act of 1793 for the "protection and encouragement" of "societies of good fellowship" provided that those societies which chose to register would be relieved from stamp duties and would acquire a legal personality. Under this encouragement the societies increased rapidly. The membership was estimated at 648,000 by Eden in 1801 and at 925,000 in 1815.

But the authorities, alarmed by the French Revolution, had grown suspicious of meetings. The Corresponding Societies Act of 1799 and the Combination acts of 1799 and 1800 included in their prohibitions all societies except the royally patronized Freemasons and the small friendly societies encouraged by the Rose Act. Branches of the still amorphous Odd Fellows were prosecuted as seditious. Trade unions were outlawed.

The craft unions at that time were so small and impromptu that they were hard to distinguish from friendly societies. Benefit clubs composed of members of one trade almost inevitably developed into trade unions. One of the earliest friendly societies on record was formed by the Newcastle shoemakers in 1719. Thus by empha-

sizing their benefit features trade clubs continued to exist in spite of the repression. The box deposits of the woolen croppers of Leeds enabled them to win a strike in 1802. The Royal Commission of 1825 discovered that in 1810 the spinners' union in the Manchester district had conducted business under sick club rules legally registered at Manchester. The commission concluded that "most alliances to raise wages cloaked themselves under the rules of Friendly Societies."

When after the repeal of the Combination acts the trade unions came into the open, their names, such as the Friendly Society of Operative Masons and the Flint Glass Makers' Friendly Society, and their organization into lodges with elaborate rituals show the closeness of their connection with the friendly societies proper. The unions of skilled trades have continued to pay sickness and death benefits in addition to the more usual unemployment relief and strike pay.

As industrialization proceeded, the growth on the one hand of Tory humanitarianism and on the other of radical agitation resulted in further governmental encouragement of friendly societies and similar working class attempts at thrift and mutual aid. The act of 1819 guaranteed a high rate of interest to funds deposited with the national debt commissioner. Ten years later Tidd Pratt, the barrister of this commission, was appointed examiner of friendly societies as well as of savings banks. After 1834, when the law broadened the definition of friendly societies to include any purpose not illegal, loan societies, building benefit societies and cooperatives developed rapidly. It will be remembered that 1834 was the year of the poor law reform. Finally by the acts of 1850 the great orders were officially admitted to the friendly society movement. In 1871 the trade unions were legally sanctioned and entitled to registry.

A new chapter in the history of the friendly societies had opened with the institution of federated "orders." Some of these orders had existed in the eighteenth century, but early in the nineteenth began the formation of the great affiliations, each with an elaborate and secret ritual copied from Freemasonry. The Independent Order of Odd Fellows, Manchester Unity, the oldest and strongest, was constituted about 1810; the Ancient Order of Foresters, the next in importance, was federated in 1834. More and more the federations captured the working classes until the investigators of the Friendly Society Commission of 1870 had to report that

everywhere the small clubs were being crushed out.

But Tidd Pratt, who was officially registrar of friendly societies from 1846 to 1870, continued hostile to the orders. However, he inveighed against the feasts and the public house connections of the small clubs as well as against the ritual of the orders; and, although the powers of the registrar have always been advisory rather than directive and registration has been purely voluntary, Pratt was largely responsible for the increasing emphasis on the benefit aspect of the friendly society.

Federation gave the affiliated orders greater strength, a better administration and a sounder financial basis. The absence of reliable sickness and mortality tables had led many of the early societies to insolvency. Pratt estimated that between 1703 and 1867 one third of the registered societies had collapsed. The correct method of calculating annuities had been much debated since Price devised his Northampton tables in 1780 for the Equitable Society, the first life insurance company. But Charles Ansell in his Treatise on Friendly Societies (London 1835) and F. G. Neison in his Contributions to Vital Statistics (London 1845) were among the founders of modern actuarial methods. The standard tables now in use are based on Manchester Unity experience during the five years 1893-97, as ascertained by Sir A. W. Watson. Not only is this experience used for the valuations of the great majority of friendly societies, but as regards insured males it provides the financial basis of the national health insurance system.

After the passing of the act of 1875 making quinquennial valuations compulsory the importance of maintaining parity in assets and liabilities could be ignored no longer. The practise of graduating contributions according to age at admission and the benefits insured for has been increasingly followed. Deficits on valuation have been met, where deemed needful, by the revision of rates of contribution or benefits. The Manchester Unity of Odd Fellows and the Ancient Order of Foresters assist branches in difficulty by grants from central funds created by levies on surpluses or otherwise. Nevertheless, one of the strongest arguments advanced in 1911 in favor of the state system of sickness and disablement insurance then instituted was the fact that a large proportion of the small friendly societies were still unable to meet their liabilities. Two special facts have contributed to the present virtual disappearance of the insolvency:

one is the considerable fall in sickness claims during the war years and the years immediately following, and the other is the higher rate of interest received on invested funds. The fact that no society has been unable to bear the abnormal strain of war claims is a striking attestation of financial stability.

The law which now regulates these societies is the Friendly Societies Act of 1896 (as amended in 1908), under which the collecting societies may also be registered. Registration is open to the following groups of friendly societies, some of which fall short of the true principles of insurance and mutuality: (1) the affiliated orders and their branches; after affiliation each branch remained an autonomous unit, having its own code of rules and scales of contributions and benefits and controlling its financial and other affairs; the branches are grouped in districts, whose business it is to see that the general rules of the order are carried out, and to administer the funeral benefit; (2) independent societies of the same mutual type, mostly local, with which may be ranked a small group of county societies with high contributions; these societies are still decreasing in numbers; (3) the centralized sickness benefit societies, the largest being the Hearts of Oak and the Rational, which are purely provident agencies, paying only cash benefits and making no claim to a fellowship character; (4) the deposit societies, represented by the National Deposit group, which act both as "limited liability" benefit societies and as savings banks; they are very popular, notwithstanding the fact that where the benefits come for the most part out of the members' individual contributions no provision is made for long periods of illness, still less for permanent invalidism; (5) the dividing or sharing out societies, known also as "slate clubs," "tontines," etc., which are usually local, provide only small benefits and distribute among the members at the year's end the whole or part of such balance of income as may remain after all expenditure has been met; (6) death and burial societies; (7) a number of local provident dispensaries and medical aid associations, mostly of old standing and of a semicharitable character; (8) a small group of railway benefit societies, miners' permanent relief societies and warehousemen's and clerks' societies; superannuation, pension and annuity societies.

If to these groups be added the juvenile societies, the total for the United Kingdom in 1927 exceeded 22,000 societies with approximately

7,500,000 members, of whom it is estimated that two thirds were insured against sickness and death. This takes no account of the large number of unregistered societies, for the most part small and providing modest benefits, which are still scattered throughout the country, and regarding which no numerical data are available.

This total disregards 74,000,000 industrial insurance policies outstanding in 1928, 17,000,000 issued by collecting societies and 57,000,000 issued by industrial assurance companies. Although these societies were developed after the commission of 1853 had found that existing friendly societies were providing only for the needs of the skilled workers, a large proportion of industrial policies today are unquestionably held by members of friendly societies.

CHIEF BRITISH FRIENDLY SOCIETIES

	Member- ship 1010	Member- ship 1026
National Deposit Friendly So-	1910	1926
ciety	219,381	781,477
Independent Order of Odd Fel-		
lowsManchester Unity	759,488	752,079
Independent Order of Recha-		
bites -Salford Unity	320,739	713,069
Ancient Order of Foresters	621,375	572,044
Hearts of Oak Benefit Society	303,483	424,943
Loyal Order of Ancient Shep-		
herds Ashton Unity	165,262	251,574
Order of the Sons of Temper-	***	
ance	170,755	242,030
Rational Association Friendly	,	
Society	120,118	108,441
	2,680,601	3,845,657

The large migration from Great Britain and Ireland which began early in the last century carried the friendly society to all the present dominions and to some of the smaller colonies as well as to the United States. In general English traditions and legislation have been followed. The success of the movement has been most marked in Australia, where there were some 5000 societies and branches in 1928, nearly one half of them attached to the orders of Odd Fellows (Manchester Unity) and Foresters. Special features of the legislation there are compulsory registration, the omission of invalidism, superannuation and maternity benefits, since these are provided by the commonwealth out of the general taxation and the state subsidies given in New South Wales.

When the National Health Insurance Act of 1911 was passed, imposing on some 15,000,000 persons the obligation of insurance against sickness and disablement, the fear prevailed that

the days of the friendly societies were numbered. That fear was not shared in circles conscious of the strong sentiment of attachment and loyalty which is common to all the great orders. Continuity in some form was inevitable owing to the fact that a very large number of members were excluded from state insurance by occupation, age or the income limit or were unwilling to exercise the right to become "voluntary contributors" under the new system. Such persons therefore had claims on their societies which could not be repudiated or even easily commuted.

Whatever danger may have seemed to exist was removed by the permission given to the federations and the larger independent societies to act as "approved societies" for the administration of the statutory sickness and disablement benefits in cash, a privilege accorded also to the trade unions; while the industrial assurance companies were allowed to form independent "approved societies." Given the opportunity of dropping so much of their benefits as was provided by the state scheme and of reducing their contributions to the extent of the new state contributions, the general decision of friendly society members was in favor of maintaining their existing insurances. The work of the societies was continued in unreduced volume with the state benefits as a supplement. Inasmuch, however, as the new law took over the provision of medical attendance and medicine, treating it as a benefit separate from sickness pay and entrusting its administration to statutory bodies called insurance committees, the contributions of state insured members were reduced by the amounts which they had hitherto paid for that service, while as regards the members who were not so insured new and on the whole more onerous arrangements had to be made for their medical treatment. It is estimated that the societies are today still giving benefits to some four million members who are also compulsorily insured. It should be added that all persons who come under the health insurance scheme are also insurable under the act of 1925 for the provision of pensions to widows, orphans and insured persons aged sixty-five to seventy, when free pensions can be claimed under the acts of 1908 and 1924.

The fact that the operation of the statutory system has largely coincided with entirely abnormal social conditions caused by a great war and a prolonged period of unexampled unemployment forbids any satisfactory estimate of its influence upon public health and well-being; while the close interaction of the voluntary and compulsory agencies, whose benefits fall to the same classes of the population, makes it impossible to divide credit due for whatever improvements have occurred.

Of the place of the friendly societies in social life generally it is possible to speak more definitely. Throughout their long history the societies have proved potent agencies in the advance of the working classes. The practise of estimating the value of these societies according to their influence in reducing the number of the dependent poor persists no longer. While all the evidence available indicates that friendly society members rarely seek public relief, it is not in that direction that the principal efficacy of these organizations must be sought. Hardly any movement or cause conducive to self-help and popular welfare and progress can be mentioned which has not owed much of its strength and success to the efforts of the men and women in these societies. Although during the past thirty years, which have witnessed so large an extension of social service legislation, there have appeared signs of a distinct tendency on the part of the working classes to look to the state for assistance, the spirit of self-reliance remains vigorous today in the friendly societies.

W. H. DAWSON

See: MUTUAL AID SOCIETIES; GUILDS; WORKING MEN'S CLUBS; FRATERNAL ORDERS; LABOR MOVEMENT; BENEFITS, 'Trade Union; Social Insurance.

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FRÖBEL, FRIEDRICH (1782-1852), German educator. Fröbel was the son of a Thuringian clergyman and his childhood was almost hermitical. Early impressions of nature and the church led him to seek "a life of self-realization in the country" and he became a teacher in 1805. After observing Pestalozzi's work in Yverdon from 1808 to 1810 he undertook to defend youth's creative power against "agglutinated" information. He believed in the unity of nature and in the infinite gradation of the entire universe, which he regarded as a divine educational institution. From 1811 to 1816 he attended the universities of Göttingen and Berlin in order to find support for his beliefs and later became assistant in connection with a mineralogical collection at the University of Berlin. There his study of crystals, in which he saw "the greatest in the smallest," confirmed his faith in a cosmically adjusted educational method. He attempted to put his theories into practise in a pioneer workers' school which he had founded in Keilhau, Thuringia, in 1817. On the basis of this experiment he wrote his principal literary work, Die Menschenerziehung (Keilhau 1826; tr. by J. Jarvis, New York 1885). He was disappointed by the misuse to which his ideas were put by quarreling sects and political groups and turned to infant education.

For the early training of the child's soul and mind he arranged a series of toys (balls, bowls, mathematically cut bricks) as "gifts," through which the play of the baby was to develop freely and regularly. The child was to copy forms of utility, beauty and understanding which it saw at home or imagined, for Fröbel cared only for a gradual development of self-activity. The task of the educator, according to Fröbel, is to nurse the awakening senses, translate childish ideas and imagination into words and fix these by repetition in song. As a transition to the ordinary school Fröbel organized in 1840 the kindergarten. Here, where children imitated naïvely the activities of the adult world, he saw their eager, intuitive simplicity striving toward a moral social order. His whole method aimed at making the child through its play feel at home in an orderly cosmos, a process he called rounded life harmony (allseitige Lebenseinigung).

His mature sociological attitude was expressed in a letter of 1834 as follows: "No community can progress in its development whilst the individual, who is a member of it, remains behind; the individual, who is a member of the whole body, cannot progress in his development while the community remains behind." A firm believer in innate virtue, Fröbel may be described as a German Rousscau. He had lived in his childhood what he later taught and he therefore taught only what he had himself experienced. His educational ideas have enjoyed a wide following, especially in Germany and the United States.

FRITZ HALFTER

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FROISSART, JEAN (c. 1337-c. 1404), Norman English historian. At the age of about twenty-three Froissart followed Queen Philippa from Hainault to England and became her secretary. Encouraged by her he began to write a history of that great conflict between England and France which later generations have called the Hundred Years' War. For the earlier years (for it had lasted a whole generation before Froissart began to write) he borrowed freely from Jean le Bel, canon of Liége. In England Froissart met many of the principal actors in these wars and collected much material at first hand. After Philippa's death he remained under pro-English patrons until about 1373, when he became the pensioner of Guy de Blois. The second half of his Chronicles is more favorable to the French than is the first, and a third edition, represented only by a single manuscript in Rome, contains a few unpleasant reflections on England introduced after Queen Philippa's death.

He is not an accurate historian in the modern sense. While he took pains not only to collect but to check evidence he is in conflict with the testimony of more formal documents on many points, some very important. But nobody has rendered better than he the atmosphere of mediaeval life, seen through upper class spectacles. In him are both the strength and the weakness of the chivalric ideal. He was, however, not insensible to the sufferings of the poor and shows clearly that there was much justice in the claims of the rioters in the Peasants' Revolt of 1381. Such a volume of selections from the *Chronicles* as that published by G. C. Macaulay (London 1895) is an excellent short introduction to the study of mediaeval life.

G. G. COULTON

Works: Le premier [quart] volume de Froissart des croniques de France, 4 vols. (Paris 1495?; later ed. by Simeon Luce, 11 vols., Paris 1809-99), tr. by John Bourchier, 2 vols. (London 1523-25, ed. by W. P. Ker, Tudor Translations, vols. xxvii–xxxii, London 1901-03).

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FRONTENAC, COMTE DE PALLUAU ET DE, Louis de Buade (1620–98), French colonial administrator. Frontenac's distinguished military services in France won for him an appointment as governor of New France in 1672. Ten years later, as the result of quarrels with Intendant Duchesneau, he was temporarily recalled in 1682 to France. But the blundering Indian policy of his successors, La Barre and Denonville, involved the colony in such a critical war that in 1680 he was again sent out as governor, an office which he continued to hold until his death in 1698. During both periods of his administration Frontenac played an important part in molding the political evolution of New France. Instructed by the home government to restrain the political activities of the ambitious ecclesiastical leaders in the colony, he eventually succeeded in curtailing the influence of Bishop Laval and the Jesuits in administrative matters. Although believing in and practising autocratic rule Frontenac encouraged active cooperation on the part of the colonists. He held a meeting of the three estates, created a system of elected aldermen with judicial jurisdiction-a striking departure in French administration-and instituted biennial meetings of the citizens to express their views on matters of general concern. Under his aggressive direction the boundaries of New France were rapidly extended to the south and west, and in the wake of the explorers followed traders and builders of forts. In his attempt to convert the Indian tribes into staunch allies of France Frontenac displayed a remarkable genius, mixing authority with kindness and firmness with paternalism. He was equally capable as a military leader both on the offensive and in defending the colony from invaders.

GUSTAVE LANCTOT

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FRONTIER

AMERICAN HISTORY. Apart from the meanings generally given to the word frontier it suggests an important theory of American history. Until 1893 the word had been often applied to political or military borderlands or to a twilight zone within which creative thought might be expected to reveal new truths. In North America it had been connected with the region lying at any moment between the settled portions of the continent and the region of untouched nature and aboriginal man. As "the West" it had aroused curiosity and had drawn observers, a few of whom had glimpsed the idea which Frederick Jackson Turner, then a professor in the University of Wisconsin, formulated in his monograph, The Significance of the Frontier in American History (1893). Turner had been studying the occupation by English speaking settlers of the region just beyond the Appalachian watershed, using the unique collection of manuscripts, assembled by Lyman C. Draper, which belong to the State Historical Society of Wisconsin. He saw a possible meaning in the fact that here for the first time in modern history, if not in all history, a people with an advanced culture found itself living next to an unlimited area of unowned or slightly valued land, from which the common man could capture for himself what he needed and upon which he could build, free from most of the restrictions of congested society, what personal life he was capable of and what social structure he desired. This hypothesis gave a new and important meaning to the history of the United States. It remains unproved, as must most hypotheses in the philosophy of history; but its reasonableness and its capacity to give a rational interpretation to events have brought about a rewriting of the whole American story in its terms. Only Edward Channing among the major historians has escaped its influence; and he although distrusting it as an explanation made no attempt formally to disprove it. Many historians in varied fields have been inspired by it to examine the frontiers of South America and of Russia and the remoter

frontiers of antiquity and of Europe in the Middle Ages but with results less startling than those which Turner suggested.

The special conditions which made possible the episode of the frontier in the experience of the United States include an English policy which permitted the easy emigration of dissatisfied individuals during the period between the planting of Jamestown and the end of the French wars; the scarcity of exploitable wealth in those parts of North America to which British emigrants had access; the river systems of the Atlantic seaboard, which assisted penetration inland from the coast; a sparse aboriginal population, reduced to fractional dimensions by the frontier of European disease which preceded the English entry, and the partly cultivated areas upon which Indians had dwelt, which indicated sites for residence and made easier the first steps in occupation; and the adoption by the United States of a land policy encouraging the speedy appropriation of the land by small holders.

Without the free emigration permitted by England and the generosity of English law that gave to overseas colonists the rights of Englishmen the English settlements in America might not have escaped the course followed by Spanish and French settlements. These latter failed to set up in the New World detached fragments of the parent country. New France and New Spain were new cultures rather than transplants; whereas New England and Virginia were old cultures with only such modifications as time produced and as environment and neglect encouraged. There was little desire among the powerful of the Old World to capture and appropriate the resources of the English region, for the resources were cheap and at that obtainable only at the cost of bitter labor. Attempts to build up American estates, such as those of the Penns and the other proprietaries, were unprofitable The cost of protecting the rights of an overlord was out of proportion to the profit to be derived; and from the beginning of settlement the settler was an uneasy underling. However tractable he may have been at home (and most of the settlers were people with little tradition of wealth or dignity), the colonist in America became an aggressive individualist who ignored restrictive laws or perverted them to his own use. It was not profitable for anyone in England, whether with property right or with governmental authority, to make the effort to reduce the farmers of the American frontier to a lock step with vested interest.

The farmer of the frontier has especially interested those who have studied frontier influence. The other frontiers in advance of British civilization in America were anticipatory to his, but had the farmer not followed to convert the country to agricultural use the other frontiers would have lacked meaning. Before him in succession spread the frontiers of exploration, of military control, of missionary activity, of the fur trader and trapper. All of these had been preceded by a deadly frontier of European disease; after them came frontiers of local government, of railroad penetration, of financial sufficiency. But the agricultural frontier, with a new and sparse population of from two to six inhabitants to the square mile, was the significant frontier agent.

The influence of American frontier life was dispersive, throwing the individual upon his own resources: he was probably more than normally willing to be thrown upon himself, because in many cases the English who selected themselves for emigration were in some way more stubborn than their relatives who remained at home. Most of them came from economic motives to find a larger life. Mingled with them were others, nonconformist by temper, who preferred to pay the price of comfort for the opportunity to live politically, religiously or socially as they pleased. England was more comfortable with them gone; and they were not the raw material for an acquiescent dependency three thousand miles away.

Amid frontier conditions such emigrants set up on the Atlantic coast in the seventeenth century a new England which began at once to deviate from the standards of old England, the deviation not being recognized until it had gone too far to be checked. The first frontier was of necessity on the coastal plain with urban concentrations at suitable harbors where immigrants might land and whence exports might be moved. In successive decades the Atlantic ports of entry developed as the centers of business and government, and successive increments of settlers found their way along the river valleys to where coastal plain and piedmont meet and to the mountain valleys behind. The major rivers led to the obvious gaps, with the Susquehanna and the Potomac marking the chief routes to the valley system of the Appalachians. Once beyond the piedmont edge the standard channels of penetration broke down, and settlement was dispersed northeast and southwest in directions generally parallel to the seaboard The mountain

valleys became a mixing basin for social contributions from all the colonies and for all the races that had a part in the process.

At every stage of its advance on the cutting edge of the frontier was the single family farmer, whose cabin on the margin of settlement was a nucleus whence spread the occupation of the wilderness. From the time when the earliest resident made his appearance to build a home until the time some twenty-five years later when his first born child left home to repeat the process, there developed a typical cycle of events that has repeated itself *mutatis mutandis* in nearly every county in the United States and in every decade from 1600 until 1900.

The repetition of the frontier cycle over small units for three hundred years constitutes an approximation of a series of laboratory experiments in social establishment. The free farmer doing his own work and accomplishing only what he and his family could encompass faced the task of creating farm and home. He was remarkably free from the restrictions of precedent, the dead hand of property interest and the retarding influence of information. He could never be persuaded that he had not in fact made his farm himself; and he never willingly admitted that he owed to any jurisdiction a price in payment for his land. He had few pieces of wealth worth taxing and scant willingness to submit to the imposition of any tax not convenient to pay or not imposed for a benefit that he appreciated. During the twenty-five years of the cycle in any region the land passed from wilderness through a stage of scattered farmsteads and became an agricultural community with county town, roads and schools, institutions of government and a partnership share in a nation. No individual who lived through the process could avoid being shaped in some ways by his experiences. His life, his mentality and his ideas of business and government all tended to derive from the experiences of working with fresh materials and in new units. Social creation was going on, not accomodation to the matrix of an accepted and dominant existing civilization.

The racial components of the wave of immigrants whose labor cleared the continent up to the Appalachian watershed by the middle of the eighteenth century were various with variations that tended to lessen before generations of common life and experience. The English came first carrying the intellectual cargo of seventeenth century England, with notions of common law, free church and controllable government natural

to the century. They planted Virginia and New England, worked their way into control of the little settlements of Dutch and Swedes, occupied the shores of the Chesapeake and Delaware and began the easier cultivation of the southern coastal plain in the Carolinas. Early in the eighteenth century the Germans came, made ready for emigration by starvation and persecution in the Rhine valley, and settled west of the English counties of Pennsylvania and in the Mohawk valley above Albany. By their side the descendants of the Ulster Scots came from the north of Ireland, and from the rest of Ireland and Scotland came enough residents to give to each race a distinct part in the development of the American frontier. On that frontier or, more precisely, on those frontiers in the second and third generations there was admixture of blood that lessened the significance of racial origin and enough concealment of names by marriage or by translation to render forever impossible the task of separating the new race of Americans into its racial stocks. The Scotch-Irish moved beyond the English and the German settlements to cheaper lands and between 1763 and 1819 contributed typical farmer volunteers along the cutting edge of the advancing frontier line.

For a century and a half after the first plantations the frontier in America was a European frontier which had sprung directly from its European base. By the middle of the eighteenth century, when England drove France from the continent and proceeded to reorganize the colonies and to erect controls over the direction and speed of occupation of the land, there was an American social base in the older colonies against which for the remainder of the frontier period it is possible to measure the changes brought about by exposure to frontier life. After the Peace of Paris and the Proclamation of 1763 it became more and more an American frontier.

Among the causes that produced the separation of the United States from England was the English decision to interfere with the occupation of the interior of the continent. Regulations were in vain; Americans defied them without qualm. The common problems of the colonists became clearer along the border than they were among the separatist seaboard establishments. The common lands in the west, gained at the treaty of peace, nearly wrecked American federation; but that once accomplished they constituted one of the earliest forces to give to the new government a national aspect whether under the Articles of Confederation or under the constitu-

tion. Repeatedly after the inauguration of Washington new political movements originated in the west or gained there a force, undiluted with doubts, that made them impressive. Continuously the west drew from the young, the ambitious and the poor to recruit new frontier settlements. The people of these settlements had energy and unanimity in pressing their demands for measures of relief upon the government, which they regarded as essentially national.

As the process of occupying the continent continued under the constitution, the repetitions of the creative process of the frontier cycle operated as a filter upon the ideas and the institutions of the older east which were transplanted and modified in the governments of the newer states. There were few restrictions upon the type of government that the new states might erect. There dropped out of sight among the western states many of the qualifications which the eastern colonies had inherited from their English background. Manhood suffrage and eventually woman suffrage took foothold in the west. Free schools and state education gained ground. Qualifications for elective offices were whittled away. There was a definite political liberalism and a practical democracy that led the west and its leaders not only to erect progressive governments for local use but to wage war against what were regarded as the conservative and aristocratic habits of the east. The parties of Jefferson, Jackson, Harrison, Lincoln and Bryan indicate, in turn, waves of political emotion for which the west on or near its frontiers provided breeding grounds. Each advanced from the west toward the east as its philosophy gained a national acceptance.

The typical frontier cycle appeared with the first settlements on Atlantic tidewater and it repeated itself so long as there remained land capable of development by the cabin farmer. By 1800 the frontier states touched the Mississippi. By 1821 nearly the whole of the United States, as the boundaries then were, was occupied by states or prospective states; what land remained beyond the western boundary of the new state of Missouri was generally regarded as incapable of sustaining the typical agricultural life. Within the next thirty years the political boundaries were projected to the Pacific, the western coast was discovered to be both habitable and desirable, and much of the intervening country was held to be too good to be left to the primitive usages of aboriginal man. New tools were necessary to reclaim the trans-Missouri and to

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bring it within the reach of the frontier farmer; but new industrial methods in the mid-century provided them. By the date of the census of 1880 the statisticians of the government were prophesying the speedy disappearance of free land. By 1890 the American frontier in its special sense was gone; more than gone, since in the enthusiasm of the final phases the land had been broken on the high plains and along the slopes of the Rocky Mountains, where it was not normally capable of sustaining the single family farm of American experience. There was a recession of the occupied frontier during the next decade; in the forty years since 1890 farms have not again reached the margin of the greatest development.

With the disappearance of the frontier this episode in human experience came to an end, without precedent and without probability of repetition. It is likely to remain the peculiar part of the heritage of the United States. For three centuries the common American had an easier opportunity to become a free economic agent than did any of his contemporaries. The democratic aspect of American life, its fluidity and its adaptability appear to have some connection with this environment. The American ideology which assumes freedom to be the common lot of man may be a part of it. American restiveness under remote or absentee control seems to derive from it. American suspicion of Europe may be a reaction toward a world whose narrow opportunities made men through ten generations willing to leave its fold. The hypothesis that Turner phrased continues therefore to account for much that is vital in the interpretation of American history and of American status in the world, now that the frontier itself is gone.

Frederic L. Paxson

GEOGRAPHICAL AND SOCIAL ASPECTS. The frontier, or the pioneer belt, is the initial stage in the settlement of a new region by representatives of a stronger civilization. It is characterized by sparsity of population, self-sufficing economy and the crude living conditions and uncouth manners of the less complex cultures. The line of frontier settlement in America was drawn by the Bureau of the Census at a density of six persons per square mile. The frontier is thus a fact of social demography and should be carefully distinguished from the state frontier, which is a political and military boundary (see BOUND-ARIES). Among the conditions which make frontiers possible are unsettled boundary lines, unexplored and unclaimed territories, virgin soils,

free or nominally priced lands and large or unrestricted immigration. Pioneer belts of historical importance are found in west Australia, South America, especially the Argentine, northwest Canada, Siberia and Rhodesia. They differ from the American frontier largely in possessing lands more subject to extremes of either rainfall, climate or inaccessibility; in leaving less to the untrameled individualism of the settlers and more to governmental policy; and in allowing the unpropertied less access to public domain by requiring for its exploitation a larger amount of capital. Another difference lies in the fact that the present pioneer does not, like the early American pioneer, leave behind him security, but rather the amenities of culture, the artifices of comfort and the power of a more highly mechanized civilization.

The geographical phases of the movement of a frontier may be best studied in the case of America. As population spread from the Atlantic seaboard to the Pacific in a series of successive waves, the frontier expanded not as a uniform belt but in patches and strips. The first to be settled, such fertile and accessible areas as the tidewater, blue grass, limestone valley, black land, delta and prairie, became the centers from which the less attractive surrounding regions were organized as new frontiers. At each advance the reversion to untamed nature and primitive tasks, for which there existed no division of labor and no considerable technology, carried with it a regeneration of frontier modes of life. The vanguard of the advance was led by "long hunters," explorers, trappers, scouts, outlaws, prospectors, gold rushers, Indian traders and coureurs de bois. They made the initial contacts with the Indians and learned the folkways of the wilderness. Following these came the main stream of hunters, ranchers, frontier farmers, traders and miners. The frontier, however, did not of necessity recapitulate in its history the orthodox stages of economic organization: hunting, pastoral and agricultural. The Kentucky blue grass, for example, was first settled by farmers who afterward adopted grazing, only to replace it later with diversified farming in which livestock played a large part. As hunting diminished, cow pens, canebrakes and uplands became the centers of a respectable grazing economy, while the ease of settlement in any section whence cattle could be driven to market was often noted. The chief settler was likely to be a squatter farmer with a horse, a cow and a few swine, who settled in a forest clearing, large enough for his log cabin and a corn patch, near a few neighbors of similar tastes. When population became so dense as to disturb the hunting and restrict the range, such a settler was likely to sell to some substantial immigrant and move to the next frontier. As a more stable agricultural industry grew, frontier transportation developed to supplement its economic autonomy. It was manned by pack horse traders, hog and cattle drovers, stage drivers and the roustabouts of the river trade, all of whom served to connect the back country with its markets.

The successive advances naturally created many frontiers whose temporary stopping places were largely suggested by terrain. There was a frontier at the fall line and another at the Appalachians; an army post frontier and a salt springs frontier. Spanish frontier, French frontier and Indian frontier, Puritan and tidewater, old west and old northwest, southwest and middle border, prairie and plains, California and Oregon country—these are but variations on a more fundamental geographico-economic classification into three types: the eastern frontier of forests and clearings, the western grasslands of prairie and plains, and the western mountains and mining frontier. In fertile areas of the south the frontier gave way to the plantation, but it was not until it debouched from the forests to the grasslands that the frontier changed from the farm to the free range. When the extinction of the buffalo made it easy for the federal government to confine the Plains Indians to their reservations, the cattle man replaced the buffalo by the long horn and extended the range frontier to the Rockies. In the high plains low rainfall repelled dense agricultural settlement, thus making for the modification of some frontier traits and the retention of others. The transition from free range to ranch, begun by the innovation of barbed wire, was officially signalized when in 1884 a special session of the Texas legislature made it a penitentiary offense to cut wire fence. Whereas property had existed in cattle, it was now established in land. It remained for the extensive ranches to give way to the advancing hordes of small farmers before the frontier process was completed. The mining frontier, established by the California discoveries of 1849, began in the farthest west and retreated eastward as far as Nevada.

By gradually changing the settled farm villages of Europe into isolated farm homes the frontier formed the physical basis of rural community life in America. Virginia first set the pattern of extended "string town" settlement along her tidal rivers. Pioneer upland farmers settled in forest clearings around a stockade. No community life was possible on western prairies after the passage of the Homestead Act, for each settler was required to live on his 160 acres for five years. Had every quarter section been open to occupation, each family would have been located on the average half a mile distant from its nearest neighbor. This barrier to social intercourse and group organization made for a continuation of frontier conditions in well populated agricultural districts.

By nature and necessity separate and independent, the pioneer developed a self-reliant and aggressive personality. Forced to become a jack of all trades, he ended by developing a confident individualism and a studied disregard for instruction and experts. He came to believe that a fool can put on his own coat better than a wise man can do it for him and that almost any kind of timber can be worked into the political ship. Where none were rich, learned or polished, a backwoods democracy prevailed which desired no aristocracy, no civil service, no learned or professional class. The frontier also developed a certain ruthlessness, evident in its dealings with the Indians and in the exploitation of the public domain. Its rough and tumble fights developed after the invention of the Colt revolver into the dueling code of the cow town and mining camp. It set up its own system of law and its own conception of order. It eventually made horse stealing a capital crime and relegated murder to the category of casual accidents.

Frontier society was not all individualism and competition in the exploitation of public domain. Out of crude contacts grew spontaneous associations. The frontier farm was a fostering habitat out of whose domestic economy came the rapid and easy growth of the family. In its closely knit unity children furnished needed labor, married early and received lands from the family or settled farther west Hospitality was a kind of mutual aid to be extended in sparsely settled sections, while logrollings, house raisings, husking bees, camp meetings, mining camps, vigilantes and the squatters' and cattle raisers' associations testified to the amount of voluntary cooperation. Indian peril and common hardships served to consolidate the community and to combine in its government democratic and summary tendencies.

Moreover, the accumulation of contrasting traditions tended to set the frontier off from more Frontier 505

populous areas in its attitudes. Sectional antagonisms early developed with the scaboard states, which used the pioneers as buffer settlements against the Indians and failed to accord growing upland counties their proportionate representation in state legislatures. Questions of boundaries, internal improvements and the clashing economic interests of producing and consuming areas arose to make relations more strained. The dominant political attitudes of early frontiersmen were nationalist, expansionist, imperialist; they advocated internal improvements and military action against all Indians. Later their debtorcreditor relation with the east intensified their attitudes, and the west came to be known as the home of Greenbackers, populism, free silver, the initiative, referendum and recall, farmers' blocs, non-partisan leagues and party insurgents.

The frontier has had considerable impact on American economic life and opinion. It opened a new economic hinterland with its wealth of resources and its problems of internal improvements and government control. It gave the common man easy access to the public domain. The difficulty of maintaining a labor supply in the face of free land was partly met in different sections by slavery and immigration. The presence of unassimilated Negroes and immigrants conspired with the native working man's tendency to take up lands in the west to retard the growth of an American labor movement. The laissez faire philosophy of the frontier meant freedom to exploit natural resources. The situation encouraged land grabbing, hasty skimming of natural resources, corrupt politics and speculation in mining, ranching and real estate deals. Mistakes were quickly cured by expansion into the public domain, and the resulting prosperity constituted an argument in favor of lax policies. In this sense the heritage of the public domain has left America a generation behind Germany and England in programs of social legislation.

In other spheres the frontier has dissolved old patterns and directed an insurrectionary attack on new ones. It cut the ground from under the traditional aristocratic political thinking of the Federalists. It displaced the ideological democracy of the thinkers of the French and American revolutions by a workaday democracy that glorified the common man while it left the actual machinery of government to professional politicians and a spoils system. It served as the setting of experiments in political and social adaptation and in the wheat belt aided in assimilating certain foreign groups. In religion it was

important in substituting sects for a more comprehensive church and emphasis on revivals and emotional experience for religious nurture and confirmation. The state theocracy of Episcopalian Virginia and Puritan New England failed to survive the frontier, and the aristocratic implications in the predestination and election doctrines of the Scotch Presbyterians proved unacceptable to the backwoods equalitarianism. The emphasis on ritual was loosened, the demand for an educated ministry abrogated, and the circuit riding Methodist and Baptist preachers took their toll of more conservative sects. The frontier gave American literature new subject matter and a new viewpoint, reaching characteristic expressions in David Crockett's Autobiography, Bret Harte Hamlin Garland and, above all, Mark Twain.

RUPERT B. VANCE

Sec Boundaries, Migration; Conquest; Mobility, Social; Individualism; Democracy; Sectionalism; Native Policy; Public Domain; Homestead; Land Shitlement, Agrarian Movements, section on United States, Europeanization; Cossacks; Fur Trade, Missions; Geography.

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FROUDE, JAMES ANTHONY (1818-94), English historian and man of letters. The reputation of Froude as a historian stands higher now than in his lifetime. His literary rather than historical training and methods, the difference of his judgments from those traditionally held and the bitter controversies he aroused all tended at first to deter serious readers and fellow historians from accepting his work as of solid value. As time has gone on, however, his excellences have compelled recognition. Among these his industry takes a high place. The twelve volumes of his History of England were written within the years between 1856 and 1870 (new ed. London 1893), and the work of preparation for them was done, after the first six years, while they were being written. His three courses of lectures as regius professor of modern history at Oxford, to which position he was appointed in 1892, were each a piece of independent historical research on a large subject. His other historical and biographical writings, his more purely literary essays, most of which were gathered in the four volumes of Short Studies in Great Subjects (London 1867–83, new ed. 1891), his accounts of his colonial journeys and the Carlyle correspondence carried his published work to thirty-eight volumes, produced in fortyfour years.

He was partisan, sometimes careless in the use of his sources and he overemphasized the historical importance of great men, but his mis-

takes are hardly more numerous than those of other historians of his time. The extent of his labors, his eloquent style, his insight into characters and events, his correction of narrow traditional views and his capacity to interest a vast number of readers command respect and admiration. He was brought into contact at Oxford with Newman and other leaders of the Tractarian movement but soon emerged from their influence into a mild form of skepticism. His departure from orthodoxy, especially his publication of The Nemesis of Faith (London 1849), excluded him from clerical and educational life and forced him to make his living by his pen. He lived for twenty years in the closest intimacy with Thomas Carlyle and was entrusted by him with the duty of writing his life and editing his correspondence and that of Jane Carlyle. His inexorable truthfulness in portraying the characters and married life of the Carlyles brought upon him much criticism.

In 1872 and 1873 he lectured in the United States on the Irish question, contending that the Irish were incapable of governing themselves and must therefore remain under English guidance. In 1874 he was sent by the government to South Africa and later traveled in Australia and the West Indies making observations and reports on colonial conditions which are a curious combination of anticipations of what has since actually occurred with disparagement of the democracy which has alone made those changes possible. He was a convinced imperialist, believing that it was the duty and the proper destiny of Great Britain to remain the center of a group of English speaking colonies, whose attachment he believed could be retained by considerate and wise treatment. He believed that the empire should be held together as a place for the extension of British population and for its bracing effect upon the character of British people at home.

He disliked laissez faire and the ideals of the Manchester school in general, drawing in the concluding pages of *Oceana* (London 1886) a striking if dark picture of a purely industrial and degenerate England which he feared would result from the supremacy of those ideals.

E. P. CHEYNEY

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FRUIN, ROBERT JACOBUS (1823-99), Dutch historian. Fruin was born in Rotterdam of English ancestry and studied classical philology at the University of Leyden. The works of Heeren, Ottfried Müller and Niebuhr turned his attention to history, and after preliminary work in Egyptology he devoted his life to the study and teaching of the history of the Netherlands. He was professor of history at Leyden from 1860 to 1893 and after 1868 also editor of Bijdragen voor vaderlandsche geschiedenis en oudheidkunde.

Fruin has been called the Ranke of Holland. His work marks the beginnings of the scientific study of history in the Netherlands. Despite the fact that his writings were mostly in the form of scattered essays and addresses they were the most potent influence in the stimulation of historical investigation in Holland. His interest embraced the whole field of Dutch history, but his best work was done on the period of the sixteenth and seventeenth centuries. In Tien jaren uit den tachtigjarigen oorlog, 1588–1598 (Leyden 1859, 6th ed. The Hague 1904), Fruin's most celebrated work, "all the great problems of the history of the Dutch Republic arc firmly indicated." A determinist in his philosophical outlook, a liberal in politics and religion and a follower of the rationalist humanist tradition of Erasmus, he was attracted more to the objective historical method of Ranke than to the moralistic pleading of Mommsen. He attempted to understand and enter into sympathy with the thought and the milieu of the people and periods he described. The question of motive was for him the central problem of historiography. Although an admirer and follower of Ranke he adopted in his later writings more of a genetic approach to historical problems and criticized Ranke for his overemphasis on political history and his failure to deal adequately with social, intellectual and institutional history. He also expressed his de-

cided opposition to the formulation of historical laws as propounded by Comte and Buckle.

KOPPEL S. PINSON

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FRUIT AND VEGETABLE INDUSTRY.

The cultural history of fruits and vegetables goes back to remote antiquity, but their commercial history is largely confined to the last century. Transcontinental and transoceanic shipment of fresh products on any considerable scale began within the business life of men who are still active. In the United States the first car of vegetables under refrigeration crossed the Potomac River on its way north in 1887, and in the same year the first car of California fruit under refrigeration crossed the continental divide.

The fruits which were identified with early civilizations were either easily preserved by primitive means or yielded a semiperishable product. The olive became a source of oil on lands so arid and in climates so hot that animal fats were hard to produce and impossible to preserve. The date of the tropical desert oasis was easily dried and usable throughout the year. The fig early became the dooryard tree of semitropical races permanently located in regions of light rainfall. If irrigation was possible the vine and the fig were closely associated, as in California today. Inhabitants of humid tropical regions have always been and are still dependent largely on the orange or the banana, each available on the tree practically throughout the year in a climate which precludes fruit preservation. Diluted sour wine first became important to peoples whose water supplies were scanty, often alkaline and always warm.

For centuries the difficulties of primitive ways of communication precluded most commerce, even in dried fruits. When the wooden cask was devised as a container for fluids, displacing earthen jars and skin bags, long distance water transportation of dried fruits and wines became possible. The classical Mediterranean trade in dried fruits was extended gradually by sailing vessels to the northern European and British ports. Although the Roman occupation extended the cultivation of pears and apricots in France and of apples and cherries in Germany, the monastic and court gardens alone preserved their

rulture during the Middle Ages. Even today the peasants of eastern Europe raise little fruit.

Fruit growing thus became specialized through the rigid limitations of climate in the days when canning and refrigeration were unknown and before sugar was available as a preservative. When the struggle for existence was largely a struggle for food, the fruit which afforded the most sustenance from a given space or a given supply of moisture tended to supplant all others. Mixed orcharding, affording a considerable choice of fruits for local use, came only with stability of population and a considerable advance in the standard of living.

Diversified fruit culture, where climate permitted, has kept pace with the increase in wealth. Intensiveness of culture, or the total quantity grown by prosperous populations, has been dependent upon the density of population or the number of consumers within reach. The radius of distribution for soft fresh fruits was until recently limited to a land haul of less than forty miles by wagon or a voyage of twenty-four hours by boat. For apples the distances by land hardly reached sixty miles for any considerable quantity. During limited periods of favorable temperatures the steamship might carry apples or citrous fruits and bananas in international trade, but means of distribution were lacking at all ports.

Accordingly the first modern development and intensification of fruit culture for distant trade was the extensive planting in California of fruits for drying. Loaded at first as ship stores, the dried fruits rapidly became cargo and the industry grew virtually world wide in scope. The canning industry and still later the tremendous movement of fresh fruits gave new impetus to the development of this uniquely favored fruit growing region. With climatic conditions such as those near San Francisco Bay, where winter rainfall and summer fog suffice to produce good crops of fruit without irrigation, general freedom from spring frost insures a large proportion of full crop years and absence of rain at the ripening season makes ideal conditions for drying out of doors with a minimum of labor and equipment, Californian preeminence in sun dried fruits was rapidly established and successfully maintained.

The production of fruit in the Rocky Mountain and Pacific coast region of the United States has been the primary cause of American advance in the art of irrigation. Early irrigation was largely a work of necessity, performed by

populations struggling for food supplies. In the far western states the reclamation by irrigation of vast areas for purely commercial exploitation has been stimulated by the profits of fruit growing. These regions produce the apple, pear, peach, plum, prune, fig, apricot, cherry, orange, lemon, grapefruit, grape, avocado, olive, walnut and almond. Except for its fruit growing possibilities this region would have remained predominantly a series of mining, lumbering and grazing areas. Following closely the methods developed here, Australia and South Africa are exploiting specialized fruit areas for international trade. Chile and Argentina are attempting to do likewise.

The history of the potato is even more phenomenal than that of many fruits. Native to the cooler highlands of South America, the potato never comprised the chief food resource of any large native population, but following its introduction into Europe in the sixteenth century it rapidly became a principal food of millions of people. This increased food supply has forestalled famine and made possible much of the increase in European population. But notwithstanding its preeminent importance the potato has never figured largely in European commerce. It is too bulky and cheap to bear rail transportation costs. Water rates permit shipments from the Canary Islands and Jersey, which raise new potatoes for export to the Lon-

Until within the last fifty years all vegetable production and most fruit growing were exclusively for the local market. Gradually the industries expanded to supply the nearby demand resulting from the rapid growth of cities. The goal of the early orchardist and gardener was the production of a large assortment of varieties to furnish a salable supply through the longest possible season. Except that cheaper land was available, conditions in the United States were similar to those in most of Europe.

The modern international fresh fruit and vegetable trade depends for its existence on transportation and refrigeration. Even after the introduction of the refrigerator car railroads did not extend the commercial production of fresh fruits very far from the centers of population as long as natural ice had to be obtained at both ends of the run. But the development of mechanical refrigeration and the modern cold storage plant, supplemented by controlled temperatures in the holds of ocean vessels, have made possible the present day fruit and vege-

table industries. The building of the first commercial ice plants in 1886 and 1887 was followed within a year by the first long distance shipments of fresh fruits and vegetables under refrigeration. Transatlantic steamers immediately provided refrigerated space for fresh meats, and as that trade decreased, the increase in fruit exports created a demand for refrigerator space to an even larger number of ports. The fruit business alone led to refrigerator service from Pacific ports through the Panama Canal direct to Europe.

In internal commerce refrigeration has made possible an extension and concentration of berry and bush fruit production far from the larger markets as striking as any aspect of the tree fruit industry. In the United States many thousands of carloads of strawberries are grown on cut over pine lands in Louisiana, on the coastal sands of North Carolina and on the relatively infertile soils of western Tennessee and the Ozarks. These reach all important markets in such volume that the cheapest strawberries of the year in all the country north of the Ohio and Potomac rivers are those which come from a distance and well in advance of the local season. Dewberry production for the east centers in North Carolina. The greatest long distance movement of raspberries is from Puget Sound. The quick freezing process promises to put fresh berries, in small packages, into the hands of every ice cream vendor in the land the year around.

The concentration of production and extent of distribution of vegetables, such as tomatoes and melons, are equally striking. Tomatoes from the west coast of Mexico are sold in all American markets all winter. Cantaloupes and lettuce from Imperial valley, California, monopolize the markets of the country for several weeks. Watermelons from Georgia and Texas reach all American markets.

Communities are almost as highly specialized as are the plantings of individuals. The Wenatchee valley of Washington is almost one continuous apple orchard. For miles the lower Sacramento valley is set almost solidly to Bartlett pears. In central Georgia it is the peach, on Cape Cod the cranberry.

An increasing number of examples of a similar regional specialization are to be found in countries outside the United States. It is the banana trade which makes Central America important to the rest of the world. Railroads in producing areas and ocean steamship lines are

dependent upon the banana for their existence. Special facilities for transporting and ripening are provided in consuming countries. Every step of the process from the clearing of the tropic jungle to the jobbing of the delivered product in markets on other continents is controlled by a few gigantic organizations with national and international political and economic influence. The grape and wine industry of the Rhine, the lemons of Sicily, the oranges of Spain, the Zante currants (small raisins) of Greece, the figs of Smyrna—each illustrates a localized fruit interest of international importance, and each is a chief source of income for a region.

The mixed orcharding and vegetable growing of northern Europe is yielding slowly to the tendency toward specialization. Until recently fimited national domains, with the difficulties which beset shipments of perishables across numerous boundary lines and through a maze of customs regulations, have checked free competition between producing areas and the grower has not been compelled to confine his production to fruits in which he has a natural advantage over other growers. But already French lettuce, Italian cauliflower, and tomatoes from Campania and Emilia are seen regularly in British markets and to some extent in Germany. England imports onions from Spain from May to February, from Egypt in the spring and from Holland and Germany in the summer. Heavy shipments of apples from both the United States and Canada are made to England every year. South Africa supplies soft fruits. Spain, the United States and the West Indies supply large quantities of citrous fruits, with Palestine as a new competitor. London asparagus comes from Worcestershire, cherries from Kent and currants from Norfolk. Paris draws many of its vegetables and fruits from Vaucluse and Brittany; Normandy sends apples, Beigle near Bordeaux sends artichokes, Lalande near Toulouse sends spinach. Spain sends plums and, with Italy, beans and potatoes.

Those markets which are open to American competition are in self-defense attempting to standardize their product and adopt trademarks and modern packing methods. Holland has been most successful in cooperative marketing. Belgium has also attempted to reorganize its marketing technique, but until recently Belgian cooperative societies buying fertilizers and other supplies have been more successful than selling societies.

Common interests and problems, arising out

of long time investments, seasonal needs for labor and packing facilities, and a common market have in the United States also led to cooperative effort and organization among fruit growers, from the cranberry growers of Cape Cod to the apple growers of the Pacific northwest and the orange growers of southern California and of Florida. Local cooperative effort is almost everywhere successful in fruit regions, but an element of monopoly seems to be a prerequisite to large scale cooperative marketing. Geographic limitation of orange and cranberry production affords the necessary monopolistic possibility. Deciduous fruits are grown so widely and fall into so many naturally competitive districts that cooperation has thus far been strictly local. The organization of growers into large units for purchasing supplies as well as for marketing crops has forced the consolidation of competing agencies into larger units. As a result the entire fruit growing community is effectively represented by a limited group. The marketing of the crop is accomplished with less loss and waste than is generally believed. Few industries in the United States are better represented before state and national legislative or official bodies, a fact which largely explains why fruits enjoy such marked consideration by lawmaking bodies and are so very generally sheltered by protective tariffs and other trade barriers.

In earlier periods the growing of fruits and the growing of vegetables were closely related, the two often coming from the same farms in the same wagons to the same markets. As their production has been freed from confinement to suburban lands by the development of quick transportation and refrigeration, the separation of fruit and vegetable growing into two distinct industries has become more marked. The channels of distribution, particularly of retail distribution, remain the same, but methods and conditions of production present striking contrasts. This is especially the case in the United States.

Orchards represent a long time investment; they require progressive and intelligent care. Moreover, fruit lands abound in attractive home sites. Fruit areas therefore usually contain a highly permanent farm owning class. The modern fruit industry has undergone a marked process of mechanization of production as well as of transportation and distribution. Apple cultivation, for example, is done by the tractor with extension harrows which operate under low, spreading trees. Prunings are burned in a sheet

iron furnace on wheels drawn up and down the rows. Power sprayers with perforated nozzles drive a fine mist through the trees. Thinning the fruit, propping or bracing overloaded trees and picking the crop are among the few remaining hand operations. Fruit is trucked to packing houses at high speed. It goes through an acid bath, thence perhaps through a mechanical drier; then over a grading table to be distributed through a machine which separates sizes with great accuracy ready for the packers. Mechanical conveyors bring empty packages and carry away those which are filled. A mechanical device applies the lid to boxes with a bulge pack.

The most highly specialized vegetable areas have, in contrast, tended steadily toward the development of tenancy and absentee landlordism. Extensive and specialized vegetable production has led to the drainage of vast swamp or muck land areas now given over wholly to onions, celery and other so-called muck land crops. The development of these lands has required much capital, and they have a high rental value because of their large annual return; but there is nothing to commend them to the capitalist or his family as places of residence. They are low and flat, usually with a long muddy season and with water supplies of questionable quality. The inevitable result is tenantry by operators who are held to the soil only by the hope of quick and substantial gains. These tenants are necessarily financed by the landlord or a marketing agency. No local bank can afford to finance large scale local vegetable operations. A single crop often requires an outlay about equal to the value of the land on which it is grown. The tenant will remain on such land only until he is able to establish himself elsewhere. A single bad year may provoke a large exodus. Meantime large numbers of laborers of the least skilful type must be imported and released as needed for specific operations. The financing agencies must often attend to this. Obviously such a population has little stability; with only an annual interest in the crop and no permanent stake in the community tenants have never yet formed effective cooperative groups.

Not all large scale vegetable farming is on muck land, but in the irrigated deserts and alluvial bottom lands so large a part is conducted by tenants or by the holders of small equities who are dependent upon distributors for their operating capital that effective and permanent cooperative organization has been found impracticable. A few potato growers' exchanges

have survived for several years and operate on a large scale; but these potato regions stand midway between orchard and muck land districts, the crop being grown almost entirely by permanent landowning farmers who are largely able to finance their own operations.

The specialization of fruit and vegetable growing has given rise to a labor problem of some magnitude. Many operations, particularly in fruit production, require a large supply of relatively skilled labor, but the demand is highly seasonal. In the United States thousands of laborers migrate with the fruit and vegetable seasons, often operating through nearly 1500 miles of latitude. An increasing number of these migratory workers are Mexicans. In Europe the beet sugar harvest draws laborers from as far as Poland. The problem, however, is of less magnitude for the fruit and vegetable industries of Europe as a whole than for those in the United States. The seasonal and migratory character of such labor militates against effective trade unionism, and the securing of satisfactory conditions for these workers is a problem which still awaits solution.

Wells Alvord Sherman

See: Food Industries; Food Supply; Agriculture; Agricultural Marketing; Refrigeration; Canning Industry; Migratory Labor.

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FRY, ELIZABETH GURNEY (1780-1845), English philanthropist and prison reformer. Elizabeth Gurney was the daughter of a wealthy Quaker banker and married a London merchant. Her husband later suffered economic reverses which compelled her to manage her own household of many children but did not deter her from continuing her reformist activities. Early in life she had undergone a deep religious experience and had become a preacher. In 1813 she began her practical work in prison reform by a visit to Newgate prison in London. She was horrified by the usual spectacle of the herding together of the accused, debtors and criminals, by the unspeakable filth, the lack of decent clothing, the scanty and miserable food and the presence of small children in prison with their mothers. Mrs. Fry raised money to buy clothes for the women inmates, to establish a school, to institute Bible reading and religious instruction and to provide regular preaching. In 1817 she formed the Association for the Improvement of Female Prisoners in Newgate. She was permitted by the prison authorities to work out a system of prison discipline which embodied the separation of the sexes, the differentiation and classification of types, female supervision for women inmates, religious instruction and prison employment. The results achieved established Mrs. Fry's international reputation. She extended her activities to other British penal institutions and sought to influence the government to reduce the horrors in the treatment of convicts deported to Australia. Later she traveled extensively on the continent, visiting prisons in France, Prussia, Switzerland, Belgium, Holland and Denmark. Mrs. Fry also established shelters and soup kitchens for the paupers and beggars in London.

HARRY E. BARNES

Consult: Memoir of the Life of Elizabeth Fry, cd. by R. E. Cresswell and K. Fry (2nd ed. London 1847, abr. ed. 1856); Timpson, T., Memoirs of Mrs. Elizabeth Fry, 2 vols. (London 1847); Lewis, G. K., Elizabeth Fry (London 1909); Richards, I. E. H., Elizabeth Fry, the Angel of the Prisons (New York 1916); Tabor, M., Pioneer Women (London 1925) ch. i.

FUCHS, ERNST (1859-1929), German jurist. Fuchs may be considered the founder of the so-called free law movement in Germany. He became the champion of a liberal, sociological approach to law when during the first two decades of the twentieth century he published a series of books which attracted wide attention: Schreibjustiz und Richterkönigtum (Leipsic 1907); Recht und Wahrheit in unserer heutigen Justiz (Berlin 1908); Die Gemeinschädlichkeit der konstruktiven Jurisprudenz (Karlsruhe 1909); and Juristischer Kulturkampf (Karlsruhe 1912). In all these works Fuchs contended that juridical theory and practise in Germany had become antiquated and senile and needed rejuvenation at its head and in its members. He therefore preached a "juridical modernism" and a juridical Kulturkampf against the principal evils of his day in the administration of justice. These evils lay for him in the prevailing habit of "constructionalism." He meant thereby that both in juristic literature and in judicial decisions conclusions were based not on the sociological requirements of life, but upon mere intellectual concepts. Since he believed that the exaggerated tendency toward a purely conceptional treatment of law had been originated by the school of Roman law predominant in Germany in the nineteenth century, he spoke of a war against "pandectology." The term cryptosociology, also coined by him, has become especially famous. It signifies a method by which a decision is reached on equitable grounds, without these being openly acknowledged; the sociological contents are hidden behind forced logico-constructivist forms.

Throughout his controversies Fuchs, who was not a professor but a practising attorney in Karlsruhe, proved himself an important figure in contemporary life. He stood within the current of a philosophico-historical development which others have advocated under the term Interessenjurisprudenz or Freirechtswissenschaft. Yet despite the many who shared his views Fuchs always preserved his individuality. Lacking the gift of establishing a coherent legal system he devoted himself to casuistry and especially directed his biting criticism against many decisions of the German Supreme Court. The tone of his polemical writings was frequently stinging, but for this very reason they had a stimulating effect. The manifest growth of the sociological spirit in present day German legal practise is to be attributed primarily to the work of Fuchs.

J. WILHELM HEDEMANN

Consult: Gmelin, J. G., "Dialecticism and Technicality: the Need of Sociological Method" in Science of Legal Method, Modern Legal Philosophy series, vol. ix (Boston 1917) ch. iii, and literature there cited; Hedemann, J. W., Einführung in die Rechtswissenschaft, Grundrisse der Rechtswissenschaft, vol. ix (2nd ed. Berlin 1927) p. 197–200.

FUEROS. See Customary Law; Civil Law.

FUETER, EDUARD (1876-1928), Swiss historian. Fueter studied at Basel and Berlin. He lectured on modern history in the University of Zurich from 1904 to 1921 and acted as political editor for twelve years on the Neue Züricher Zeitung. He was a tireless investigator, a man of many sided culture, wide knowledge of languages and a thoroughly modern point of view in historical interpretation. His chief works are Geschichte der neueren Historiographie (Munich 1911, 2nd ed. 1925), the first history of general historiography and a valuable handbook both as to facts and method, in which the epochs of rationalism (humanism, Renaissance, Enlightenment) are treated with special acumen; Geschichte des europäischen Staatensystems von 1402-1550 (Munich 1919), splendidly arranged, modern in conception, with great reserve in the expression of political views; Weltgeschichte der letzten hundert Jahre, 1815-1920 (Zurich 1921; tr. by S. B. Fay, New York 1922), a less important work which has been much criticized, although it is a real universal history with an extensive treatment of America and Asia; Die Schweiz seit 1848, Geschichte, Politik, Wirtschaft (Zurich 1928), the best work on recent Swiss history and the political and economic democracy of Switzerland, with much emphasis upon sociological and economic points of view. In addition Fueter published a number of smaller studies on the fifteenth and sixteenth centuries and displayed a wealth of critical activity in newspapers and other periodicals. In all his works he evinced a very strong interest in and understanding of the Romanic and Anglo-Saxon characters and achievements; his point of view as a historian was west European but in all his works he was eminently universal in outlook, geographically and actually. He died just as he was preparing to write a handbook of modern history for American universities; at that time Harvard University was to have called him to the chair of European history.

EMIL DÜRR

FUGGER FAMILY. The family fortunes of these famous south German capitalists of the Renaissance period may be traced back to about 1380, when Hans Fugger left his Swabian village, Graben, and settled in Augsburg. Probably he worked there as a mere master weaver until the expansion of fustian weaving in south Germany offered an opportunity to his commercial talent. While many of his fellow craftsmen in town and country were becoming more and more dependent upon the Augsburg merchants who controlled the importation of the raw material from Venice and marketed the finished cloth, Fugger rose to the rank of merchant himself. He imported his own cotton and sold his own fustian, and gradually began to dispose of the products of other less enterprising weavers as well. He may also have dealt in other wares which figured in the German-Italian trade. Certainly such transactions were carried on by his two sons, one of whom, Jacob 1 (1407?-69), founded the branch of the family known from its coat of arms as the Fuggers of the Lily. With this branch the future mercantile history of the family is associated.

Jacob I's son, Jacob II (1459–1525), or "Jacob the Rich," stands in European economic history as the outstanding genius of the early capitalistic period. An apprenticeship served in Venice, where he became permeated by the spirit of economic individualism and rationalism of Renaissance Italy, and his inheritance from his father and two elder brothers, Ulrich (1441–1510) and George (1453–1506), whose mercantile exploitation of the wealth of south Germany had already broken the path for his far more rigorous

exploitation of these resources, partially explain his amazing success. But they count for less in the reckoning than Jacob's innate capacity and univalent purpose to "go on making a profit as long as he could." It was Jacob who more consistently, boldly and ingeniously than any of his relatives developed the unique organization of the Fugger business. Although he himself had no children, his plans were laid with a view to the concentration of the family wealth through succeeding generations in the hands of those members who would employ it for the creation of new wealth. The principles which guided him as well as the devices he contrived to put them into effect are summed up in his last will, made a few days before his death. The partnership was to be restricted to male representatives of the family in the direct Fugger line, and neither outsiders nor relatives by marriage could be admitted; there was to be no dispersal of capital through the withdrawal of large sums by female heirs or others not participating directly in the partnership; none but the ablest members of the family were to have a share in the administration of the business.

In the form in which it crystallized under Jacob II the Fugger firm combined the three activities of international merchant, banker and industrial entrepreneur. As the primary mercantile concern of the family Jacob established metals in preference to textiles, which from the time of Hans had engaged the attention of his ancestors; the spice trade which in his day was tempting other famous mercantile firms in south Germany, such as the Welsers, he usually avoided as too speculative. The principal metals dealt in by the Fuggers were the silver and copper of the Tyrol and Hungary-the two most productive areas for these metals in the world until the middle of the sixteenth century - and Spanish silver and quicksilver. In return for large loans to the reigning princes, particularly the Hapsburgs, the Fuggers received monopolies in the purchase of ore. Thus by the same contract they became royal creditors and controllers of the ore trade; the profits reaped were proportionate to the dexterity displayed. From their interest in regulating the sale of ore they were led gradually into investing capital in its production until finally they assumed the actual ownership and direction of the mines and became the prototypes of modern captains of industry. The more their capital was absorbed by mining, the more reason they had to retain and augment the emperor's favor or protection; and since their

money was always needed by the Hapsburgs they became constantly more deeply involved in financial transactions with the imperial family. The consistency and effectiveness with which they placed their financial resources at the disposal of Maximilian 1, Ferdinand 1, Charles v and Philip 11 have perhaps never been equaled by any other mercantile house in the service of royalty-even the house of Rothschild not excepted. For decades Jacob Fugger was also an outstanding financier of the popes. The mightiest supplicant for his money could not win his assistance without offering at least ample security; but Jacob took still further precautions to insure himself against royal insatiability by investing a considerable portion of his wealth in real estate, partly urban but mainly rural. This property, the most valuable constituents of which were the great imperial domains of Swabia, became the nucleus of a family entail which Jacob designed to be held in common by the active members of the business and to be inalienable by them. When Jacob died in 1525 his firm was the wealthiest then existing. From a little over 50,000 Rhenish (gold) guldens in 1494 its capital had swollen to more than 2,000,000; an immense sum considering that the Rhenish gold gulden had a gold content approximately equivalent to that of two dollars and a purchasing power of over ten times that amount.

Jacob was succeeded as head of the firm by his nephew, Anton (1493-1560), under whose leadership its capital and trade continued to grow in volume. At its peak in 1546 the business property of the firm amounted to almost 5,000,000 Rhenish gold guldens. Nor was Anton inferior to his uncle in general influence. The money which Jacob had extended on behalf of the Hapsburgs to the electors of the Holy Roman Empire had made possible the succession of Charles v as emperor in 1519; Anton's money permitted the Hapsburgs to prosecute the Schmalkaldic war and thus became a decisive factor in the course of the German Reformation. It was to Anton's counting house that the Spanish and Austrian Hapsburgs looked for their strongest financial support in all their grosse Politik. Nevertheless, before the middle of the sixteenth century the company had lost the internal solidity which it had possessed under Jacob. The truth was that in spite of his luminous role in European finance and politics Anton lacked his uncle's genius for business. In the end he found himself powerless to stem the flood of the Hapsburg demands for money or to offset the outflow by strengthening

his trade in commodities. As a consequence after his death, when control of the firm had passed to his son Markus and other members of the family, the Fuggers lost most of their wealth in the great national bankruptcies—particularly the Spanish and Dutch—of the sixteenth and seventeenth centuries. In the latter century their commercial activity ceased. What remained of their wealth was chiefly the landed property, which Jacob Fugger had rendered immune to the vacillations of mercantile and financial fortune.

JAKOB STRIEDER

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FUKUZAWA, YUKICHI (1834-1900), Japanese educator, publicist and reformer. Fukuzawa was born of a samurai family and like all such youths in feudal days was trained in the Chinese and Japanese classics until his twentieth year. In 1854 he went to Nagasaki—which was the one port open to the Dutch, the only foreigners at that time permitted to trade in Japan -to study the Dutch language, which he thought the key to western civilization. In 1858 Fukuzawa went to Tokyo (then Edo), where he taught Dutch, but soon realized that English was a more important language and began to study it. In 1860 he went to San Francisco as an attendant to the commander of the first Japanese frigate to cross the Pacific and brought back to Japan the first copy of Webster's dictionary to enter that country. Shortly afterward he compiled and published an English-Japanese dictionary. In 1861 he served as interpreter to a shogunate mission which visited Paris, London, Berlin and St. Petersburg, and in 1866 he

published the famous Seiyo jijo (Western conditions), a description of what he had observed, written in a style which could be understood even by the masses. In 1867 he accompanied a mission sent to Washington to buy a warship and guns and returned to Tokyo just after the shogun had abdicated in favor of the emperor.

In 1868 he opened in Tokyo the Kei-O-Gi-Juku, the nucleus of a great educational institution consisting of primary schools, high schools and colleges, now commonly called Keio University, which has produced many progressive leaders in politics, finance, business and journalism. Before his classes Fukuzawa translated orally the works of Adam Smith, Mill, Spencer and Darwin, his favorite authors. He ridiculed Confucian politico-ethical concepts and urged the substitution of western ideas. In 1882 he launched the Jiji shimpo, a non-partisan daily newspaper with a political, economic and social educational policy. For many years this paper exercised great influence. Fukuzawa wrote numerous books interpreting western civilization and advocating the rehabilitation of Japan on progressive lines. He was frequently invited to become minister of education but preferred to work through his school and his writings without the interference of the bureaucracy or aristocracy. He was the foremost representative in his fields of the generation of leaders who first undertook the making of the new Japan.

KIYOSHI K. KAWAKAMI

Works: Fukuzawa zensiu (Complete Works of Fukuzawa), 10 vols. (Tokyo 1926); Fuku-o Jiden (Autobiography of the Venerable Fukuzawa) (Tokyo 1899). Consult: Aston, W. G., "Yukichi Fukuzawa, Author and Schoolmaster" in Japan Society, Transactions and Proceedings, vol. v (1898–1901) 280–310; Miyamori, Asataro, A Life of Mr. Yukichi Fukuzawa (Tokyo 1902).

FULL FAITH AND CREDIT CLAUSE. The provision in article iv, section 1, of the Constitution of the United States, commonly referred to as the full faith and credit clause, is as follows: "Full faith and credit shall be given in each State to the public acts, records, and judicial proceedings of every other State. And the Congress may by general laws prescribe the manner in which such acts, records, and proceedings shall be proved and the effect thereof." The clause was derived from the provision in the last paragraph of article iv of the Articles of Confederation, which provided: "Full faith and credit shall be given in each of these states to the records, acts and judicial proceedings of the

courts and magistrates of every other state." Since the clause was thus limited to the "records, acts and judicial proceedings" of the courts, the Congress of the Confederation was empowered neither to provide a method of authentication nor, as was said in the case of M'Elmoyle v. Cohen [38 U. S. 312, 326 (1839)], to "legislate upon what should be the effect of a judgment obtained in one state in the other states." Prior to the adoption of this provision the courts of the American colonies seem to have regarded the judgments of courts of sister colonies as foreign judgments in default of provision to the contrary, such as was enacted by the provincial Act of 14 George III, c. 2, for the province of Massachusetts Bay.

The brief discussion of the full faith and credit clause in the Constitutional Convention indicates that the original purpose was threefold: to prevent repetitious litigation in a federal system of justice, to secure uniformity in the proof of official records and to make possible the federal regulation of interstate rights, whether arising under legislative or executive acts or as a result of judicial proceedings. By the act of 1700 the first Congress of the United States provided for the authentication of state legislative acts and judicial records and further enacted that judicial records and proceedings, duly authenticated, should "have such faith and credit given them in every Court within the United States, as they have by law or usage in the Courts of the state from whence the said records are or shall be taken." By the supplementary act of 1804 the provisions of the act of 1700 were extended to the public acts, records and judicial proceedings of the territories of the United States and countries subject to its jurisdiction. The latter act was held in the case of Embry v. Palmer [107 U. S. 3 (1882)] to be an exercise of the general judicial power of the United States government, complementary to the provisions of the full faith and credit clause.

The fact that Congress has thus far not regulated the effect of other than judicial records and proceedings has restricted the application of the full faith and credit clause primarily to judgments of courts within the United States or its territories. The principal questions involved relate to the effect of given judgments of a state in other states of the United States, to the defenses available in actions on a judgment of a sister state, to the application of the full faith and credit clause as between state and

federal courts and to the mode of enforcing sister state judgments.

For a brief period it was the prevailing view that the full faith and credit clause and the act of 1790 provided only for the authentication of judgments of sister states and did not give them a more conclusive effect than was given under the common law doctrines of the time to foreign judgments, these being regarded as no more than prima facie evidence. In 1813, however, the leading case of Mills v. Duryee [11 U.S. 481 (1813)] decided that "the record duly authenticated shall have such faith and credit as it has in the state court from whence it is taken." The law was thus settled that if a judgment is conclusive in the state of its rendition similar effect is to be given it in courts of other states. The accepted view, however, is that it is conclusive only as evidence; therefore a state court is not required to take judicial notice of the fact that there has been a prior judgment in the court of another state on the same cause of action unless it is pleaded as a defense. A more important result is that, because of the artificial but necessary distinction which is drawn between remedies and rights, the mode of suing upon the prior judgment and the methods of execution available are determined by the law of the forum. Consequently, the actual results in the enforcement of a state judgment may vary in other states from those in the state of its rendition.

The limitations which have been imposed by judicial interpretation upon the application of the full faith and credit clause to state judgments are chiefly the effect of other legal doctrines. The most important is that the court of the state rendering the judgment must have jurisdiction; by the Fifth Amendment to the Constitution the United States, and by the Fourteenth the states, are prohibited from depriving any person of life, liberty or property without due process of law. Consequently, unless there be in a personal action personal service or the equivalent and in an action in rem jurisdiction of the subject matter, the judgment of a sister state is not constitutionally valid and therefore is not entitled to full faith and credit. And, as was decided by Thompson v. Whitman [85 U.S. 457 (1874)], the recital of jurisdictional facts in the record of a state judgment does not preclude evidence to disprove them in the court of another state. Secondly, under the unsatisfactory doctrine as to the remedial character of statutes of limitation it was decided in 1839 that the period within which action may be brought on a sister

state judgment may be more limited in other states than is provided by the state of its rendition (M'Elmoyle v. Cohen). Thirdly, the doctrine that actions arising under penal and other administrative statutes are not transitory has led to the rule that a state judgment on a "penal" cause of action is not entitled to full faith and credit [Wisconsin v. Pelican Ins. Co., 127 U. S. 265 (1888)]. Fourthly, as a result of the doctrine that foreign corporations are not "citizens" a state is not required under the full faith and credit clause to entertain an action by a foreign corporation on a sister state judgment [Anglo-American Provision Co. v. Davis Provision Co. no. 1, 191 U.S. 373 (1903)]. It should be added that to be given full faith and credit the judicial proceeding should be final under the laws of the state in which it is had.

As to the recognition of state judgments in the federal courts and vice versa, the broad terms of the act of 1790 extend full faith and credit to state judgments in actions upon them in the federal courts. Conversely, the state courts have been required by judicial interpretation of the act of 1804 to give full faith and credit to the judicial proceedings of federal as well as territorial courts.

Under the principles of the common law the jurisdiction of a court is territorial and its judgment has no effect of record outside the jurisdiction. As a result, a judgment can be enforced in other jurisdictions only by action brought upon the judgment. This requirement generally prevails in England and the United States as to the enforcement not only of foreign judgments but also of interstate and intercolonial judgments. Australia, however, which has been strongly influenced by the American constitution in the drafting of its own, has incorporated in it an improved version of the full faith and credit clause providing a more effective federal mechanism for the interstate enforcement of rights. By the Service and Execution of Process Act, 1901, amended in 1912 and known as the Service and Execution of Process Act, 1901-1912, which was enacted in pursuance of the constitution of the commonwealth, provision was made not only for the registration of judgments duly rendered in any state with courts of similar jurisdiction in other states in which execution is desired, but also for the service of the civil and criminal process of each state throughout the commonwealth. The advantage of the latter provision is that it tends to fix litigation in the state where the subject matter

is situate or the cause of action accrued instead of where the defendant happens to have been served and thus to eliminate *ab initio* many possible conflicts of laws. The authorization of the direct execution of judgments, a method of enforcement familiar in civil law countries, largely obviates the delay, expense and difficulties of obtaining jurisdiction over a judgment debtor which are inherent in the more usual English and American practise.

It should be noted, however, that the hardship involved in requiring that a judgment debtor should be personally served in an action brought to enforce a foreign judgment has been somewhat alleviated in a large number of American states by the enactment of attachment statutes which provide for the enforcement of debts without personal service, if property of the debtor can be attached within the jurisdiction. The interesting suggestion has been made that Congress might even under the present full faith and credit clause constitutionally provide by new legislation for the registration of judgments in other states as well as for service of process throughout the Union.

Although the full faith and credit clause has been primarily applied to sister state judgments, there is some indication of a tendency in certain types of cases to extend its application by judicial interpretation to state statutes. Thus it has been said that a statute defining the rights and liabilities of members in a fraternal association [Royal Arcanum v. Green, 237 U. S. 531 (1915)] and the laws of the state in which a life insurance policy was contracted [Aetna Life Ins. Co. v. Dunken, 266 U. S. 389 (1924)] were entitled to full faith and credit. It is probable that these cases are to be explained by the desire for a certain degree of federal control in corporation and insurance cases.

These cases have led to the suggestion that a considerable degree of uniformity in the solution of the troublesome problems of the conflict of laws could be secured by a more liberal judicial construction of the full faith and credit clause in conjunction with the due process clause. The alternative suggestion that by federal legislation interstate service of process could be authorized and the conflicts of laws resolved by "a code of uniform national laws" accord more directly with previous trends and with the powers granted to Congress to prescribe the effect of state acts and judicial proceedings. Thus far tendencies toward uniformity have chiefly taken the form of the enactment of uniform state laws

and more particularly of direct federal legislation in important fields of commercial law, e.g. bankruptcy, interstate commerce, and so on. In the absence of federal legislation as to the general law of conflicts the courts have been reluctant to extend the full faith and credit clause beyond the narrow legislative definition in the act of 1790. Indeed, in certain fields, such as divorce, the jurisdictional requirements under the clause have been the occasion of a restrictive interpretation which has led to confusion. In consequence, the application of the full faith and credit clause has been scarcely more effective than the very similar doctrines independently developed by the courts as to foreign judgments; nor can it be said to have been substantially utilized as a means of securing uniformity in the enforcement of interstate rights. HESSEL E. YNTEMA

OF LAWS: LUBISHICTIONS

See: Federation; Conflict of Laws; Jurisdiction; Judgments; Comity; Codification; Uniform Legislation.

Consult: Freeman, A. C., A Treatise of the Law of Judgments, 3 vols. (5th ed. San Francisco 1925) vol. iii, ch. xxvi; Willoughby, W. W., The Constitutional Law of the United States, 3 vols. (2nd ed. New York 1929) vol. i, ch. xii; Costigan, George P., Jr., "The History of the Adoption of Section 1 of Article IV of the United States Constitution" in Columbia Law Review, vol. iv (1904) 470-89; Cook, W. W., "The Powers of Congress under the Full Faith and Credit Clauses" in Yale Law Journal, vol. xxviii (1918-19) 421-49; Dodd, E. M., Jr., "The Power of the Supreme Court to Review State Decision in the Field of Conflict of Laws" in Harvard Law Review, vol. xxxix (1925-26) 533-62.

FULLER, (SARAII) MARGARET (MARCHESA D'Ossoll) (1810-50), American literary and social critic and feminist. Unusually erudite and self-reliant, Margaret Fuller early sought for some suitable sphere of activity. To support herself and her family she at first taught school, for a time under Bronson Alcott; from 1840 to 1842 she edited the Dial with her friend Emerson as nominal joint editor, at the same time conducting in Boston classes for women, called conversations, which attracted the attention of the intellectual world. In 1844 she joined the staff of the New York Tribune, for which she wrote critical reviews and general articles and for which she acted as correspondent while in Europe from 1846 to 1850.

Although interested in all problems of social reform Margaret Fuller was especially occupied with the question of woman's place in society. She did not believe that women's talents are

necessarily the same as men's, but she maintained that women could not adequately develop their peculiar gifts until all artificial restrictions were removed and for that reason argued that women should be allowed to enter upon all forms of activity as freely as men. Both her writings and her example were influential in the feminist movement. In her writings on this question and on all social problems her transcendentalist tendencies are discernible in her emphasis on individual improvement rather than on collective activity.

In Europe her reputation, based especially on her pioneer study, Woman in the Nineteenth Century (New York 1845), brought her wide intellectual contacts. In England she had met Mazzini and when she went to Rome, where she remained for more than three years, she became deeply interested in the cause of Italian independence. During the siege of Rome she served as a nurse. There she married the Marquis d'Ossoli, a youthful participant in the cause. In 1850 she and her husband and child were drowned on their way to America.

GRANVILLE HICKS

Works: Collected Works, ed. by Arthur B. Fuller, 4 vols. (New York 1855-59).

Consult: Higginson, T. W., Margaret Fuller Ossoli (Boston 1884); Anthony, K., Margaret Fuller (New York 1920); Bell, M., Margaret Fuller (New York 1930).

FUNCTIONAL REPRESENTATION. The term functional representation is used in political science to describe the representation of specific economic groups, such as the workers or the employers in particular industries or both workers and employers together, the members of a profession and so forth. It must be distinguished from representation by class or rank or wealth, although in some cases the two groups may coincide. A distinction may also be drawn between conferring on special groups or persons the right to vote with the general body of citizens, by reason of the fact that they belong to a particular category, and giving separate representation to that category. To the question whether the purpose of representation by economic groups is to represent a status or an industry or an occupation there is no single answer which will fit all the facts and theories. Historical analysis increases the difficulty of clear definition.

In the ancient world there was no representation of any sort, functional or otherwise. The Athenians believed that the whole life of a citizen must be dedicated to the service of the state, and they would have regarded the fulfilment of the civic obligation through the occasional exercise of the right to vote as a travesty of political life. Nevertheless, Solon organized the constitution of Athens on the principle of dividing the population into four classes according to property and distributing the various public offices among three of the classes in proportion to the value of their ratable property. There is here a rudimentary indication of the conception that government should be representative of certain economic interests.

The great political invention of representation first appears in a coherent form in the thirteenth century, although the notion of the representation of a community by some of its members may have been much older. It existed as an important part of the organization of the friars, and particularly of the Dominican order, as early as 1221. Later in the same century the idea was consciously utilized in the formation of the early English parliaments. Thus in 1254 in the king's absence the regents summoned a great council to Westminster to which each sheriff was bidden to send "four lawful and discreet knights from your county whom the county shall have chosen for this purpose." At the famous Model Parliament of 1295 the bishops and abbots were summoned by name, but the lower clergy were represented on a definite electoral plant. By the end of the century Parliament had taken shape as a national assembly consisting of clergy, barons and commons. There was a rough correspondence between these classes and the threefold division of society into those who pray, those who fight and those who work, which in one form or another can be traced back to the ancient world. But recent historical research has discredited the idea that the early English parliaments were deliberately organized on the basis of three estates as such. With the gradual withdrawal of the clergy Parliament instead of being an assembly of the three estates became an assembly of lords, spiritual and temporal, and commons. The commons were probably the organized bodies of freemen in the shires and towns; they represented the "poor folk of the land" and were elected in the full county court.

The idea of embodying representatives of the priestly, military and plebeian orders in a parliament or council was prevalent throughout western Christendom during the Middle Ages. The actual institutions which were created varied from country to country. In France, for example,

meetings of the Estates General were summoned by the king at irregular and often infrequent intervals from 1302 onward. The Estates General was an assembly of barons, clerics and bourgeoisie, the last named being represented by elected deputies. Each of these three orders or estates had its own deliberative chamber for general decisions, and business was transacted on the basis of one vote for each order. This system prevailed until 1789, when the third estate not only demanded one vote for each member but with the support of the parish priests declared themselves a National Assembly.

All this relates to central government. In the Middle Ages, however, local government was in many ways more important than the central power. Municipal administration was for centuries inextricably bound up with the guild system. The governing body of the borough or corporation was largely composed of members of the various merchant and craft guilds situated in the town, and there was often a deliberate intention of making the town council representative of the different guilds.

In the centuries which followed the Middle Ages a gradual change took place from a stratified society consisting mainly of orders to one consisting mainly of individuals. Democracy everywhere relies on the representation of individuals as such, an essentially atomistic conception of society which would have seemed strange indeed to the political thinkers and statesmen of the thirteenth or the fourteenth century. Representation, moreover, has come to mean representation by election. In the Middle Ages there was plenty of representation of classes, orders, occupations, functions, but little in the way of election; in fact, representation did not necessarily imply election until the nineteenth century. Representatives might be chosen by a public officer, by lot, by rotation or by other methods. For the most part also representation was not a right claimed from below but an obligation imposed from above--in the case of parliament, a service required by the king.

When the movement for democratic institutions swept across Europe in the nineteenth century there was no talk of functional representation. It is true that Sir Hugh Cairns asserted in the House of Commons in 1866 that Parliament should be "a mirror, a representation of every class; not according to numbers, but according to everything which gives weight and importance in the world without." But he was a voice crying in the wilderness, for the demand for

popular parliamentary institutions was essentially a demand for the representation of persons in their capacity of individuals. John Stuart Mill in his influential book Representative Government (1861) ignored the whole question of functional representation and dealt exclusively with what may be called by contrast territorial representation. Nevertheless, there existed up to the end of the nineteenth century in various countries electoral requirements which had the indirect effect of producing something approaching functional representation. In the Austrian empire, for example, 85 out of a total of 353 members of the lower house of the Austrian Reichsrath were elected to represent the largest landed proprietors, or those most highly taxed, while a further twenty-one were elected by the chambers of trade and commerce either individually or in conjunction with the electoral town district, and various persons in the towns were entitled to vote by virtue of the office or position which they held.

The conception of political democracy as a system involving the total representation of isolated individuals grouped into territorial units appeared to be firmly established in parliamentary assemblies all over the civilized world by the end of the nineteenth century. In the twentieth century, however, it has been severely challenged both in fact and in theory in a large number of the leading countries.

The most vehement although incoherent attack before the World War came from the revolutionary syndicalists in France. The main emphasis in the exhortations of Sorel and his followers was laid on the general strike as an instrument of revolution, on the need for violence and the desirability of direct action to secure control by the workers. In all the utterances of the exponents of syndicalism a fundamental distinction is assumed between an economic class and a political party, and there is an underlying disbelief in the method of parliamentary representation.

The immediate influence of revolutionary syndicalism was short lived, as might have been expected in view of its insecure philosophical foundation, the slender intellectual equipment of its exponents and the absence of a constructive program. A more substantial effort to supersede parliamentary democracy was made by the English guild socialists, who put forward a developed scheme for the entire government of political, economic and social life by means of an elaborate series of functional councils.

The starting point of guild socialism is the assertion that the idea of democracy has become entangled with a particular theory of government based on a totally false theory of representation. This false theory is that one man can "represent" another or a number of others and that his will can be treated as the democratic expression of their wills. No man, according to the guild socialists, can represent another and no man's will can be treated as a substitute for, or representative of, the wills of others. True representation is always specific and functional and never general and inclusive. What can be represented is never man, the individual, but always certain purposes common to groups of individuals. It follows naturally from this hypothesis that the theory or the practise of representative government commonly found in legislative assemblies is utterly false and destructive of personal rights and social well-being.

Functional representation in the eyes of the guild socialists is open to no such objection, for it does not profess to be able to substitute the will of one man for the wills of many. In proportion as the purposes for which the representative is chosen lose clarity and definiteness, representation passes into misrepresentation. Thus, they declared explicitly, misrepresentation is seen at its worst today in the omnicompetent "representative" parliament, which professes to represent all the citizens in all things and therefore as a rule represents none of them in anything. Real democracy is to be found not in a single omnicompetent representative assembly but in a system of coordinated functional representative bodies. These guilds would represent particular functional groups and would in the last resort be self-governing.

The fatal weakness of guild socialism lies in the overwhelming amount of power it aims to confer on men and women in their capacity as producers. The selfish interests of particular groups of producers are nowhere to be effectively subordinated to the claims of the consumer or those of the general public. The difficulty of carrying on industrial processes under a system in which the workers have supreme control over their own economic activities was demonstrated by the breakdown of the building guilds which were started in England after the World War to give practical expression to the guild socialist creed. Little is now heard of guild socialism. Yet shortly after the end of the war it had a striking echo in Germany, where many leaders of political thought, including especially Walther Rathe-

nau, formulated a political system which bore in many ways a close resemblance to the guild socialist doctrine. It had also a considerable indirect influence in forcing upon the public notice the vital and intimate relationship which normally exists between a functional representative and the rank and file of the functional group, as compared with the frequently remote and apathetic relationship between a territorial representative and his constituents. The effect of this was shown by the admission on the part of such severe opponents of guild socialism as Sidney and Beatrice Webb that in a socialist commonwealth the democratic organization of society must spring from at least three distinct foundations: man as producer, as consumer and as citizen, with each of these functions adequately represented in its appropriate institutions.

The radical thinkers to whom reference has been made were only voicing in an extreme form the dissatisfaction with parliamentary institutions widely felt among practical politicians and political scientists. The vast increase in the scope of government, its extension into economic fields and the complexity of public administration have made both citizens and representatives aware of the shortcomings of election on a territorial basis. The huge increase in the size of modern electorates (especially where women have been enfranchised) has destroyed any real contact between the parliamentary representative and the voters who elect him. The difficulty of the problems with which modern states are confronted has made it seldom possible for persons who are not experts or prepared to specialize to be able to contribute usefully to parliamentary discussion. The close relation between central and local government on the one hand and industry, agriculture, commerce and finance on the other has produced a clear realization of the dominant part played by economic interests in political life, and a demand for representatives who can bring to the legislative assembly knowledge of industry, of labor problems, or some other kind of special experience. The impact of science, education, public health and other social services on public administration has intensified the demand for the introduction of expertise into representative institutions.

It is scarcely surprising in view of all these forces working in the same direction to find in a number of countries a well marked tendency toward either the supplanting of the parliamentary idea altogether or the supplementing of it by various devices for securing the representa-

tion of significant functions. In the Soviet Union the principle of geographic representation has been entirely replaced by the system of soviets, or councils, of workers' representatives.

Scarcely less significant is the Fascist regime in Italy. There, as in the Soviet Union, territorial democracy has been completely displaced. An attempt is being made to construct a parliamentary system based entirely on functional representation. The corner stone of the Fascist edifice is the syndicates which are officially authorized to represent the various occupational groups of workers and employers—one for each group. These syndicates are built up into national syndicates, the national syndicates into national federations embracing both workers' and employers' associations, and the national federations are in turn united in national confederations of Fascist syndicates. There is also a complex arrangement of provincial unions. Under the present law 800 delegates to the reconstructed Parliament are designated by the syndicates, and 200 candidates are proposed by various cultural, educational, charitable or propagandist associations. The list of delegates is then revised by the Fascist Grand Council and finally submitted en bloc to the electorate, which comprises all those paying syndicate contributions together with certain other groups. This constitution clearly displays the corporative state, with such representation as exists based entirely on functional activity.

In a number of countries where democratic institutions based on territorial representation have been maintained the idea of functional representation has been worked into the traditional fabric. In England numerous instances are to be found. The Education Act of 1921 requires every local education authority to have an education committee which must contain persons of experience in education and persons acquainted with the needs of various kinds of schools. These persons are to be nominated by outside bodies. The National Health Insurance Act of 1924 embodies a scheme for the functional representation of specific interests, such as the medical profession and the suppliers of drugs, medicines and appliances, in the various committees charged with administering the system of social insurance. The minimum wage legislation enacted in the Trade Boards acts of 1909 and 1918 contains analogous provisions.

A more striking example is to be found in Germany. Under article 165 of the constitution of 1919 workers and salaried employees for the protection of their social and economic interests have a right to be legally represented in workers' councils established for individual undertakings, in district workers' councils grouped in connection with economic districts and in a federal workers' council. District economic councils and a federal economic council are also called for by the constitution in order to combine the workers' councils with the employers and other classes of the population. This article has been in part implemented by the German Works Council Act.

Article 165 goes on to stipulate that all bills of fundamental importance dealing with matters of social and economic legislation shall before being introduced be submitted by the federal government to the federal economic council for its opinion. The federal economic council shall have the right itself to propose such legislation, which the federal government is bound to introduce in the Reichstag whether it agrees with it or not. A provisional federal economic council, not based on district economic councils, was called into life by a decree of May 4, 1920, and has been functioning since then. Its constitution has been considerably modified by later decrees.

In the international sphere numerous instances of functional representation are also to be found. For example, the conferences of the International Labour Office are attended by persons chosen to represent the workers' and employers' organizations as well as by government representatives. Such bodies as the International Postal Union clearly have a functional aspect.

From what has been said it can be seen that since about 1910 there has been an almost continuous reaction at work against the system of parliamentary democracy based on territorial representation, which in the nineteenth century succeeded the legitimist principle of monarchical rule in most of the civilized countries of the western world. That reaction has in some cases consisted only of an intellectual revolt, as in the case of revolutionary syndicalism and guild socialism; in others it has taken practical shape, as in the case of communism and Fascism. In every instance, associated with the challenge to territorial representation and indeed forming an integral part of it, is a scheme for some alternative form of representation based on function. The idea of functional representation has been definitely introduced in greater or less degree in the political institutions of a number of important states, including Germany, the Soviet Union, England, Italy, France and Jugoslavia.

With so much experimentation in process it is

scarcely possible at this stage to arrive at any final and complete evaluation of the merits of the principle. But certain conclusions definitely emerge. The first of these is that the vigor with which functional representation has asserted itself in the past two decades is a symptom of the dissatisfaction with which territorial democracy is regarded in many quarters. It is abundantly clear that the relatively simple legislative and administrative institutions which sufficed when the main work of government consisted of the exercise of police powers are inadequate to carry successfully the immense burden of positive duties and services which governments in all countries are now expected to provide. It is certain therefore that large reforms and innovations in the structure and technique of democratic institutions may be expected in the near future as regards both legislation and administration. It must not be assumed, however, that the imperfections of existing institutions are necessarily due to the fact that they are based on territorial representation. This is not true in any substantial sense.

The next fact which emerges is that none of the advocates of functionalism has devised a satisfactory method of allocating due weight to each interest to be represented. No objective standard exists by which "due" weight can be measured. The importance of a function obviously does not depend on the number of persons performing it; the medical profession, for instance, has a social importance out of proportion to the numbers engaged in it.

Another formidable difficulty inherent in functional representation is that of determining the functions to be represented. Are industries to be represented as such? Is transport a function? Or are the railways one function and motor omnibus services another? Is the railway industry a single function which includes diverse undertakings such as hotels, restaurants and the repair shops belonging to the railways? Or should the railways' undertakings in each of these lines be represented with the hotel, restaurant and shop industries respectively? Endless problems of this character arise from the lack of clear cut boundaries in economic life.

It is certain that functional representation if extensively introduced everywhere would be destructive of the political party system as it at present exists. But the precise effects in that connection are impossible to predict.

The whole conception of functional representation may be regarded either as a method of

securing expert knowledge in the conduct of public affairs or as a means of obtaining the representation of sectional interests. The former has much to commend it in a world of increasing complexity where vocational qualifications and professional standards are being called for with increasing insistence. There is a growing belief that those who take part in a social or industrial process have something of value to contribute to the discussion of governmental policy where that process is concerned. But it does not follow from this that the reins of government and in particular the control of economic enterprises affected with a public interest ought to be handed over to the representatives of sectional interests. The ultimate limitation to functional autonomy lies in the difficulty of securing a disinterested will in those who represent sectional interests. If the post office were governed exclusively by representatives of the postal workers, it is almost certain that the interests of the consumer would suffer. In a legislative assembly constituted on a functional basis the disposal of a political question of general import such as disarmament would doubtless depend largely on the sectional interests of dominant industrial groups.

It may be inferred therefore that the vital question is the amount and character of the functional representation which is admitted into the governmental system. Functional representatives have, outside Italy and the Soviet Union, been subordinated to territorial representatives by numerical inferiority where both enjoy membership of a single body or assembly or by legal or constitutional differentiation, such as by restricting functional bodies to advisory powers only. The introduction of such limited functional representation may not necessarily have disadvantageous results and may bring a valuable infusion of expert knowledge. On the other hand, if dominance is given to the functional principle, an entirely different situation is produced, the results of which seem unlikely to be favorable.

WILLIAM A. ROBSON

See: REPRESENTATION; DEMOCRACY; GOVERNMENT; GUILD SOCIALISM; SYNDICALISM; PLURALISM; FASCISM; SOVIET; NATIONAL ECONOMIC COUNCILS; LOBBY; ADVISORY BOARDS; EXPERT; BLOC, PARLIAMENTARY; INTERESTS; MINORITY REPRESENTATION; FUNCTIONALISM.

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FUNCTIONALISM is a term which came into the foreground of philosophic discourse in the last quarter of the nineteenth century and has maintained an increasingly strong position there ever since. It sums up and designates the most general of the many consequences of the impact of Darwinism upon the sciences of man and nature. This was to shift the conception of "scientific thinking" into a temporal perspective; to stress relations and activities as against terms and substances, genesis and development as against intrinsic character, transformation as against continuing form, dynamic pattern as against static organization, processes of conflict and integration as against formal composition out of unchanging elements. In short, the shift was from "structure" to "function" as the principal tool of scientific explanation and interpretation.

These pairs of antitheticals, together with others of similar intent, express contrasts which experience is everlastingly turning up and of which the classic tradition in philosophy has taken characteristic account. Since the life of man is a sequence of events and not an eternal substance; since it is recorded as biography and history and not as principle or law, it constitutes a flux of experiences springing from an unknown source and flowing to an unknown terminus between birth and death. The concern of the classic tradition was to give character, local habitation and name to the source and the terminus. It used the achievements and practises of religion, of art, of the economic establishment and the political institution as extensions of the unknown. By means of data selected ad hoc from these modes of social interaction and external adjustment it referred the chances and changes of biography and history to necessary law and immutable substance. It demonstrated every change as an expression of changelessness, every activity as a manifestation of substance Thus it treated of human nature as immortal soul equipped with unchanging faculties; it treated of nature as substance, as eternal idea or form, unmoved and unmoving in itself but the cause of the motion of all moving things, making them one with its oneness, good with its goodness and true and beautiful with its truth and beauty. According to the philosophic tradition such order and direction as may be found in the dark confusion of experience is an expression or projection into unreality of the lucid structure of the world of substance beyond. Outside of that world the daily life is a dim stream flowing; within, it is no stream. Reason, art, society, salvation are each and all projections or exemplifications of that single order amid the chaos of events. Thus all argument is of a foregone conclusion; all invention only discovery; all technique-whether of government, law or business -only the explication of a priori principles; all knowledge only revelation of a preexisting, selfsustaining and self-sufficient hierarchy of substances; all conduct the exercise, discipline and perfection of unchanging faculty. The oak exists preformed in the acorn, the hen in the egg, the man in the sperm. Growth and change are only expansion and emergence of a structure from its limitations, not the occurrence of new events compounding themselves into a new creature.

This view is held no less by the materialisms of the philosophic tradition than by the idealisms. To both, substance or structure is primary and original, activity or function is secondary and derivative. Functions which were so important in social life that they might not be subordinated were hypostatized. Platonism indeed could well be described as a system of hypostatized functions, extended by the logic of illation to all events of experience; so, for that matter, could Marxism in so far as it holds that history is the dialectic movement of matter to a foregone conclusion. Marxism is in fact a sort of inverted Platonism.

Broadly speaking, the Darwinian hypothesis tended to stand all this on its head. It effected a transvaluation of philosophic and methodological values, lowering the mighty from their seat in biology, psychology, logic, philosophy and the more strictly social sciences and exalting those of low degree. Activity or function, which

had been treated as a dependent variable, a faculty of fixed structure or form, to be defined only with reference to such fixity, now began to receive the primacy formerly accorded to its referent. Function tended to be regarded as the original and to be treated as an independent variable, while structure or form was demoted to second place, a derivative and consequence of the play and sequence of functions. The cumulative effect of this change has been to render substance defunct. In psychology the soul has been replaced with the "stream of consciousness," and the latter with the responses of behavior. In logic the "laws of thought" have been replaced with the theory of scientific method the techniques of trial and error, doubt, hypothesis, investigation, experiment, verification: the "normative" with the instrumental. Data of psychology were interpreted like those of anatomy and physiology as events in the interplay of two dynamic systems, one an organism reacting to the other, an environment of stimuli among which the first grows but which were not made for it. At first the reactions were regarded as functions in a struggle for survival and were interpreted as survival values. Truth was redefined as the survival value of the processes of cognition, goodness as the survival value of other processes of behavior and so on. The meaning of all events in biography or history was set in their consequences to the fortunes of the organism. Later, however, the processes of behavior were taken sheer, as a sequence of functions, without reference to any subsequent function, as a phase of any activity under observation, without regard to its genesis and without imputation of intent.

The philosophical elaboration and defense of this use of "function" as an instrument of interpretation and explanation is called pragmatism. But the mental posture and the methodology here involved have a wide range beyond any particular school of philosophy. They appear in fact to pervade all the sciences and to suffuse and distort the prevailing philosophies. The reason is probably the fact that the whole trend of the social process since Darwin has been in the direction of functionalism and might be described as its verification and validation. The spread of machine industry with its impersonal automatic engines in continuous action; the tremendous acceleration of the tempo of life by the industrial establishment; the adoption of "efficiency," "service," "progress" and the like as measures of value in the community; all tend

to set up "the functional point of view" both as a cause and as an expression of the temper of the times. Hence even its opposites must assume it to maintain relevancy. In assuming it, however, they distort it to congruity with their own patterns and trends.

The distortion is made possible by the fact that function can be conceived in two ways: as a going process, a neutral mechanism, calling for no external justification and generating its rationale as it proceeds; or as a means to an end, the activities of an agent accomplishing a purpose. In the concepts of survival of the fit and survival value the ghost of the agent still lurked. It made the indifferent processes of Darwinism casy to translate into the purposive direction of Lamarckism and other forms of vitalism, and thus facilitated the absorption of the functional point of view into the philosophic tradition. Function and purpose, varied function and invariant purpose, have always been paired together. But the real animus of functionalism lies in the conception of function without purpose. The traditional philosophies stripped this conception of its essential meaning by means of the organismic interpretation of community and individuality. All such interpretations involve the hypostasis of function into substance. For instead of taking activities at their face value, to observe, describe and measure, the organismal interpretation treats them as a sequence of parts energized and interrelated by a preexisting and unchanging whole called in one connection instinct, in another want or wish, in another organism. It conceives this whole substantially, a being somehow different from their parts and their dynamic interrelations. Bergson, Driesch, Marx and the sectaries deriving from them, contrasted and antagonistic as they are, share this mode of functionalism.

This derives perhaps from the fact that human life as it is lived is a compenetration of survivals, and the past from which the future eventuates is so massive and pervading that willy-nilly old orders assimilate the new into their characteristic patterns. Thinking, which is quite largely a suffusion of new situations with past experiences, operates by folkways and mores of its own. In these substance, if only as a ghost or a Gestalt, and teleology, if only as an ideal, are continuously operative. Inevitably specific problems and situations are permeated with those categories which automatically embrace in a defining frame the actual dynamics of conflict and integration, compensation and control,

repression and projection, among an individual's drives and functions and a society's institutions, groups, castes or classes.

Programs of reform and of social innovation exalting function take on a definite color in the light of these observations. Thus guild socialism, syndicalism, communism, Fascism put forward radically conflicting philosophies of society. The first interprets the contemporary socio-economic process by means of an idealized mediaeval order; the next in terms of the Bergsonian élan vital; the third through the dialectical materialism of Marx; the fourth is a hybrid of syndicalism and the postulates of capitalist economy. They have in common a rejection of many aspects of the cultural aggregate, such as monarchism, democracy, representative government and the like. Such establishments, they declare, are modes of political operation and control either by parties without any other than the political interest and hence are social parasites or by parties whose interests are aborted or masked. The power which is said to elect government is not the power which actually controls it. Waste and hypocrisy automatically supervene; the social organism corrupts. For health the elective and the controlling power should be identical. So syndicalism and guild socialism propose what communism and Fascism endeavor to accomplish as the communist and corporative states. Theoretically and programmatically such states are organic wholes. All their citizens are organized in industrial unions, soviets or corporations. Each division of an industry constitutes a function within the industry and each industry as such constitutes a function of the state as a whole, integrated with its fellow industries in and through the whole and deriving through this integration all the value or significance they possess. Closely related to these corporative and organismal variants of functional political theory is the recent trend toward pluralism. The chief animus behind the disintegration of the monistic conception of the state is the desire to establish a functional connection between the principle of growth in a group or association and its mechanism of control.

In economics functionalism has taken mainly the form of institutionalism as embodied in the point of view of Thorstein Veblen and his followers. The hates and enthusiasms of Veblen often deviate him into teleology, but on the whole he appears as the most uncompromising functionalist among social philosophers of the last generation. Malinowski appears to be aim-

ing at an equally thoroughgoing functionalism in anthropology, insisting that questions of origins, stages and laws of development in culture are inferential and secondary and must wait upon the discernment of functions. Functions are events going on, operations of bodily needs and the instrumental uses of objects which constitute their cultural character. They are contents of direct experience, susceptible to observation and analysis. Seen functionally, religion, the arts and sciences become reduced to specific habits, materials, meanings, activities, within the context of a cultural situation, and the forms and structures of such cultural objects become derivatives, concretions or deposits of the dynamic relations in play. What ceases to function, ceases to be. In the study of law an attempt is being made in various ways, notably by Pound, Llewellyn, Hamilton and Moore, to adapt the content of the legal principle in the particular decision to the observed character of the functioning economic or social situation. Even architecture has caught the contagion and opposes "functional" building to historic styles, ornamentation and the like. Functional architecture is construction whose form arises out of the uses for which it is intended and reenforces and is reenforced by those uses. It is presumably characterized by the economy, simplicity and elegance that go with perfect efficiency, discarding superfluities and every other mode of obscuring or defeating the maximum of use.

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See: Philosophy; Pragmatism; Science; Psychology; Behaviorism; Gestalt; Instinct; Organism, Social; Evolution, Social; Culture; Economics, section on Institutional School; Guild Socialism; Functional Representation; Pluralism; Law; Architecture.

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FUNDAMENTALISM is the name of an aggressive conservative movement in the Protestant churches of the United States which flourished during the decade after the World War. It manifested itself chiefly in the Baptist, Disciple and Presbyterian churches but received considerable support from other ecclesiastical groups. It was characterized not only by its conservatism with regard to traditional popular Christian beliefs but also by its aggressive efforts to impose its creed upon the churches and upon the public and denominational schools of the country. Its conservative supernaturalism was expressed in the "five points of fundamentalism," which included the doctrines of the inerrancy of the Bible, the Virgin Birth of Jesus, the supernatural atonement, the physical resurrection of Jesus and the authenticity of the Gospel miracles. The first of these points was interpreted by fundamentalism to apply particularly to the Biblical account of the creation of man in opposition to the theory of evolution, which became the central question of the fundamentalist controversy.

The movement was directed against liberal

elements within the churches and against purely scientific or secular interests in American civilization. In the former sphere it attempted to exclude from the churches and particularly from the control of their educational institutions those who did not share the conservative faith. The effort was not generally successful, but in a number of denominational colleges the teachers were required to subscribe to the fundamentalist creed on pain of dismissal and in other instances new colleges in which the creed was made obligatory were founded. The effort to control the public schools in the interest of the conservative dogma was expressed in the attempt to induce state legislatures to pass laws prohibiting the teaching of evolution. This political phase of the fundamentalist movement was strongest in the southern and border states and made itself felt in the middle west but was weak or absent in the New England, middle Atlantic and far western states with the exception of California, where considerable controversy developed around the textbook question. The legislature of Tennessee enacted a bill in 1925, reaffirmed in 1931, which made it unlawful to teach in any tax supported school any theory "that denies the story of the Divine creation of man as taught in the Bible and to teach instead that man has descended from a lower order of animals." The constitutionality of the law was tested and upheld in the Scopes trial at Dayton, Tennessee, in 1925 and in a later decision in 1927 by the Supreme Court of the state. This trial formed the dramatic center of the fundamentalist controversy. A similar law was passed in Mississippi in 1926, while textbooks teaching evolution were barred in Oklahoma from 1923 to 1926. The Florida legislature adopted resolutions disapproving the teaching of evolution but failed to enact a law. In many other states, including Louisiana, South Carolina, Texas, Arkansas, Kentucky, Georgia, Alabama, Missouri and West Virginia, attempts to pass restrictive legislation of this sort were unsuccessful, but it became evident through them that the strength of the fundamentalist movement was considerable. Its effect upon the schools was measurable not only in terms of laws passed but also in terms of social pressure, particularly in many isolated communities in these states. In some instances local or state boards of education were prevailed upon to exclude textbooks unsatisfactory to the conservative sentiment or to exert corresponding pressure upon the teachers.

While fundamentalism drew a certain amount of sympathetic support from the conservative religious groups, such as the Roman Catholic and Lutheran churches, and from conservative parties in other churches it often failed to enlist them in its aggressive efforts to influence legislation; and it remained distinguished from them by the manner in which it threw the weight of its interest upon the popular dogmas of Biblical inerrancy and miraculous supernaturalism while conservatism remained primarily interested in the doctrines of human sinfulness and divine atonement. Fundamentalism shared with conservatism distrust of human nature and reacted with it against the romantic and liberal dogma of human goodness and self-sufficiency, but in accordance with its non-theological and popular character it placed its emphasis on myth rather than on doctrine.

In the social sources from which it drew its strength fundamentalism was closely related to the conflict between rural and urban cultures in America. Its popular leader was the agrarian W. J. Bryan; its rise coincided with the depression of agricultural values after the World War; it achieved little strength in the urban and industrial sections of the country but was active in many of the rural states. The opposing religious movement, modernism, was identified on the other hand with bourgeois culture, having its strength in the cities and in the churches supported by the urban middle classes. Furthermore, fundamentalism in its aggressive forms was most prevalent in those isolated communities in which the traditions of pioneer society had been most effectively preserved and which were least subject to the influence of modern science and industrial civilization. Its rejection of a dynamic conception of creative processes was due partly to the inadequate development of educational institutions for both clergy and laity in isolated and poor communities or religious groups, partly to the static character of the culture prevailing in these societies. The contrary movement was associated with an industrialized civilization in which the acceptance of change as a primary law of life was encouraged by the dynamic and changing character of the social process, especially in the economic sphere, as well as by the more effective contact with modern science through its schools. Again, the fundamentalist attitude reflected the distrust of reason and the emphasis upon emotion, the doubt of human ability to solve ultimate problems and the reliance on divine agency which

are characteristic not only of much traditional Christianity but also of those groups which have received the least profit from a rationalized culture and of pioneer or isolated rural societies which remain most conscious of dependence for their livelihood on those processes of nature which are least subject to human control. The rationalism and self-reliance of the opposing groups, on the other hand, had been fostered not only by science and education but also by industrialized culture with its rational and artificial methods of productio 1 and its immediate urban environment, all largely subject to human control.

The fundamentalist movement was related in some localities to the Ku Klux Klan and to similar types of intense racialism or sectionalism. With them it shared antagonism to changes in the mores which the war and its consequences, the rise to power of previously submerged immigrant or racial groups and other social processes, brought forth. The political effectiveness of fundamentalism was due in part to this association and to the support which it gave to political leaders, who found in it a powerful symbolism representative of the antagonism of political and economic minorities against the eastern or northern urban industrial majority.

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See: Religion; Religious Institutions; Dogma; Belief; Sacred Books; Modernism; Rationalism; Secularism; Evolution; Academic Freedom.

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FUNERALS. In the United States ancient funeral customs and traditions have been modified by commercial enterprise: the old wedge shaped coffin has become obsolete; different styles and grades of caskets are available, ranging from a cheap cloth covered pine box to an expensive cast bronze sarcophagus. In Europe, on the other hand, the number of styles of

coffins is relatively small and these still follow conventional lines. Embalming has been developed in the United States to a high degree of effectiveness. It is almost universally used, except among orthodox Jews, and has had a marked effect on funeral customs and incidentally on funeral costs. The preservation of the body makes it possible even in the poorest funerals for the body to lie in state for several days. In most European countries embalming is seldom practised except when the body must be shipped to a distant point.

During the last twenty-five years, while the population has steadily increased, the annual death rate has dropped, with the result that the annual number of deaths, with a few minor fluctuations, has remained practically stationary. Yet during this period the burial industry has had its greatest expansion both in regard to the number of persons and firms engaged therein and the total money volume of business transacted. In 1900 there were 16,200 undertakers in the United States; in 1920 there were 24,469, an increase of 51 percent. The estimated number of deaths in 1900 was 1,352,703; in 1920 it was 1,394,078, an increase of 3 percent. In 1880 the average number of deaths per undertaker was 194; the number steadily declined until in 1920 the average was only 57 deaths for each undertaker. The business is not evenly distributed among undertakers; in New York City 8 percent of the undertakers handle 44 percent of the business. The other 92 percent have each only two funerals a month. The marginal undertaker is therefore an important factor in the problem of high funeral costs. There has been practically no elimination of marginal establishments, and the industry to make profit has persuaded the public to purchase more expensive merchandise and to hold more elaborate funerals. The casket manufacturers have made it possible for the small undertaker to survive by helping him to sell more expensive goods. In 1889 the average wholesale value of burial merchandise was \$10.11 per funeral; in 1927 it was \$55.38.

A survey of all the social and economic factors which determine funeral costs on the basis of 15,100 samples of funeral expenditures among various economic groups and from typical communities revealed that for estates of less than \$1000 in New York City funeral expenses absorbed 52.2 percent of the assets and 62.1 percent in Brooklyn, while in estates valued at over \$100,000 less than 1 percent of the estate was

absorbed. The average funeral bill in all New York estates was \$772; in Chicago it was \$480 and in Pittsburgh \$460. The average funeral charge for 7871 adult industrial policyholders insured by the Metropolitan Life Insurance Company was \$363. The highest average, \$484 for New Jersey, was two and one half times the lowest average, \$194 for North Carolina. Funeral charges were highest in the east and lowest in the south. Ohio, however, with an average cost of \$415, outranked New York, where costs were \$404. Newark with an average funeral cost of \$493, Philadelphia with \$483 and New York City with \$432 far exceeded the costs in southern and mid-western cities. Nashville was lowest in the list of large cities with an average cost of \$233. A study of 3123 claims submitted to the United States Veterans' Bureau for the hundred dollars awarded by the bureau for the burial expenses of veterans showed that in towns under 10,000 in population funeral expenses averaged \$241, in cities of from 10,000 to 250,000 they averaged \$270 and in cities of over 250,000, \$336. This is perhaps what should be expected, for land values, wages, rent and taxes are usually higher in larger cities, increasing operating costs. That funeral expenditures were much higher among the Irish and Italians than among the Jews was shown by a study of 319 dependent widows receiving grants from the New York Board of Child Welfare. Irish widows spent on the average \$452, which absorbed 44 percent of the net assets, and the Italians \$421, representing 50 percent, while funeral expenditures by Jewish widows averaged only \$247, 27 percent of net

Public ownership and operation of the mortuary industry to prevent the exploitation of the poor and middle classes by commercial undertakers and to provide burial for those without funds are found in many European cities. Some cities provide only a partial service and that often in competition with private undertakers, while other cities have a complete monopoly of funeral services. Since 1890 Swiss cantons have established free burial service, supported in part by the municipality or canton and in part by the state, for all persons holding certificates of residence, regardless of citizenship. Services are exceedingly simple and are uniform for all. Interments are made in rows in the municipally owned cemeteries. Individuals may, however, elect more expensive coffins and extra carriage hire, but the municipal

hearse must be used. Various towns and cities in Saxony are operating, with some modifications, on the Swiss principle. From the beginning of the nineteenth century until December, 1004, funerals in France were controlled by the Catholic church, which sublet the business to the highest bidder. In 1904 the control of the disposal of the dead was withdrawn from the church and granted to the municipality and now all French cities have a municipal monopoly. The burial service may be conducted either directly by the municipality or by a concessionaire. Eight classes of funerals are provided, ranging from the very simplest, which is little more than a pauper burial, to a very elaborate and expensive affair. In Frankfort on the Main funeral management has been regulated since 1828. By 1900 abuses had become apparent and in 1907 the city attempted to prohibit private enterprise entirely. When this was declared illegal, the city entered into competition with private undertaking firms, with the result that they have disappeared with one single exception, which is under the control of the municipality. A rigid scale of prices based upon annual income is fixed by the municipal burial office. For adults the prices of the uniform funerals range from \$57.12 for the group whose annual income is 8000 marks (\$1904.76) or over to \$8.57 for those whose income is less than 1200 marks (\$285.71). In Munich there are no commercial undertakers and the city has a monopoly, providing six distinct classes of funerals for adults and four for children with prices ranging from \$15.48 to \$176. The municipalities of Milan and Genoa have monopolies of the undertaking business and furnish various classes of funerals at fixed prices. In 1908 Madrid began a monopoly of the undertaking business through the concessionaire system. A single firm, granted a concession to care for the dead, paid into the municipal treasury a percentage of the price of funerals ranging from 8 to 20 percent. In 1922 this plan was abandoned.

Prior to 1919 the funeral business in Cologne was in the hands of private undertakers, but since then the city administration has entirely assumed this function. There are in Cologne about fifty undertakers, who do not have charge of funerals but merely deliver coffins, decorations and other material. A similar arrangement exists in Copenhagen. Berlin, Dresden and Vienna provide all of the services connected with funerals but do not have a complete monopoly of the business of the city. Only in

Switzerland does the government offer free burial service.

This survey would be incomplete without reference to the provisions made by the working populations to assure themselves funds for decent burial. Burial clubs are the oldest known form of mutual aid association. Today fraternal organizations and friendly societies and even many trade unions grant death benefits to their members and pay them funeral honors. In England and America and to a lesser degree in the countries of northwestern Europe industrial life insurance companies, working largely upon the fear of a pauper's grave, have enrolled large sections of the wage earning population as policyholders. The efficient post office monopoly of Japan is rapidly increasing its industrial insurance business. Allowances for funeral expense are granted by the sickness insurance laws of Norway, Germany and many of the central European countries. The almost universal workmen's compensation laws provide for families faced with death caused by industrial accident. In America group insurance has increased from a total value of a billion and a half dollars in 1921 to more than nine billion dollars in 1927, and is regarded by many as a substitute for some of the forms of social insurance prevalent in Europe.

In the English speaking countries insurance benefits and wages something over the subsistence level have provided burial funds adequate enough to prevent a widespread demand for public funeral services. Commercial undertakers are still in complete control of funeral practises and prices.

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See: DEATH CUSTOMS; FRIENDLY SOCIETIES.

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FUNK, FRANZ XAVER VON (1840–1907), German Catholic historian. After graduating from the University of Tübingen Funk completed his theological training at the seminary for priests at Rottenburg. A period of study at Paris settled his interest in social and economic

problems. In 1870 he succeeded Hefele as professor of theology in Tübingen and six years later became associate editor of the *Theologische Quartalschrift* published by the university. With both of these institutions he remained connected until his death, the contributions which as early as 1867 he began pouring into the *Quartalschrift* continuing uninterruptedly throughout the entire period. These articles, with numerous others, were later collected as *Kirchengeschichtliche Abhandlungen und Untersuchungen* (3 vols., Paderborn 1897–1907).

Funk's early writings, showing the influence of his study at Paris, revolved primarily about the relation of Catholic ethics to economic institutions. Two significant works belong to this period: Zins und Wucher (Tübingen 1868) and Geschichte des kirchlichen Zinsverbotes (Tübingen 1876). Starting from the assumption that "every normal institution and category of economic life is in itself either morally indifferent or morally legitimate" (Zins und Wucher, p. 266) he considered interest on loans to be legitimate in itself and to be forbidden only when the common norms of law and justice were violated either through deceit or through usury. So long as loans had been made primarily for consumption purposes, interest had been correctly identified with usury. But with the change in economic relations such identification was no longer possible. Accordingly the church's ban on interest signified only a ban on usury. With the same candid and exhaustive scholarship that made these early works acclaimed by economists as well as by theologians Funk applied himself in his later writings to the investigation of the literature, culture, discipline and in particular the constitution of the early church. Besides numerous monographs he contributed to the knowledge of this field two important compilations of documents, Opera patrum apostolicorum (2 vols. Tübingen 1878-80, 2nd ed. 1901, vol. ii 3rd ed. 1913; German translation 2 vols. Tübingen 1901, vol. ii 2nd ed. 1924) and Didascalia et constitutiones apostolorum (2 vols., Paderborn 1906). Funk's Lehrbuch der Kirchengeschichte (Rottenburg 1886, 6th ed. Paderborn 1911; tr. by P. Perciballi, 2 vols., London 1914) has been widely used not only in Germany but throughout western Europe as a convenient and accurate manual.

G. Briefs

Consult: Koch, A., "Zur Erinnerung an Franz Xaver von Funk" in *Theologische Quartalschrift*, vol. xc (1908) 95-137.

FUOCO, FRANCESCO (1777-1841), Italian economist and publicist. Fuoco was one of the ablest expositors of the theory of rent in Italy during the first half of the nineteenth century. and his writings cover a wide range of economic theory. He defined political economy as the science which "investigates how industry is created, how the system develops, what direction it takes, what causes favor and disturb it; how, from the nature and development of the system. there results today either convenience and comfort, abundance and prosperity or scarcity and poverty." He recommended a judicious use of the algebraic method as the easiest, shortest, clearest and most exact way of presenting economic problems. He added, however, that calculus does not measure causes but effects, not productive forces but products. To those who blamed Canard for the attempt to use mathematics in scientific research Fuoco replied that the latter erred not in the use but in the abuse of the new method. His essays (Saggi cconomici, 2 vols., Pisa 1825-27) on the theory of rent, the metaphysics of economics, the theory of limits as applied to economic problems and on the origin and nature of public and private wealth exhibit an unusual critical spirit. In discussing static and dynamic industry in Introductione . . . dell' economia industriale (Naples 1829) Fuoco displayed a clear conception of the conditions of equilibrium in industry. In the field of credit theory, which he treats in Magia del credito svelata (Naples 1824) published under the name of Giuseppe de Welz, to whom Fuoco, poverty stricken, sold the manuscript, Fuoco supported the theory that credit creates capital. Fuoco deserves a distinct place among Italian economists. If the recognition accorded to him fell short of his intellectual attainment it was due to the lack of clarity in his writings and to the fact that he did not systematize his ideas into a unified treatise.

RICCARDO DALLA VOLTA

Consult: Fornari, Tommaso, Delle teorie economiche nelle provincie napolitane dal 1735 al 1830 (Milan 1888); Mancarella, Antonio, Le dottrine di Ricardo e gli economisti italiani della prima metà del secolo XIX (Naples 1906) p. 33-40; Ricca-Salerno, G., Storia delle dottrine finanziarie in Italia (2nd ed. Palermo 1896) p. 471-75.

FUR TRADE AND INDUSTRY. For this article it will be assumed that the Oxford dictionary definition of fur as "the short fine soft hair of certain animals growing thick upon the skin and distinguished from ordinary hair which

is longer and coarser" relates chiefly to the fur of the small non-migratory, non-hibernating carnivorous animals, especially the Mustelidae, and the amphibious animals of the Rodentia, chiefly beaver and muskrat, and not the coarse fur, hair or wool of large animals. The fur trade and industry are concerned with the pelts of animals to be made into clothing because of the warmth and thickness of the fur and not of the suitability of the skin for the production of leather. Warmth and lightness are demanded by wearers of fancy furs, and thickness by manufacturers of hat felt from fur cut from the skin. The thick fur of amphibious animals, especially of the rodents, is best adapted to the production of felt, while that of the smaller carnivorous land and water animals is sufficiently light to be used for clothing. The beaver has consequently been of importance to the felt and hat industry, and the carnivorous animals to the manufacturer of fancy furs.

In general fur is produced as a physiological reaction to seasonal changes and is at its prime during the coldest months of the winter. It is dependent also on such factors as food and shelter and varies in character with changes of climate and the age, health and species of the animal. The vast continental land areas of the north temperate regions, especially the northern regions of North America and Asia, are the important fur producing areas. Within these areas in territory unfavorable to agriculture because of geology or climate are extensive conferous forests, which are essential to an abundance of Rodentia and, in turn, of the important fur bearing Carnivora.

The production of fine fur in large quantities demands a vast, thinly populated forested area with transportation limited to water in the open season. Production consequently has been largely dependent on peoples who have evolved cultural traits adapted to these areas, i.e. people primarily concerned with hunting. Palaeolithic man was probably dependent on wild animals for food and clothing in contrast to the dependence of neolithic man on domesticated animals and cereals. During the period of abundant forests fur was probably an important item of clothing, as suggested by Tacitus. With the clearing of the land, the increasing scarcity of fur bearing animals, the rise of feudalism and the later growth of towns the fur trade emerged and fur increased in value. The consumption of fur is linked to luxury trades and historically the growth of the fur trade is closely correlated with

the rise of luxury demands, since the large number of pelts of small animals necessary for clothing precludes their use as common wearing apparel. It may be doubted whether Mediterranean civilizations developed an extensive fur trade, but in northern Europe the trade became important with the spread of feudalism.

The rise of guilds concerned with the fur trade reveals the course of its development in western Europe. In Leipsic organization of the industry began in the fourteenth century and the furriers' guild (Kürschner Innung) dates from 1423. In England the Skinners' Company dates from 1327 and by 1369 furs were being imported from Flanders and badger skins from Germany and Flanders. The Haberdashers' Company, however, absorbed hatters and furriers in 1501, until the spread of the fashion in felt hats made from fine Spanish wool during Elizabethan times led to the formation of a separate felt makers' company in 1604. Probably because of the pronounced rise in Spanish prices with the inflow of American treasure in the late sixteenth century there was a decline in imports of Spanish wool and a demand for new sources of felt. Before the sixteenth century it is diffiuclt to trace the history of French furriers as such, since for several centuries they tended to be dominated by hat makers, who used furs and felts. In northern Europe trade in furs prior to 1600 was confined chiefly to supplies from the Baltic.

The spread of Italian fashions, especially to France, had probably led to a decline in demand for fancy furs and an increased demand for staple fur for hats. The rise of this demand coincided with French penetration of the Gulf of St. Lawrence in search of areas suitable to the production of dried fish for the growing Spanish market. Contact was made at the mouths of the northerly tributaries of the St. Lawrence with hunting Indians and a supply of beaver fur for the expanding hat industry was tapped. There was an immediate and rapid expansion of the fur trade across the northern half of the North American continent, whose history suggests the trade's general characteristics over a long period and over a wide area. The fur trade was the point of contact between two widely divergent cultures, depended upon the absolute advantages of the different cultures and had important effects on both. The Indians obtained access to European goods, especially iron, which revolutionized their culture to the extent that large numbers of people disappeared. When the beaver, by virtue of the Indians' knowledge of its habits together with the assistance provided by European goods, was rapidly wiped out, the Indians penetrated farther to the interior, opening up new lines of trade with more distant tribes for the first time and utilizing the large eastward flowing waterways of Canada to develop rapid exploitation of furs.

The relatively small bulk and high value of furs meant a light return cargo in exchange for a heavy cargo of cheap and bulky manufactured goods. Penetration to the interior accentuated the effects of this characteristic of the trade as it became necessary to take heavy goods long distances, in many cases upstream. Consequently ocean transportation adapted to the fur trade was opposed to the migration of settlers, and increasing costs of transportation to the interior drained the energies of the colony, accentuated problems of competition and in the main tended toward the growth of monopoly and centralized control. From the beginning of the seventeenth century the tendency toward centralization has been conspicuous.

With the lengthening of transport lines to the interior competition threatened from adjoining drainage basins, first that of the Richelieu River and later that of the Mohawk route to Lake Ontario and Hudson Bay. The centralized organization of the colony dependent on the fur trade faced serious direct losses of trade and military expenditures to check competition. The French fur trade was characterized by a continued drain on the colony and by collapse of political control; eventually the geographic limitations on the trade under the prevailing technique led to the downfall of New France.

The trade also had serious effects on the consuming country, not only involving it in the colony's production difficulties but also in difficulties from the standpoint of consumption. In the latter part of the seventeenth century the rapid decline of the consumption of beaver, largely as a result of fashion changes and the competition of other raw materials, created serious problems for both New and old France in industry, trade and finance.

Improved transport technique and organization together with industrial and marketing efficiency facilitated English trade expansion from Montreal. The tendency toward centralization was shown especially after the outbreak of the American Revolution in 1775 in the formation of the Northwest Company, which included in its trading territory practically all of modern

Canada. The importance of inbound cargo eventually led to the disappearance of the long Montreal route, and following the amalgamation of the Northwest Company with the Hudson's Bay Company in 1821 the Hudson Bay route by York Factory controlled the western trade. Centralized organization was particularly important in negotiations over boundary disputes, and the economic boundaries of the fur trade came to correspond closely to Canada's political boundaries. The significance of the fur trade for Canada was shown in the rapidity with which the country was explored and exploited and in the problems which followed the adaptation of later types of economic development to the political boundaries. The rapidity of its exploitation facilitated the intrenchment of its institutional inheritance and contributed to the problems which arose with its disappearance and the emergence of new types of economic activity. The peculiar characteristics of Canadian development, such as the transcontinental and centralized type of railways, banks and other institutions, and the importance of government ownership are closely related to the early dominance of the fur trade.

Improved transportation, such as river steamboats, railroads and gasoline transport, hastened the breakdown of centralized control by encouraging competition and by exhausting fur supplies. The Hudson's Bay Company has lost control relatively but has gained through the rise in frontier land values, the establishment of retail stores and depots for mining explorations. Improvement in transportation facilitated centralized control within the organization and the share system of the Northwest Company disappeared in favor of the increasing centralization of the Hudson's Bay Company and the intrenchment of the wage system by the end of the nineteenth century.

The fur trade of the United States differed from that of Canada primarily because of its relatively minor importance. Its development was linked more closely with other economic activities and consequently it left no such definite stamp on the political and economic structure. Explorers and traders, first from the St. Lawrence basin and later from New York and St. Louis, penetrated the fur trading areas of the United States. Centralization was worked out by Astor in the American Fur Company and its subsidiaries but never satisfactorily included the whole of the northern United States. The rapidity with which settlement followed the fur trade led inevitably to difficulties between the

government and the Indians which were much more serious than in Canada. In the United States as in Canada the tendency toward centralization led to early concentration of wealth and enabled the fur trading interests to take advantage of other rapid economic developments which followed. Astor in the tea trade and in New York real estate and Lord Strathcona in Canadian railways may be cited as examples.

In Russia the early fur trade centered in the northwest, especially at Novgorod, passing across the Baltic Sea through such organizations as the Hanseatic League, and in the northeast, especially at Nizhni Novgorod, whence merchandise was shipped south, toward the Black and Caspian seas. In the last half of the sixteenth century trade developed across the Ural Mountains and in its tracks came Russian domination of Siberia. Fancy furs, particularly the highly valuable sable, occupied a position similar to that of the beaver in North America. The problem of transportation in Siberia was accentuated by the northward flowing rivers. The supply of furs was less certain than in the case of North America, since the cultural discrepancy between the peoples of Siberia and Russia was less pronounced; consequently furs were obtained by the Cossacks in tribute rather than in trade. Depots were established from Tobolsk eastward to Omsk on the Ob, to Yeniseisk and Irkutsk on the Yenisci, to Yakutsk on the Lena, and to Okhotsk on the Pacific in 1639. About 1740 penetration to Kamchatka and northeastern Siberia led to the discovery of the fur seals and sea otters of Bering Strait and the land furs of Alaska. The difficulties of trade led to a continuation of the tribute policy. The severe competition which followed the decline of furs and the high costs of penetrating Alaska led to centralized control in the Russian American Fur Company especially after 1799 and to central political control. Exhaustion of furs on the southern Pacific seaboard was hastened by the discoveries of Cook in 1778. English and American ships engaged in the trade, especially that of the profitable sea otter, to China. By the end of the eighteenth century virgin fur areas had practically disappeared in North America and Asia.

In the nineteenth century there was a steady decline of wild furs and a rapid development of agriculture, lumber, pulp, paper and mining industries in areas formerly occupied by the fur trade. The industrial revolution hastened the demand for new supplies of raw material and the movement of population to new areas. In

the northern half of the northern hemisphere the legacy of the fur trade was shown in centralized economic and political control and in the sudden changes in development which characterized delay, followed by extraordinarily rapid development dependent on the application of mature technique to virgin natural resources. The highly valued fine furs consequently increased in price and in turn were subjected to more rapid exploitation. The trend in production of fine furs is downward. It may be increased as a result of the work of biologists engaged in the study of periodic fluctuations in animal life; but, on the other hand, the spread of humanitarianism may hasten an increase in production of furs from farms and a decline in production of furs from wild life.

Rapid improvement of transportation and exhaustion of supplies have created serious labor problems. The spread of diseases introduced by the white man and the hardships of their work have threatened the existence of the Eskimos and the Indians who have concentrated their energies on trapping while the increasing effectiveness of trapping methods introduced by the white man and the widening of the latter's range through use of the gasoline engine have made profitable trapping more difficult for the natives. Industrial fluctuations in frontier industries and the reluctance of frontiersmen to enter mechanized industry have acted to maintain a large steady supply of white trapping labor.

The decline of native populations and the increase of white trappers have affected the marketing structure of the industry. With increasing competition monopoly has steadily weakened and large numbers of new centers have challenged the importance of the older centers. As transport has improved, cash payment has tended to displace the credit system and the white trapper has spread the auction market. While marketing and manufacturing technique have tended to broaden out as a result of mechanization, the difficulty of grading furs has restrained the growth of the marketing structure.

The marketing structure of raw furs has been tremendously influenced by the increasing importance of the United States. The sale of furs at the various fairs in Russia and in turn at Leipsic has become less important because of Soviet centralized control and despite strenuous German efforts to regain the pre-war trade. The efforts of the Hudson's Bay Company to maintain control of the London market have met with considerable success by reason of its substantial

control of important Canadian producing areas and its prestige in marketing. On the other hand, the cheaper furs, for which the demand for efficient grading has been less conspicuous, have been sold to an increasing extent in new marketing centers in North America, such as St. Louis, New York, Montreal and Winnipeg, which emerged during the war. Improvements in communication, especially the radio, and in transport have contributed in hastening important changes in marketing structure.

Decline in supply has been accompanied by a rise in demand. The growth of metropolitan centers, especially in the New World, and the rise of a wealthy class seeking luxuries have been responsible for a marked increase in consumption and rise in the prices of furs, especially since 1900. The long run effects of decreased supply and increased demand which become conspicuous after that date have reduced the relative importance of short run fluctuations. Short run fluctuations in demand through changes in fashion or through the general effects of the business cycle after 1900 have been responsible for more rapid and violent changes in fur prices, tendencies which have been most conspicuous with fine furs but have also become important for lower grade furs. The World War shut off the Leipsic market and disrupted the trade; low purchasing power of European countries and temporary prosperity of the United States in the post-war period have tended to accentuate the effects of the preceding period. The rise in prices, especially of fine furs, has contributed to the decline in supply. New sources have been tapped, such as the white fox of the arctic region during the war, the chinchilla and the nutria of South America, the wombat and the kangaroo in Australia. High prices have coincided with increased efficiency of transport; larger numbers of trappers, improved trapping technique and more intensive competition have contributed to decline in supply.

The circle of destruction of product and higher prices followed by increased demand, which characterizes luxury products, has led to conservation measures and attempts to increase the product from other sources of supply. Conservation measures have been difficult to adapt to the trade. The multiplicity of jurisdictions in any one fur trading area make uniformity of legislation and administrative machinery difficult to achieve. The character of the commodity facilitates smuggling and adequate supervision is expensive if not impossible. Taxation designed

to support the enforcement of regulations may by increasing costs accentuate the problems solution of which is sought. Nevertheless, various control devices have been developed. Especially since 1900 the more important fur producing animals have been protected by closed season regulations and prohibitions as to methods of capture, enforcement being supported by license fees paid by trappers and traders, royalties and fines. British Columbia has established definite boundary lines for small areas and licensed trap lines. Especially in Canada and the United States reservations have been established and organizations for forest fire protection and the education of public opinion to the conservation of wild life have been encouraged. The Soviet government now fully controls the production and export of furs in Russia. International agreements have contributed to the control of very valuable fur bearing animals, as in the case of the monopoly of the United States over the fur seals of the Pribilof Islands in Bering Sea, where in 1927 there were 808,870 animals in hand and 30,298 skins were taken.

The raising of animals for the production of furs has been a striking development following the rise of prices. After a long period of experiment problems of technique in breeding and raising animals, in finance and in marketing have been gradually solved; for example, fur farming of silver fox has become an important industry in Prince Edward Island as well as in various provinces of Canada, in the United States and in Europe. Other species have been added and the technique of domestication is being slowly worked out. Cheaper grades of fur, especially muskrat, have been the object of similar interest. Despite fluctuating prices and changing fashion the industry has steadily gained ground.

The most significant contribution to the problem of meeting the increased demand for furs has been the development of improved dyeing and manufacturing processes. Sewing machines became increasingly important after 1880, various inventions after 1900 led to the application of motors and the use of high speed machines, and coal tar dyes were improved and adapted to furs especially after 1888. Now that large quantities of cheap furs (rabbit, opossum, skunk, domestic cat, dog, lamb) can be placed on the market as products similar in appearance to fine furs, new production areas, including South America, Australia and Africa, have become important. As a result of the introduction of the

new methods of preparation the advantages of highly technical skill concentrated first in the guilds and later in special localities tended to disappear. Dressing and dyeing industries, formerly centered in England, Germany and France, began to spread to the United States, which made further gains as a result of the war and the emigration of technical skill from Germany. Thus the value of the output of the fur dressing and dyeing establishments in the United States increased from \$2,875,000 in 1914 to \$34,656,000 in 1929. This development was also encouraged by a tariff on dressed and dyed skins, while the import of raw furs is free of duty. Consequently the import of raw furs increased enormously in the post-war period, while that of dressed and dyed merchandise suffered a comparative decline.

The expansion in American dressing and dyeing was concomitant with the rapid growth of the entire fur industry in the United States. The value of the output of fur manufacturing shops rose from \$43,633,000 in 1914 to \$198,042,-000 in 1923 and \$277,058,000 in 1929. The increase was due primarily to post-war prosperity and reflected the general growth of the luxury trades; higher prices, however, were also a factor. This popular demand stimulated large scale production and the handling of cheaper furs, the transformation of which into imitations of more expensive furs was facilitated in recent years by important technical improvements. As a result the misnaming of furs increased tremendously and created a real marketing problem. In 1928 the Federal Trade Commission called a conference of the interested parties to eliminate objectionable practises; and rules were adopted to standardize the naming of furs, which offered partial relief.

The three constituent factors in the fur industry, in addition to the trappers and collectors, are the dyers and dressers, the manufacturers and the wholesale dealers. The dressers and dyers have a considerable investment in their plants; they work on a charge basis and sometimes finance wholesalers and manufacturers. The manufacturers prepare for garments the skins obtained from the wholesale dealers and dispose of their product to garment jobbers and department stores. The workers in fur shops, skilled craftsmen with a good sense of color, cut, match and sew the skins together in sections; individual manufacturing processes are necessary in accordance with the nature of the furs. The wholesale dealer purchases the raw skins

from the country collectors or imports them from abroad, contracts with the dressers and dyers and sells to manufacturers, whom he frequently finances. In addition the large dealer in raw furs may have interests in other branches of the industry; one large raw fur company in New York, which increased its business from \$300,000 in 1901 to \$12,000,000 in 1929, recently acquired the controlling interest in the largest fur coat jobbing concern in the United States. Most of the dealer business is transacted on credit; in 1928 the credit sales of members of the American Fur Merchants' Association were \$138,000,000, the cash sales only \$15,000,-000. Cash transactions are the rule at the fur auctions, which handle in addition to some imported furs about one third of the American fur take. All branches of the industry tend to concentrate in the New York area; in 1927, for example, 2029 of the country's 2756 establishments were located in New York City.

Changes in the industry have affected the marketing structure of the finished product. The difficulty of standardizing fine furs has been responsible on the one hand for the continued importance of the highly skilled firms and of the exclusive stores, especially in fashion centers, and on the other hand for the importance of a large number of small firms. The enormous increase in the production of low grade furs has made the fur manufacturing industry sensitive to style changes and enhanced its speculative character; it has also emphasized the importance of standard marketing machinery, strengthening the position of such organizations as department stores in the handling of the finished product. The luxury character of the commodity and its speculative character intensify the importance of firms with an established reputation.

The highly speculative character of the American fur industry has been aggravated in recent years by rapid growth, an increase in the number of small competitive concerns and the prevalence of credit transactions. The slump which began in 1926 grew steadily worse, so that the output of fur goods in 1929 was considerably lower than in 1927. Among its basic causes were overbuying of raw materials, overproduction, the maintenance of prices on a high level despite the sharp fluctuations, and the lowered quality of products. The results were most severe among the smaller dressers and dyers, 382 of whom failed in 1928 with losses of \$13,528,-000. The industry has been considering plans for control and stabilization. There have also

been attempts to stabilize conditions on an international scale; the Leipsic International Fur Exposition in 1930, at which the United States was well represented, discussed proposals for an international court of arbitration, an international credit bureau and agreements on grading, misnaming and other subjects.

The instability of the industry creates extreme insecurity of employment. Wages are apparently high, but they benefit only a minority of highly skilled and steadily employed workers; the rest earn considerably less primarily because of chronic unemployment. Since the 1926 slump approximately one half of the workers employed in the fur manufacturing shops in New York City have been almost continuously unemployed. These conditions produced unrest among the members of the International Fur Workers' Union and the left wing secured control of the union in 1926. A strike in 1927 was unsuccessful, and the continuous internal dissensions led to the reorganization of the union by the combined efforts of the old officials, the employers and the American Federation of Labor; its membership, however, declined to less than 3000 in 1929 as compared with 11,400 in 1925. The communist group organized an independent union with a considerable membership; it is a part of the Needle Trades' Industrial Union.

The fur trade is an index of the decreasing disparity between the cultures of the northern hemisphere resulting from the spread of industrialism. Machine industry, seeking forests and mines, has taken possession of territory formerly controlled by the fur trade and has contributed to the decline of wild life and of fur trapping by the aborigines. The effects of machine industry on demand have been scarcely less important. The demand of metropolitan centers in the north temperate areas of Europe and Asia for furs was dependent on the existence of distinct social classes. Furs were used as an item of dress designed to emphasize class distinction because they were obtained from distant areas and were correspondingly expensive. Their early significance with relation to men's clothing declined with the growing importance of women's costumes as a more subtle device for enhancing the prestige of wealth. The increasing use of silk for that purpose was accompanied by the employment of fancy furs, especially in the manufacture of coats as a complement to lighter clothing. Rapid exploitation of the resources of the New World created new demands for furs as a most satisfactory medium of emphasizing

the status of the nouveaux riches at the same time that it undermined the supply of fine furs for the future. The aristocracy now found that furs were no longer of distinctive importance to the maintenance of its position and its demand for fine furs declined accordingly. The increasing demand of larger numbers of women for furs has been met only by recourse to the increasing efficiency of machine industry. The rise of democracy has become the dominating factor in the world's fur trade.

HAROLD A. INNIS

See: Hunting; Frontier; Natural Resources; Game Laws; Commerce; Commercial Routes; Fairs; Auctions; Dress; Fashion; Garment Industries.

Consult: Saint Louis Public Library, Furs and Fur Bearers of the United States and Canada, a List of Books and Articles on the Technology and Romance of the Subject (St. Louis 1929); Bachrach, M., Fur, a Practical Treatise (New York 1930); Brass, Emil, Aus dem Reiche der Pelze (2nd ed. Berlin 1925); Lomer, H., Der Rauchwaaren-Handel (Leipsic 1864); Veblen, Thorstein, The Theory of the Leisure Class (new ed. New York 1912); Malbin, Max, Der internationale Rauchwarenhandel vor und nach dem Weltkriege unter besonderer Berücksichtigung Leipzigs (Oschatz 1927); Fougerat, L., La pelleterie et le vêtement de fourrure dans l'antiquité (Lyons 1914); Hennig, Richard, "Der nordeuropäische Pelzhandel in den älteren Perioden der Geschichte" in Vierteljahrschrift für Sozialund Wirtschaftsgeschichte, vol. xxiii (1930) 1-25; Peckert, Joachim, Die Edelpelztierzucht im Rahmen der deutschen Volkswirtschaft (Markt Grafing 1929); Menminger, Anton, Die Entwicklung des würzburger Kürschnerhandwerks (Würzburg 1927); Heiderich, J H., Das Leipziger Kürschnergewerbe (Heidelberg 1897); Schiller, "Die Kürschnerei in Breslau" in Verein für Sozialpolitik, Schriften, vol. lxviii (1896) 63-98; Newiasky, Mosche, Die russische Pelz- und Lederindustrie (Kaunas 1927); Klein, J., Der siberische Pelzhandel und seine Bedeutung für die Eroberung Siberiens (Bonn 1906); Innis, H. A., The Fur Trade of Canada (Toronto 1927), and The Fur Trade in Canada (New Haven 1930); Reflections of Inkyo on the Great Company (London 1931); Fur Resources of the United States, a Special Report (Washington 1930); Laut, Agnes C., The Fur Trade of America (New York 1921); Belden, A. L., The Fur Trade of America (New York 1917); Vandiveer, Clarence A., The Fur-trade and Early Western Exploration (Cleveland 1929); Stevens, Wayne E., The Northwest Fur Trader 1763-1800 (Urbana, Ill. 1928); Davidson, Gordon C., The North West Company (Berkeley 1918); Johnson, I. M., The Michigan Fur Trade, Michigan Historical Publications, University Series, vol. v, pt. i (Lansing 1919); Fuller, G. W., A History of the Pacific Northwest (New York 1931); Gottlieb, Abraham, Fur Truths, the Story of Furs and the Fur Business (New York 1927); Rosebury, A., "Furs and Fur Workers" in American Federationist, vol. xxxvii (1930) 306-12; United States, Bureau of Foreign and Domestic Commerce, "International Trade in Furs" by T. J. Biggins, Trade Information Bulletin, no. 590 (1928).

FURNITURE

GENERAL AND HISTORICAL. The history of the invention and development of furniture must study man's pursuit of comfort from the rigors of migratory life to the sedentary domesticity of contemporary centralized living. Fulfilling a less crucial function than shelter or clothing, the use of furniture follows upon the accumulation of an economic surplus and the establishment of the home, with the consequent opportunities for leisure and for the cultivation of comfort, prestige and aesthetic pleasure. The nomadic character of much of primitive society, with the frequent migration of families to better sources of food supply, forbids the transportation and hence the use of furniture; a bed of skins on the hard ground fulfils the needs of tough active bodies. The emphasis in primitive society, however, is on community life rather than on that of the individual dwelling. Furniture becomes a concern only with the development of a settled and relatively peaceful life either in cities or in agricultural communities. Then arises the sacred tradition of hearth and home, and the home acquires its nucleus of bed, table and chair.

Although the nature of the Greek climate is such that no actual examples of Greek furniture are extant, some knowledge of it is possible, thanks to the countless illustrations of the daily life of the Greeks which still exist in vase painting and sculpture. In the earliest Greek period there appears the thronos, the high seat of god or dignitary when the Olympians consorted with mortals. In council or at the games headmen sat ceremonially on thrones, while subordinates occupied benches or stools. The figures are shown feasting, reclining on their beds or couches, eating from small three-legged tables which could be removed or slipped beneath the couch. The wooden couches either have turned legs identical in pattern with earlier Egyptian examples or borrow somewhat clumsily from architectural design. Except for the beautiful klismos, or reclining chair, used chiefly by women, the Greeks owe all their furniture forms to the Egyptians. They invested these borrowed patterns, however, with that same regard, fresh and new to the world, for plastic and not merely symbolic form which made Greek architecture the sublime achievement of antique art. Although early furniture is largely ceremonial, the functional element played an important part in Greek furniture. The Greek, still the soldier, had about him only what he could use, utilitarian forms exquisitely molded and decorated. Luxury was

apparent in the soft mattresses, the beautiful dressings of the beds, the dyed and embroidered silk and woolen covers.

In the commercial civilization of the Hellenistic period the elements of luxury were intensified. In the hands of the provincial Romans who had become world conquerors Greek furniture underwent a considerable change. The Roman genius for power and organization preyed upon Greek perfection with clumsy fingers, attempting to possess an art which in becoming the vehicle of power, wealth and ostentation lost its magic. The Romans used the same forms as the Greeks, the throne, chair, couch, stool and chest, and in addition the three-legged pedestal table and an ancestor of the parlor sofa. But they made heavy the clear grace of Greek form and added bronze, gold, ivory, rare veneers of wood and shell, precious marbles and gems. Such furniture was needed for a landowning and commercial aristocracy that lived in palatial houses thronged with slaves. It transcended its functional uses and became luxurious and even purely decorative.

In Byzantium the survival of Hellenistic culture continued for centuries to inspire furniture of elaborate and debased, strongly orientalized classical forms in an almost static tradition down to the fall of Constantinople in the fifteenth century. In western Europe the growth of new cities after the barbarian invasions called forth furniture which was but the further perpetuation of late Roman forms in a series of ever uglier repetitions. Among Teutonic peoples the making of furniture was practised as a craft, with almost no variation from the late Roman type, down to the end of the fourteenth century. Throughout the great ages of Gothic architecture this furniture shows, save in the churches and monasteries, no direct influence of Gothic design. As a craft it retained a fair degree of utilitarian dignity. In Scandinavia a wild and primitive people made furniture of solid wood carved with intricate interlacery, full of dragons, scenes of fighting, piracy and treasure hunting. In Paris, the world renowned center of the furniture industry throughout the Middle Ages, artisans made rich seats, couches, tables, chests, dressers and cupboards for king and baron. Great skill if little taste was shown in handling solid gold, ivory and precious stones at fabulous costs. Furniture in the Middle Ages as in Rome followed consuming power and was chiefly reserved for those at the apex of the social pyramid. Like the landless proletariat who had poured into Rome the mediaeval serf had little if any furniture—a bench, a table, possibly a bed.

The brilliant consumers' civilization of the fifteenth to seventeenth centuries broadened the market for costly furniture. The commercial revolution brought with it the rise of the rich Flemish and Burgundian cities and the dawning Renaissance culture of the Italian city-states. A rich bourgeoisie became part of the class structure, and in the homes of wealthy merchants furniture of a new elegance superseded the heavy clumsiness of the Middle Ages. The pomp of a reestablished court life demanded the decorative furniture of luxurious living. A fresh impetus was given to furniture design. A new structural principle, first seen in van Eyck's paintings of Ghent, liberated design from the confines of solid wood to a new structural technique of holding thin panels between rails and stiles—thus was the Gothic structural principle at length translated into wood. From this innovation grew larger and more elaborate forms of chest and dresser, especially since the division of the design into horizontal and vertical members was perfectly suited to the pilasters, cornices and panels of the renascent classical manner. Italy throughout the sixteenth and seventeenth centuries produced pieces of unmatched craftsmanship and imagination. The fire of her decorative artists, now at the peak of their glory as pope and merchant prince demanded more and newer beauty, produced chests, beds and cabinets of great fineness.

Architecture and furniture now came to parallel each other in development and to play related roles. With the rise of the French monarchy the baroque style is seen in constant struggle with the purer classical manner of Vignola. Already apparent is the gradual encroachment of dogmatic rules of design, which reached its climax in the triumph of empirical classicism in the French Revolution. Throughout this era the ever increasing mastery of furniture technique, the richness and luxury of the pieces with their exquisite carving, rare veneers, tortoise shell, gilt, inlay and marbles reflect the gratified tastes of the aristocracy.

The dominance of classicism in eighteenth century art had its effect on furniture forms. But the revival of the concept of classical democracy in the French Revolution, the introduction of the machine and the spread of an industrialized and relatively democratic culture in the nineteenth century had more far reaching effects. On the one hand, the decline of the aris-

tocracy and the broadening of the middle class with its rising standard of living increased the demand for furniture. A society in which the old class structure had disintegrated and in which pecuniary values were dominant had to resort to what Veblen calls "conspicuous consumption" to maintain the boundaries between the new classes. The home became a social ideal —the object of sentiment and the criterion of prestige—and the demand for furniture, once linked with court and mansion, was now linked with the middle class home. The era of romanticism led ultimately in furniture to the practise of eclecticism, or the choosing of period styles for reproduction in furniture design. The fantastically romantic forms of the Victorian era correspond to a vogue for "life as it is not," the escape of a people to ideas more felicitous than the unlovely reality of the dawning machine age.

The coming of the machine meant more than the displacement of the skilled cabinetmakers, local craftsmen and home construction of furniture. It meant also quantity output and stimulated selling. The furniture industry was forced to exploit every weakness of humanity under the necessity to sell. Period styles furnished the easiest and surest approach to popular taste and could with the aid of photography be ever more readily copied. Furniture was now made in "suites" for the purpose of selling five or six rather than one or two pieces at a time. The process of democratization and high pressure selling has left scarcely a home, even among the poor, uncluttered by a miscellaneous array of furniture. But the imitation of handcraft by machine technique has proved wasteful and aesthetically barren. Craftsmen have practically disappeared

In an effort to remedy this situation, the result of romanticism plus commercial exploitation, the so-called modern movement is attempting to rehabilitate creative design in furniture. The modern designer is taking stock of modern living conditions, modern architectural innovations and modern needs and by so doing is trying to reintroduce the method of functionalism. He is compelled to take account of the heightened mobility of life and the urban congestion which makes every inch of space valuable. He is also considering the problem of the difference between hand and machine technique and the profusion of new structural materials and methods. Metal furniture forecasts the application of steel engineering to furniture.

EDWIN AVERY PARK

Furniture

FURNITURE INDUSTRY. Until recently furniture was produced mainly for the requirements of an aristocracy of wealth; other people had to make their own crude furniture or live without any. During the seventeenth and eighteenth centuries in most European countries the output of furniture increased considerably—ornate and luxurious furniture for the aristocracy, substantial furniture for the rising middle class; but the output was still for a very limited class market. Even throughout a large part of the nineteenth century the common man still depended for what little furniture he had on the ordinary house carpenter or on his own manual dexterity.

The producer of fine furniture, the master cabinetmaker, usually worked in a small shop with a bench, a number of hand tools, his apprentice and perhaps a few journeymen. Even before the introduction of machinery, however, many large producers of furniture in Europe operated on a factory basis and developed considerable specialization. In the United States in 1816 there were some cabinet shops with a yearly output of \$100,000 and many shops which specialized in the production of chairs. But small cabinet shops and custom made furniture were typical.

During the first two thirds of the nineteenth century furniture making was slowly transformed from a handicraft into an industry under the influence of widening markets and technological progress. As the basic woodworking machines, such as power saws and wood turning and planing machines, were developed they were gradually introduced into the cabinet shops. The machines generally did not cause specialization at first and were regarded merely as additional tools. As they became more complex, however, a specialized group of highly skilled machine craftsmen appeared, and in the larger establishments there developed a subdivision of labor even among the users of hand tools.

The industrialization of furniture making went on most rapidly and reached its greatest development in the United States. By 1860, although the industry still centered in New England and middle Atlantic seaboard towns, where it was largely carried on in small establishments for local trade, it had started to move to the new centers of population in the west, where many factories were equipped with machinery from the start. One factory in Cincinnati, for example, had over 500 employees and eighty power driven machines. It was not until the seventies, however, that with the further improvement of ma-

chinery and reduction of costs, the substitution of quantity production for custom made goods, the rapid growth of transportation facilities and the widening of markets, the increased purchasing power of a rising middle class and the greater availability of liquid capital, the factory began to dominate the industry and pushed the old cabinetmaker farther and farther into the background.

Under the influence of industrialization, quantity production and widening markets the output of the furniture industry increased rapidly. It rose in the United States from \$17,663,000 in 1849 to \$77,846,000 in 1869 and \$125,316,000 in 1899. Output in 1914 was \$265,706,000, an increase even more moderate if the rise in prices is considered. In this the furniture industry reflected the general slowing down of economic expansion during the period. Another great increase occurred from 1919 to 1929, when output rose from \$579,906,000 to \$940,918,000, an increase so much the larger because of the substantial decline in prices. This growth reflected the increase in consumer purchasing power and the increased demand for store and office equipment.

While the industry grew tremendously, the growth of concentration was not correspondingly great. The number of furniture making establishments declined considerably from 1869 to 1899, but they have since increased twofold from 1814 in 1899 to 3763 in 1929. This is to be explained largely by the fact that mechanization was not so great as in other industries. Although the total horse power used by the industry almost quadrupled between 1899 and 1927, horse power per wage earner in the furniture industry increased only 79 percent as compared with an increase of 117 percent for all manufacturing industries in the United States. Quantity production, considered in terms of thousands in automobile plants, remains in terms of hundreds in even the largest furniture factories. The whole productive process has been greatly accelerated, but some case goods still require from 30 to 120 days to build. While the industry has grown enormously, a great many small furniture establishments have persisted and in several centers they still dominate the industry. These small shops generally make limited quantities of furniture to order and use only a few simple machines for work preliminary to the more difficult tasks of cabinetmaking.

The leading type of furniture manufactured in the United States has been wooden household furniture, some of which is upholstered. While this class has accounted for most of the industry's growth, in recent years production of furniture for offices and stores and of metal furniture especially for offices and hospitals has become increasingly important.

Value of Furniture Output in the United States,
1929

(In \$1000)

CLASS OF FURNITURE	Total	Woon	M etal	FIBER, RATTAN, REED AND WILLOW
Household	659,023	611,681	30,443	16,899
Office and store	193,359	135,849	57,510	*
Public buildings	41,044	28,691	12,353	*
Professional	14,283	6,454	7,829	*
Lockers	5,233	8	5,225	-
Total	912,942	781,195	113,360	18,387

^{*} Included in figure for wood to avoid disclosing output of individual establishments. Source: Preliminary reports of United States Census of Manufactures, 1929.

An outstanding characteristic of the industry has been its concentration in a few states. New York was the leading producer from 1859 to 1929, but its lead steadily diminished. With the growth of new population centers and the opening of new timber resources in the middle west, Illinois, Michigan and Indiana became of major importance in the eighties, and at this time Grand Rapids became an outstanding center. During the nineties North Carolina turned to furniture manufacture as an early step in its industrialization and in 1929 it ranked fifth. In 1889 the five leading furniture states (New York, Illinois, Massachusetts, Michigan and Ohio) produced 63 percent of the total output and in 1929 the share of the five leading states (New York, Illinois, Indiana, Michigan and North Carolina) amounted to 57 percent. Certain states produce a very large proportion of certain classes of furniture. Thus in 1929 Indiana was the largest producer of wooden kitchen furniture, New York and Illinois of metal household furniture. The industry has also for many years formed important centers in certain cities, although the aggregate importance of these centers to the industry has diminished. Thus the value of the product of the seven largest furniture producing cities (among them New York, Chicago, Grand Rapids and Philadelphia) was 53 percent of the total in 1889 and only 32 percent in 1925.

Furniture manufacture is still a comparatively small scale industry; but, while there were 3763 establishments in 1929, the concentration which prevails is considerable, although not so large as in most other industries. There have been several important mergers since the World War. and in 1925 one seventh of furniture making establishments produced two thirds of the total output. But in no instance did a single firm control any major branch of the industry. In 1923, however, the Federal Trade Commission revealed that certain practises of four leading furniture manufacturers' associations, whose members produced about 30 percent of the country's household furniture, tended to fix prices. Among other things these associations hired one expert who without making any real cost studies published theoretical minimum "selling values" of representative articles of furniture which practically determined prices. In 1920 these manufacturers made an average net profit of 28 percent on their investment. During the eight years following the investigation severe competition among the majority of manufactures revived.

The growth of large furniture factories and the widening of market areas have been accompanied by the development of a number of marketing devices which have largely displaced the old relationship between cabinetmaker and consumer. Because most furniture is bulky, unstandardized and difficult to evaluate without examining, the system of holding markets for short periods of time two or four times a year at leading furniture centers has grown in popularity since the first market was held in Boston in 1874. With the growth of the furniture industry in the southern states the Southern Furniture Exposition was organized at High Point, North Carolina, in 1913. Markets are also held by Pacific coast manufacturers, who largely supply local needs as eastern competition is made difficult by high freight rates. But the most important markets are held at Chicago and Grand Rapids. The one held in Chicago, which is by far the largest in the country, attracts hundreds of manufacturers, practically all of whom bring out at least one new style of furniture at each market. In 1928 manufacturers accounting for over go percent of the country's furniture production were represented at the Chicago market, where they did almost a quarter of their total business for the year. Furniture buyers either place orders with manufacturers or examine the exhibits with the idea of placing orders later in the season. This latter practise has increased with

the growth of hand to mouth buying. Since 1920 groups of buying syndicates have frequently been formed, generally by small retailers, to secure the price concessions that manufacturers grant for large purchases and to compete successfully with larger retail units. Most furniture, however, is sold to the retailer on the basis of photographs and descriptions by the traveling commission broker, who represents a number of different manufacturers.

More furniture is sold by independent furniture and house furnishing stores than by any other type of retailer, but the relative importance of their sales is declining. During the decade following the World War department stores and chain stores in the United States greatly increased in importance as furniture outlets; in 1926 chain stores made almost one third of the furniture sales in eleven cities. Mail order houses are important outlets for the rural sections. There is an overabundance of retail furniture stores: one existed for every 2665 people in 1925; in eleven cities 11 percent of the independent stores accounted for 69 percent of the total sales. Competition is severe and failures numerous. Except during the regular February and August sales most retailers have a particularly high mark up, 100 percent being quite usual. This is partly due to high sales costs, the unusually high expense required for shipping, repairing and refinishing work and the ignorance of most consumers. The majority of consumers must depend on the retailers' statement to know what they are purchasing. Even where misrepresentation is not intended—and it is more general and flagrant in this industry than in most a large proportion of the salesmen know very little about what they are selling, and there is a tremendous amount of ambiguity in ordinary furniture terminology. The consumer, moreover, is forced to pay the price of the wide choice of furniture styles. Several hundred competing manufacturers bring out at least one new style two or four times a year, which perhaps results in an excessive variety, as most people make large purchases of furniture only once or twice in a lifetime.

In 1929 the American furniture industry employed 192,057 wage earners. Most of them were semiskilled and unskilled workers, because of departmentalization and division of labor within departments, automatic machinery and, especially since the World War, the introduction of straight line production methods. Even the work of the upholsterer, which for years had required

a considerable amount of skill, is being subdivided so that it can be performed by semiskilled workers. Nevertheless, a number of tasks even in the highly mechanized plants require a great deal of skill, as, for instance, the construction of samples, some finishing jobs and setting and operating certain machines. Wages van greatly and not always in relation to skill. Ir 1929, for example, the average actual earnings per week of hand carvers were \$42.66; male upholsterers \$33.61; female upholsterers \$16.93; male assemblers and cabinetmakers \$28.44; male helpers \$15.13; and female helpers \$10.37. The average for all furniture workers in the United States was \$25.12 for males and \$16.03 for females; and among the leading furniture states it ranged from \$30.21 for males and \$21.17 for females in Illinois to \$17.61 for males and \$10.00 for females in North Carolina. Average yearly earnings in 1929 amounted to \$1235 compared with an average of \$1306 for manufacturing industries as a whole. In the same year the average number of hours actually worked per week by all furniture workers was fifty.

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Unionism in the furniture industry is insignificant. The first important trade union of furniture workers in America, the Furniture Workers' National Union, founded in 1873, was composed primarily of German cabinetmakers. In 1895 it merged with the Machine Wood Workers' organization and became the Amalgamated Wood Workers' International Union. In 1912 the Amalgamated merged with the Brotherhood of Carpenters and Joiners, which since then has had jurisdiction over the majority of furniture workers but, with the exception of a small number of highly skilled men, has had very few members in the industry. By 1931 it had practically given up the idea of organizing furniture workers. Five other craft unions with considerable jurisdiction in the industry have practically no members in this field. The Upholsterers', Carpet and Linoleum Mechanics' International Union, however, for many years has had a number of members scattered through small shops.

Mechanization and large scale production started much later and have not gone nearly so far in Europe as in America. The greater part of furniture is produced in small shops by manufacturers who are frequently also salesmen and artisans, by skilled workers generally trained in the apprentice and master tradition or by craftsmen working in their own homes. There is a large output of fine furniture, particularly in Paris, Vienna and London, and a great number

of small shops specializing in the imitation of period furniture. Modern factories exist, however, in all the important furniture producing countries, and in certain regions the smaller establishments and especially the home workers are finding it difficult to compete with the factory. Industrialization is greatest in Germany, where many furniture factories are highly mechanized and specialized and manufacturers are organized in closely knit trade associations. The production of office and metal furniture is increasing in France, England and Germany. Nevertheless, the custom cabinet shop holds its position in Europe because of the large proportion of individualistic high grade furniture demanded by the wealthy and the relatively small purchasing power of the European masses. This is strikingly apparent in France, the greatest European furniture producing country. Furniture making in Asia is still at the handicraft stage, producing massive, richly carved and inlaid furniture for wealthy natives and foreigners; there are, however, a few modern factories in Japan and India.

In Great Britain between 1907 and 1924 the selling value of the products of the furniture, cabinetmaking and upholstering trades increased from £10,969,000 to £28,518,000 and employees increased from 74,119 to 82,841. In 1924 about a fifth were females; 16 percent of the males and 37 percent of the females were under eighteen years old. About half of the boys and many of the girls were apprentices or learners. Weekly wages ranged from seventy to eighty-six shillings in London and from sixty to eighty-two shillings in the provinces. In 1927 the industry was quite well organized and the normal work week was from forty-four to forty-seven hours. Approximately eight trade unions had jurisdiction over the industry; of these the National Amalgamated Furnishing Trades Association and the Amalgamated Union of Upholsterers were the most important. Since 1893 the Deutscher Holzarbeiter Verband has done a great deal to improve the conditions of German furniture workers.

Foreign trade on the whole plays a very minor part in the furniture industry with the exception of expensive and high quality furniture, as in the case of French exports, and metal office furniture in the case of the United States. In the latter country imports and exports comprised barely 1 percent of its total production of wooden furniture in 1927; total exports amounted to \$3,183,000 and imports to \$4,631,000. There is,

however, a considerably larger interchange of furniture within Europe. In 1927 European countries imported, mainly from each other, \$32,674,000 worth of furniture and exported \$17,657,000 worth; two thirds of the exports were by France, the United Kingdom, Germany, Belgium and Czechoslovakia. The small importance of foreign trade is largely due to the bulk of furniture, differences in construction needed for different climatic conditions, the popularity of national styles, particularly among the wealthy, and the comparatively small purchasing power of lower middle and working classes in countries other than the United States.

GEORGE MARSHALL

See: ART; ARCHITECTURE; INDUSTRIAL ARTS; TASTE; FASHION; HANDICRAFT; HOUSING; STANDARDS OF LIVING; ROYAL COURT; LANDED ESTATES; MIDDLE CLASS; HOME OWNFRSHIP.

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FUSTEL DE COULANGES, NUMA-DENYS (1830-89), French historian. Fustel de Coulanges, who was successively professor at the University of Strasbourg, the École Normale, the Sorbonne and finally director of the École Normale, made his reputation through his famous La cité antique, which was a pioneer comparative study of Roman and Hellenic societies. Without giving up his studies of antiquity, as diverse memoirs testify, he then undertook his Histoire des institutions politiques de l'ancienne France, which he completed only as far as the Carolingian period. His work betrays both the unconscious influence of romanticism, which had introduced into the interpretation of history the notion of the spontaneous, and a very decided reaction against romantic thought in some of its significant features. He hated subjectivism in historical interpretation, practised Cartesian doubt regarding all testimony and based all his conclusions on original texts. Of archaeology he had little knowledge. It has been possible to reproach him for not weighing the authenticity of his documents with sufficient care; but once he admitted a text as genuine he insisted on determining its exact meaning, and his analyses of vocabularies remain models. He rejected the abuse of the racial interpretation of history dear to romanticism and was dominated by the idea of evolution. He attempted to prove that the Teutonic invasions of the fourth and fifth centuries were gradual, not violent and destructive, and to refute the idea that the Middle Ages were a Teutonic creation. The elements of the past found in the French Middle Ages were in his opinion chiefly of Roman origin. The ignorance of the ancient German societies which he displays was due to insufficient means of information, not to nationalistic bias. In La cité antique his main emphasis is laid on religious phenomena, which he believed gave rise to law; in his later works a larger place is given to material interests.

Fustel's work was very much discussed during his lifetime, and although many of his theses are now contested it still has profound influence upon historians and upon French sociologists. The political conclusions that have been drawn from his writings by members of the Action Française cannot be attributed to him. His influence in England is revealed in the writings of Seebohm and Ashley; it was much more tardy in Germany.

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GABELLE. See SALT.

GAGERN, HEINRICH VON (1799-1880), German statesman. Gagern was the son of an imperial judge and diplomat. After serving against Napoleon he studied at Heidelberg and Jena. He kept himself free of all radical tendencies and absorbed the Burschenschaft's political ideal of German unity and freedom. In 1821 he entered the Hessian administrative service and in 1832 was elected to the Hessian second chamber. He soon became leader of the opposition and resigned his government post, fighting for moderate constitutional principles until he failed of reelection in 1836 and retired to a country estate. He continued his liberal activities and when he reentered the chamber in 1846 became at once leader of the opposition. In consequence of the revolution of March, 1848, he was made prime minister and minister of foreign and home affairs. He sought to solve the question of German unity at once by sending a common embassy of all south German governments to offer the leadership of Germany to the king of Prussia, in the conviction, partly a result of the influence of his

brother Friedrich, that this state alone was in a position to unite Germany. The attempt failed, largely because of the Berlin March revolution, and Gagern sought the solution by a popular movement. He was among the foremost in efforts to hinder the radical extension of the revolution, to preserve the monarchical form of government and to assure Prussian leadership in Germany. Changes in his attitude in 1848 were but tactical means to the same end. He wished not to separate Austria entirely from Germany but to join it in a confederacy with a federation of the other German states. He became president of the national assembly in Frankfort and later of the imperial ministry, where his influence was decisive in uniting a majority upon the program of a federal state under Prussian leadership. After the work of the Frankfort assembly was destroyed by the king of Prussia, Gagern attempted to attain his objectives by supporting Prussian diplomatic ambitions; hence he took part in the unsuccessful assembly of 1850 at Erfurt. Concluding that Prussia preferred its own national egoism to German unity and that its government throughout was disinclined to fulfil the primary condition he had always attached to leadership—real liberal constitutionalism in home affairs-he came gradually to the opinion that Austria might better be able to solve the problem of German unity. After 1859 he became more and more hostile to Prussia and in 1864 he went to Vienna as ambassador, retaining this post until 1872, when he retired to private life.

Ludwig Bergsträsser

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GAIUS (second century A.D.), Roman jurist. Only his praenomen "Gaius" is known, while many of the facts of his life and career, to be gathered almost entirely from evidence found in his writings, are much disputed by scholars. Born not later than the time of Hadrian, he was active as teacher and writer in the following reigns; it is certain that he was at work as late as the year 178. His most important contribution to legal literature and the only one that has survived independently of Justinian's Digest was his treatise entitled *Institutionum commentarii quattuor*,

a work closely related in respect both of general plan and of subject matter to his *Res cotidianae*. In each of those works Gaius presented a survey of the entire Roman private law including the *jus honorarium* as well as the *jus civile*, and in each of them the treatment was primarily dogmatic. Begun at the very close of the reign of Antoninus Pius (died 161) and completed in the early part of the reign of Marcus Aurelius, the Gaian institutional treatise is the one classical work on Roman law that has been preserved almost entire.

The rise of Gaius to a position of eminence is attested by the famous Law of Citations, or lex de responsis prudentum (C. Th. 1.4.3.), of Theodosius II and Valentinian III (426). By this law, which is the earliest certain reference to Gaius, imperial approval was given to all the writings of Papinian, Paul, Gaius, Ulpian and Modestinus; to Gaius the same authority as that enjoyed by the other four jurists was expressly conceded, while the citation of all his works by judges was sanctioned. At length the high authority of Gaius was recognized by Justinian in his work of codification. Out of a total of 9142 extracts from the jurists embodied in the Digest by Tribonian and Justinian's other commissioners 535 are from the writings of Gaius. The chief influence, however, exerted by Gaius on the Justinianian codification and hence on the Roman law of later times was through his Institutes. The commissioners drew by far the greater part of the substance of Justinian's Institutes from the Institutes and Res cotidianae of Gaius; and they also modeled the plan of Justinian's Institutes upon the one which Gaius had followed in his own.

Apart from knowledge of the Institutes gained from the Collatio legum mosaicarum et romanorum (c. 390), the Breviarium alaricianum (500), non-juristic writers of the late empire and the Justinianian codification, this now celebrated work by Gaius had been lost to modern scholars until in 1816 Niebuhr discovered in the chapter library at Verona a manuscript in which works of St. Jerome had been written over the text of Gaius.

Niebuhr's finding of the last Gaius, communicated at once to Savigny, intensified an already awakened interest in Roman legal history; it coincided indeed with the rise of the historical school. The scholarly study of Gaius during the last century has in fact illumined not only the law of the second century but also, since Gaius in contrast with Justinian introduced much historical matter, the law of still earlier times. Gaius

has likewise exercised a marked influence on legal education during the last century.

For originality and creative genius Gaius cannot be ranked with the greatest of the classical iurists, such as Julian and Papinian; nor perhaps can he be given a place with Ulpian and certain other celebrated legal writers of the classical age, such as Paul. As Krüger has pointed out, Gaius appears to have taken Pomponius as his model; and his close relationship to Pomponius is shown not only by his taking the whole field of the private law, in contrast with the public law, as his province, but also by the treatment of his materials. In the writings of Gaius not less than in those of Pomponius casuistry, or the scientific handling of cases, is combined with dogmatic elaboration; and the exposition of both jurists, composed in clear and simple style, is marked by ease and breadth. While modern critics rightly point out the defects in the work of Gaius, such as his lack of thorough preparation, his errors in legal history and his want of courage in the face of controversial questions, there is, however, general agreement among scholars in according to him a high place among the world's great jurists.

H. D. HAZELTINE

Consult: Gai institutiones iuris civilis, ed. by E. Poste, with translation and commentary (4th ed. by E. A. Whittuck, Oxford 1904); The Institutes of Gaius and Rules of Ulpian, ed. by J. Muirhead, with translation and notes (new ed. Edinburgh 1904); Girard, P. F., Textes de droit romain (5th ed. Paris 1923) p. 220-370, reproducing text of the Autun Gaius; Zulueta, F. de, "The Oxyrhynchus Gaius" in Law Quarterly Review, vol. xliv (1928) 198-208; Kruger, P., Geschichte der Quellen und Litteratur des romischen Rechts (2nd ed. Leipsic 1912) §§ 24, 40, 43, 44; Kipp, T., Geschichte der Quellen des römischen Rechts (4th ed. Leipsic 1919) §§ 18, 20, 22, 23-26; Karlowa, O., Römische Rechtsgeschichte, 2 vols. (Leipsic 1885-1901) vol. i, p. 657-778; Roby, H. J., Introduction to the Study of Justinian's Digest (Cambridge, Eng. 1888) chs. vi, ix, xiii, and appendices; Buckland, W. W., A Textbook of Roman Law from Augustus to Justinian (Cambridge, Eng. 1921) p. 21-50; Kniep, F., Der Rechtsgelchrte Gaius (Jena 1910); Ledlie, J. C., "Gaius" in Great Jurists of the World, ed. by St. John Macdonell and Edward Nanson, Continental Legal History series, vol. v (Boston 1914) p. 1-16.

GAJ, LJUDEVIT (1809-72), Croatian statesman and writer. In his youth under the influence of the German culture which prevailed in Croatia during the first half of the nineteenth century Gaj wrote in German. During his studies at the universities of Graz and Pest he was influenced by the ideas of Slavic intellectuals who were striving to cultivate their native tongues,

develop their national cultures and awaken the Slavic consciousness. Their influence, especially that of Jan Kolár, the standard bearer of the romantic historical movement for pan-Slav renaissance, determined all of Gaj's subsequent activities. His pamphlet on the principles of a new orthography of the Croatian language, which appeared in 1830 in both German and Croatian, became vastly important not merely for the creation of a modern uniform orthography and literary medium for the Croatians and Serbs but also for the development of cultural and national ideologies, because in it the principle of the literary and cultural unity of the southern Slavs was asserted.

After his return to his native country Gaj by his active national agitation made Zagreb, the old center of Croatian culture, the focus of a new nationalistic, so-called Illyrian movement. A gifted popular leader filled with a prophetic, messianic faith in his mission, Gaj awakened understanding and fanned enthusiasm for national ideals and aspirations and for the southern Slav and pan-Slav movements among the youth, the intellectuals, the bourgeoisie and the Catholic clergy. In 1835 he founded the *Hrvat*sko-slavonsko-dalmatinske novine, the first Croatian newspaper, whose aim was to awaken the Croatian people, defend their interests and formulate their national aspirations. It became the organ of the Illyrian movement, which not only spread to all the Croatian provinces but also affected the other Jugoslav peoples. This movement represented the first attempt to organize all national activities in the fields of politics, literature and general culture. The political aim of Illyrianism was national self-defense against the imperialistic expansion of the Magyars. The literary and cultural program of the movement included the creation of a cultural union of all southern Slavs.

In 1840 Gaj traveled by way of Vienna and Dresden to St. Petersburg in order to win the interest and aid of foreign, especially Russian, official circles for his aims and activities. During the Revolution of 1848 he again became a leading figure especially because of the desire of the nations which formed part of the Austrian monarchy to reorganize the absolutist state on a democratic and federal basis. He conducted important political and diplomatic negotiations on behalf of the Croatians, proposed the nomination of General Jelačić as ban of Croatia, and in Vienna at the head of a Croatian deputation presented to the emperor a program which called

for the union of all Croatian lands, the establishment of an independent Croatian assembly and the abolition of feudal privileges. He was careful to prevent the movement for the national liberation of the Croatians from directing itself against the dynasty and the state and sought political backing at the courts of Vienna, St. Petersburg and the Serbian ruler. Hence in Croatia opposing tendencies and new movements soon prevailed against him, especially since after the restoration of the absolutist government he placed himself and his services as editor of the official newspaper at the command of the government in Vienna.

JOSEF MATL

Consult: Déselić, Velimir, Ljudevit Gaj (Zagreb 1910); Šišić, F., J. Strossmayer i južnaslovenska misao (Belgrad 1922) p. 131-60; Bogdanović, D., Pregled književnosti hrvatske i srpske, 2 vols. (Zagreb 1915-18) vol. ii, pt. i, p. 126-63; Fischel, Alfred, Der Panslawismus bis zum Weltkrieg (Stuttgart 1919) p. 131-43.

GALES, JOSEPH, JR. (1786-1860), American editor and congressional reporter. For more than fifty years, from 1810 till his death, Gales was an owner and editor of the Washington National Intelligencer—most of the time in association with his brother-in-law, W. W. Seaton. Until 1820 Gales and Seaton were exclusive reporters of the proceedings of Congress, the former sitting in the House, the latter in the Senate. They remained printer to both houses until Jackson became president. Their running reports, in the majority of cases abbreviated, were collected from the Intelligencer files and with other material enabled them to publish the indispensable source of early congressional history, Debates and Proceedings in Congress, 1780-1824 (42 vols., Washington 1834-56), continued in the Register of Debates in Congress (14 vols., Washington 1825-37). As an editor Gales early gained wide influence because of his semi-official position. He was the recognized spokesman for the Madison administration and although of English birth warmly advocated hostilities with England in 1812. Later he became known as a conservative, supported J. Q. Adams against Jackson and together with Seaton made the Intelligencer one of the leading Whig organs. He espoused the cause of the United States Bank, protective tariff legislation and internal improvements and deprecated the antislavery agitation. For many years his editorials carried great weight, and Daniel Webster declared that his knowledge of our governmental history surpassed that of all other politicians of the day combined. During the later stages of the slavery controversy, however, his influence declined as he persisted in adhering to his conciliatory views.

ALLAN NEVINS

Consult: Bleyer, W. G., Main Currents in the History of American Journalism (Boston 1927); Nevins, Allan, American Press Opinion (Boston 1928); Seaton, Josephine, William Winston Seaton of the "National Intelligencer" (Boston 1871).

GALIANI, FERDINANDO (1728–87), Italian writer on political and economic subjects. Although born at Chieti, Galiani was educated at Naples. At sixteen he was already beginning to write, upon the basis of Vico's political doctrines, a number of treatises dealing with aspects of ancient economic and political life. He also translated Locke's treatise on money, adding notes which became the nucleus of his classical Della moneta (Naples 1750; new ed. by F. Nicolini, Bari 1916). The principal element which renders this treatise extraordinary among the economic writings of the time is its clear analysis of the question of value. Galiani makes the value of commodities--including the commodity money -dependent upon utility, or the capacity of an object to satisfy human needs, and subject to the modifying influence of scarcity, which he defines as the relation between the existing quantity of an object and the quantity desired. In the case of goods produced by human labor he points out that value is determined by the number of laborers required during the period of production, a cost which, however, will vary according to the factors fixing the normal value of the means of sustenance in question. Galiani manifests acute perception of the interdependence of the various elements affecting value; in his discussion of utility, in his gradation of human needs, in his realistic approach to the nature of these needs, he clearly anticipates later psychological theories of value. The year after the publication of his Delle lodi di papa Benedetto XIV (Naples 1758), noteworthy for its development of the theory of political passivism, Galiani was sent to Paris as secretary to the Neapolitan embassy. There his inexhaustible flow of wit made him an outstanding figure in the principal salons and brought him into intimate contact with the most influential Parisians of the time. When he was recalled to Naples because of a diplomatic error committed in 1769 he left behind his uncompleted but famous Dialogues sur le commerce des blés (London 1770), which created such a storm

of intermixed praise and criticism that Morellet was commissioned on behalf of the government to answer it. Despite Galiani's earlier adherence, at the time of the edict of 1764, to the cause of unlimited freedom in the export of grain he here showed himself a defender of moderate duties and a determined, although hardly solemn, opponent of the physiocrats, whose fundamental assumptions he challenged. During his ten years in France Galiani had at the same time identified himself with the problems of the French Enlightenment and kept intact his Italian heritage, the ideas of Vico and Machiavelli. In contrast with the theorists of natural law he maintained the historical, relativistic approach, holding it absurd to posit an absolute law, such as the primacy of agriculture, without regard to place, time and circumstance. While it was no doubt true that cosmic activities proceeded according to law (herein Galiani, even as an exponent of historicism, manifests his customary balance), the diversity of conditions evoked varying laws and produced varying results. The problem of the statesman was one of practical adjustment. An antidemocrat and pragmatist in the mold of Machiavelli, Galiani also had the elements of a utilitarian theory; he declared that it was possible by means of plotting an algebraic graph to discover the maxima et minima, the greatest good with the least pain. In one of his last works, De' doveri de' principi neutrali (Milan 1782), designed as an apology for the neutrality of Naples during the continental counterpart of the American War of Independence, he applied this formula to the problems of international law. Galiani's last years, passed at Naples in what seemed to him exile from France, were occupied with various official positions, which drew from him a number of significant reports on economic and political questions, with unofficial compositions on subjects ranging from politics to the Neapolitan dialect and with a voluminous correspondence with Madame d'Épinay and his other French friends. This correspondence (collected in Correspondance inédite, 2 vols., Florence 1818; new ed. Paris 1881) is the best mirror which has been preserved of his talents and point of view.

FAUSTO NICOLINI

Consult: Introductions and bibliographies in the selections from Galiani's writings made by Fausto Nicolini, Il pensiero dell' abate Galiani (Bari 1909), and by F. Flora, Le più delle pagine di Ferdinando Galiani (Milan 1927); Rossi, Joseph, The Abbé Galiani in France (New York 1930); Hall, E. B., Friends of Voltaire (New York 1907) ch. iii; Arias, G., "Il pensiero economico di F. Galiani" in Politica, vol. xxi

(1924) pts. 3-4, p. 193-210, and "Ferdinando Galiani et les physiocrates" in Revue des sciences politiques, vol. xlv (1922) 346-66; Bierman, Wilhelm, Der Abbé Galiani als Nationalökonom, Politiker und Philosoph (Leipsie 1912); Blei, Franz, Abbé Galiani und seine Dialogues sur le commerces des blés (Bern 1895); Sommer, Louise, "Abbé Galiani und das physiokratische System" in Zeitschrift für Volksvertschaft und Sozialpolitik, n.s., vol. v (1925-27) 318-41; Kaulla, Rudolf, Die geschichtliche Entwicklung der modernen Werttheorien (Tubingen 1906); Nicolini, F., "Giambattista Vico e Ferdinando Galiani" in Giornale storico di letteratura italiana, vol. lxii (1918) 137-207.

GALILEO GALILEI (1564–1642), Italian physicist and astronomer. Galileo occupies a twofold place in the history of science. He discovered most of the physical truths that were later embodied in Newton's great synthesis, and he vindicated the rights of modern science by his propaganda for the Copernican theory. It is from the second aspect that Galileo's work has direct significance for social thought.

While he had been converted to the Copernican theory in his student days Galileo did not become publicly identified with it until after he had made the astronomical discoveries which followed upon his invention of a telescope in 1609. These discoveries, such as the existence of the satellites of Jupiter and of the phases of Venus, added new weight to the Copernican theory, although they were far from demonstrating it completely; and in defending them Galileo soon found himself a vociferous champion of the new astronomy. Thus he brought himself into conflict with the Catholic church, which had withheld its censorship of the Copernican theory so long as that theory had been regarded as a mere hypothesis and so long as its implications had not been drawn. The reason for the Catholic opposition was not that the theory contradicted Scripture —so did the Ptolemaic system—but that it broke with the unity of doctrine which had hitherto existed between theology, ethics and science. For this unity Aristotle's philosophy provided the framework, and it had been possible to incorporate the mathematical epicycles of the Ptolemaic astronomy without disturbance to the rest of the structure. Galileo did more than defend an astronomical theory irreconcilable with the orthodox system of knowledge: he carried on a philosophical polemic against Aristotle's physical ideas which involved a direct attack upon the whole Aristotelian cosmology. Since the same reasons which made Aristotle's system ideal from the point of view of the Catholic

church made it deadly to scientific progress, Galileo was literally fighting for the right of science to exist.

In February, 1615, he was denounced to the Inquisition. During the investigation which followed it was intimated to him that he would go unharmed and everybody would be satisfied if he would teach the Copernican theory as a mere mathematical hypothesis of convenience. Galileo refused to accept a condition tantamount to maintaining the mediaeval suzerainty of theology over science, and in February, 1616, he was called before Cardinal Bellarmine, who informed him that the Copernican theory had been condemned by the Holy Office two days before and that he was henceforth forbidden to hold or teach the doctrine in any way. Although Galileo accepted and signed Cardinal Bellarmine's prohibition, it was impossible for a man of his intelligence to forswear a scientific opinion in his heart, and for a man of his temperament it was almost as difficult to refrain from writing about it. In 1624 he profited by the accession of Urban VIII to publish a covert defense of the Copernican theory. After this was well received he set to work on his great Dialogues on the Two Principal Systems of the World. It was the publication of this work in 1632 which brought about the attack upon Galileo by the Inquisition in 1633-34, his imprisonment, his trial and his tragic abjuration.

While a nominal victory for the church, the proceedings against Galileo really marked the end of the mediaeval era of the union of science and theology. It was not, however, until 1835 that the Catholic church explicitly rescinded the prohibition of Copernican teachings.

Benjamin Ginzburg

Works: Galileo's writings dealing with his defense of the Copernican theory are Sidereus nuncius (Venice 1610); Il saggiatore nel quale . . . (Rome 1623); Dialogo dei due massimi sistemi del mondo (Florence 1632); as well as the letters to the Princess Christine and to Castelli. These may all be consulted in the national edition of his works, ed. by Antonio Favaro, 20 vols. (Florence 1890–1909). The Sidereus nuncius has been translated by Edward S. Carlos (London 1880), and the Dialogo and the letter to Princess Christine by Thomas Salusbury in his Mathematical Collections and Translations (London 1661). Antonio Favaro has published Galileo e l'inquisizione: documenti del processo galileiano (Florence 1907).

Consult: Fahie, J. J., Life of Galileo (London 1903); Stimson, Dorothy, The Gradual Acceptance of the Copernican Theory (Hanover, N. H. 1917) ch. ii; Wohlwill, Emil, Galilei und sein Kampf für die copernicanische Lehre, 2 vols. (Hamburg 1909–25); Wieser, Fritz, Galilei als Philosoph (Basel 1919).

GALL, FRANZ JOSEPH (1758-1828), German anatomist and founder of phrenology. Gall was born at Tiefenbrunn, Baden, and studied medicine in Strasbourg and later in Vienna, where he received his doctorate in 1785. He temporarily abandoned the practise of medicine in order to devote himself to the study of the brain and in 1796 gave public lectures in Vienna on the new doctrine of phrenology. The lectures were soon prohibited as subversive of religion and morality; and Gall thereupon betook himself to Berlin, where he inaugurated a similar course which did not meet with success. After making a tour through Germany, Denmark, Holland and Switzerland he settled in Paris; there together with his pupil Spurzheim he presented to the Institute of France in 1808 a memoir incorporating the results and conclusions of their researches. Cuvier and Pinel were members of the committee which returned an unfavorable report.

Although phrenology has been discredited as a science, Gall's work was not without merit. It was he who suggested the idea of brain localization, although his division of the cerebrum into faculties misled many psychologists until recent years. The interest and opposition which his theories aroused served to focus attention in biological and physiological circles upon important problems. Max Meyer has regarded him as a forerunner of behaviorism because he was not concerned with introspective psychology; and in his own day he was looked upon as a materialist because he placed so much stress on the brain as the organ of all psychic functions. Neither of these ascriptions is correct. He was a nativist in his philosophy, claiming that men are born with definite capacities and propensities. In contrast with the French naturalists, Cuvier, Bichat and Flourens, with whom he had scientific contacts and who discussed his views rather unfavorably, he did not attribute as much importance to the vital organs as to the brain. In his Des dispositions innées de l'âme he defended himself against the materialistic charges made against him.

Gall was a skilful controversialist and attracted a large number of followers, especially among persons without scientific training. Gaspar Spurzheim and George Combe did the most to promulgate his teachings in England and America, where phrenology as a profession throve for over a century.

A. A. Roback

Works: Philosophisch-medicinische Untersuchungen über

Natur und Kunst im kranken und gesunden Zustande des Menschen (Vienna 1791, 2nd ed. Leipsic 1800); Recherches sur le système nerveux en général et sur celui du cerveau en particulier (Paris 1809); Anatonue et physiologie du système nerveux en général et du cerveau en particulier, 4 vols. (Paris 1810-19), with an atlas of plates, and Des dispositions innées de l'âme et de l'esprit, du matérialisme . . . (Paris 1811), both written in collaboration with G. Spurzheim.

Consult: Blondel, C., La psycho-physiologie de Gall, ses idées directrices (Paris 1913); Hollander, B., Mi-Dougall's Social Psychology Anticipated by One Hundred Years (London 1924); Möbius, P. J., Franz Joseph Gall (Leipsic 1905).

GALLATIN, ALBERT (1761-1849), American statesman, financier and scholar. Gallatin was born in Geneva, Switzerland, but at the age of nineteen, inspired by enthusiasm for nature and for liberty, he set out for America and on the banks of the Monongahela in western Pennsylvania established a frontier estate. An aristocrat by breeding, he soon became the political spokesman of frontier democracy. Without deep local attachments he consistently spoke the language of nationalism despite his affiliation with the party of decentralization. From his first appearance in the Pennsylvania legislature Gallatin displayed moderation, industry, cloquence, integrity, a genius for administration and finance, a painstaking attention to detail, a mastery of parliamentary tactics, an enlightened humanitarianism and a broad and farsighted conception of democracy. Entering the national arena in 1795 he was prominent in organizing and directing the opposition to Federalist policies during the Adams administration. As secretary of the treasury under Jefferson and Madison from 1801 to 1813 he undertook to translate the ideals of agrarian democracy into reality through the medium of "a wise and frugal government . . . which should not take from the mouth of labor the bread it has earned." His statesmanlike administration brought severe order into the business of the government and economy into its departments. He formulated a policy of debt reduction which despite the expense of the Louisiana Purchase and the Tripolitan war was singularly effective until the outbreak of the War of 1812. He was the first to show the fallacy involved in the old sinking fund idea as accepted by Pitt and Hamilton and also the first to introduce the custom of annual reports by the secretary of the treasury. Aside from economy and peace Gallatin's chief interest during these years was the creation of a public land system. In Pennsylvania he had applied the public lands to an extension of economic democracy and relief from taxation, and he had been largely responsible for passing through Congress the Land Act of 1796. As secretary of the treasury he planned the Cumberland Road and in 1808 submitted to Congress the plan for an extensive system of internal improvements and of national education to be financed by the sale of public lands. As a member of the American peace commission in 1814 Gallatin was largely responsible for securing the highly favorable terms of the Treaty of Ghent. From 1816 to 1823 he was minister to France, and as special commissioner to Great Britain in 1826 he settled outstanding differences between the two nations and negotiated a treaty of commerce. Later he presented with great skill the American case in two boundary controversies with Great Britain —the northeast and the Oregon.

After 1827 Gallatin resided in New York City, where he identified himself closely with the business and cultural life of the metropolis. As president of the National Bank of New York he exerted a powerful influence for sound banking and sound money, forcing almost single handed a resumption of specie payments after the panic of 1837. His ultrabullionist essays, which reveal a broad grasp of economic principles, were widely circulated by the National Bank. Always an ardent proponent of free trade, he presented in 1831 the memorial of the free trade convention of Philadelphia calling for a drastic reduction of tariff duties to conciliate the South Carolina nullificationists. He was president of the New York Historical Society and the most prominent of a group of citizens who founded New York University in 1831. His interest in the North American Indians had led him around 1824 to undertake an intensive study of their linguistic groups and to prepare an ethnographical map of North America. Under his influence the American Ethnological Society of New York was organized in 1842, and to the pages of its transactions Gallatin contributed two pioneer monographs on the geography, philology and civilization of the native races.

During the later years of his life Gallatin was out of sympathy with the current of American politics. He bitterly opposed the annexation of Texas and the Mexican War and sympathized with the antislavery crusade. In his old age he was an anachronism: a child of romanticism who lived to see the harsher realities of Jack-

sonian Democracy. "I find," he confessed in 1834, "no one who suffers in mind as I do at the corruption and degeneracy of our government."

HENRY STEELE COMMAGER

Works: The Writings of Albert Gallatin, ed. by Henry Adams, 3 vols. (Philadelphia 1879), vol. iii containing complete bibliography.

Consult: Adams, Henry, The Life of Albert Gallatin (Philadelphia 1880); Mai, Chien Tseng, The Fiscal Policies of Albert Gallatin (New York 1930).

GALLICANISM is a body of doctrines and practises designed to limit the papal power in France without removing the country from the fold of the Catholic church. During the ancien régime there were evolved two parallel and distinct types of Gallicanism, ecclesiastical and political. The former was maintained by the theologians of France, but in reality its doctrine referred less to France in particular than to Christendom in general. Its basic principles were that the bishops, who represent the successors of the apostles, are established by God no less than the pope, who represents the successor of St. Peter; that the government of the Catholic church is therefore a monarchy limited by the episcopal aristocracy; and specifically that the power of the pope is subject to the canons of the church and inferior to that of the general councils. Political Gallicanism, owing its development to the legal class, found its starting point in a principle as universal as ecclesiastical Gallicanism: that the spiritual and temporal powers although both derive from God must be strictly separated. But in fact it was chiefly concerned with defining the relations between the French king or state and Rome. It made two fundamental assertions: first, that the pope had no control over temporal affairs within the domain of the right Christian king; secondly, that he could not exercise his spiritual power in France without the consent of the king, whose authorization was required for the publication of all papal bulls and encyclicals.

The two types of Gallicanism were at once allies and foes. The principal point of contention was the matter of judicial prerogative. Violent disputes over numerous questions of jurisdiction raged between the ecclesiastical and the royal courts until gradually the latter and particularly the parlements acquired sufficient strength to establish their preeminent right. On the other hand, the bishops frequently joined the parlements in a common war against Rome for Gallican "liberties." By skilfully manipulating the

two parties and alternating his support between them the king was able to use them to his own advantage, either to further his control over the bishops or the royal courts as the case might be or to provide pawns for his own dealings with the papacy.

Although embryonic Gallicanism appeared much earlier in the writings of two archbishops of Reims, Hincmar (806-82) and Gerbert (c. 940-1003), later Pope Sylvester II, the doctrine received its first complete expression during the struggle between Philip IV and Pope Boniface VIII, carried on from 1296 to 1303. Bishops and lawyers united in upholding it; pamphleteers propagated it among the educated public; and the result of the controversy was the overwhelming defeat of Boniface by Philip. The next important stage in the evolution of Gallicanism merges into the conciliar movement, which grew out of the Great Schism. Profiting by the weakened state of the papacy two French theologians Pierre d'Ailly and Jean Gerson, inspired the Council of Constance (1414–18), at which the dignitaries of all Europe both ecclesiastical and temporal were represented, to set its official seal upon the doctrine that the general council was superior to the pope. When the Council of Basel a few years later sought to extend the victory won at Constance and under the leadership of certain radicals made exaggerated demands for control over the papacy, Christendom reacted against the conciliar movement. Nevertheless, in France the result of the movement was the recognition by King Charles VII of episcopal rights. Through the Pragmatic Sanction of Bourges, a joint act between Charles VII and the bishops entered into in 1438, the French church became a virtually autonomous organization, the bishops being elected by their chapters and the abbots by their communities. The Pragmatic Sanction remained in effect, although submitting to occasional modifications, for nearly eighty years; and the doctrine of ecclesiastical Gallicanism which it represented was reenforced during the reign of Louis XII (1499-1515), who finding the bishops valuable allies in his war against Pope Julius II encouraged an outburst of pamphlets asserting their position. But in 1516 Louis' successor, Francis I, who desired to live at peace with Rome, superseded the Pragmatic Sanction by a concordat with Leo x, according to which he sacrificed the interests of the bishops in an arrangement highly advantageous to himself. The concordat endured as the definitive settlement until 1789 and the period marks the

effective realization of political Gallicanism. The bishops, far more shackled by the king, who according to the provisions of the concordat appointed them, than by the pope, who merely invested them with the spiritual insignia of their office, were soon reduced to a state of virtual vassalage to the crown. The king distributed bishoprics as favors in the families of his ministers, courtiers or officials and the recipients gave divers marks of their gratitude. Frequently they lent him financial assistance out of the very considerable incomes which their offices entailed, and always they supported him in his claims against Rome.

The coalition between monarch and bishops was officially recognized by the French church in the seventeenth century, when ecclesiastical Gallicanism received its classical expression from its most eminent representative, Bossuet. As promulgated at the Clerical Assembly of 1682, Bossuet's manifesto declared in its first article that the pope is without power in temporal affairs. The other three articles asserted that in matters spiritual the pope must respect the canons of the general councils, that in matters of faith his judgment becomes infallible only after receiving the approbation of the church, and finally that the Gallican church is entitled to preserve its traditional usages. During the seventeenth century and continuing through the eighteenth the theory of political Gallicanism on its side was being constantly restated and buttressed by the innumerable writers who commented upon the famous Les libertéz de l'église gallicane (Paris 1594) of Pierre Pithou. How strong was the allegiance of the articulate French public to the settlement sanctioned by the concordat became apparent when Louis xiv in his declining years abandoned the uncompromising Gallican policy of his prime and solicited the assistance of the pope against Jansenism. The bull Unigenitus of 1713, the condemnation of Jansenism with which the pope gratified Louis' request, aroused a storm of opposition which raged from the parlements as a center for thirty years. Gallicanism had indeed achieved such tremendous prestige in the eighteenth century that it stimulated imitation outside France. In Germany Bishop Hontheim (1701-90) instituted a movement known as Febronianism (from Hontheim's Latin pseudonym) modeled on ecclesiastical Gallicanism; while in Austria Emperor Joseph II thrust upon his hereditary dominions a replica of political Gallicanism which acquired the name of Josephism.

At the beginning of the French Revolution the Constituent Assembly of 1789 demolished the first estate as a privileged corporation; but it continued to be dominated by the essence of the Gallican tradition, the idea that the French church should be a national church. The Civil Constitution of the Clergy, by which the Assembly in 1790 reorganized the government of the church, was an attempt to strengthen that tradition. Contrary to expectation the Civil Constitution, which made the appointment of bishops and curés dependent upon popular election and transferred their salaries to the national budget, instituted a reactionary movement among the faithful, bringing the militant Catholics closer to Rome. The war thus unbridled between the revolution and the church continued until Napoleon negotiated the Concordat of 1801. According to the provisions of this pact Napoleon and Pope Pius VII agreed to reinstate the system established by Francis 1 for the appointment of bishops. That Napoleon really intended to extrude the influence of the papacy from the national church was amply demonstrated when he supplemented the concordat, without the consent of the pope, by the Organic Articles, which under the guise of police regulations gave him extensive powers of interference in the affairs of the clergy. But in authorizing and even forcing Pius VII to depose those prelates either émigré or constitutional who refused to resign in order to make way for the new regime of the concordat, Napoleon made a compromise with ultramontanism, the effects of which were never eradicated.

The mortal blow to Gallicanism was the transformation of the denominational state into a lay state. This process, begun by the revolution and continued under Napoleon, who refused to concede that Catholicism was more than the "religion of the majority," was finally consummated after the Catholic reaction of the restoration by the July Monarchy, which recognized the equality of all religions. Henceforth ultramontanism made rapid progress both among the clergy and the faithful of the laity. When at the Vatican Council of 1870 the papacy for the first time in history ventured a formal denunciation of Gallican doctrines, few French Catholics resisted his fiat or sought escape by joining the ranks of the Old Catholics in Switzerland.

But while the Gallican doctrine is obsolete it has been survived by the Gallican spirit, which certain Catholic groups hostile to papal intervention in French politics have perpetuated. Examples of such groups are the "rebellious royalists" who violently opposed the suggestion of Pope Leo XIII that they affiliate themselves with the republic; and the royalists of the Action Française, whose wrath has been aroused by the condemnation of their doctrines pronounced by Pius XI in 1927.

GEORGES WEILL

See: Religious Institutions; Secularism; Anticlericalism; Conciliar Movement; French Revolution; Concordat; Action Française.

Consult: Hanotaux, Gabriel, Essai sur les libertés de l'église gallicane depuis les origines jusqu'au règne de Louis XIV (Paris 1888), reprinted from the introduction to vol. i of Recueil des instructions données aux ambassadeurs et ministres de France à Rome . . . (Paris 1888); Imbart de la Tour, Pierre, Les origines de la réforme, vols. i-iii (Paris 1905-14) vol. ii, bk. i, chs. ii-iii; Galton, A. H., Church and State in France, 1300-1907 (London 1907); Mathiez, Albert, Rome et le clergé français sous la constituante; la constitution civile du clergé, l'affaire d'Avignon (Paris 1911); Weill, Georges, Histoire du catholicisme libéral en France, 1828-1908 (Paris 1909); Martin, Victor, Le gallicanisme politique et le clergé de France (Paris 1928); Préclin, E., Les jansénistes du XVIIIe siècle et la constitution civile du clergé (Paris 1928).

GALLIÉNI, JOSEPH-SIMON (1849-1916), French colonial administrator. Galliéni, a military colonial de carrière with a long experience, landed in Madagascar in 1896. Earlier in his career he had secured the treaty of 1881 with Ahmadou and in this Niger protectorate had worked out the "policy of races" which was to transform Madagascar. During the years from 1891 to 1895 he had subdued the remote provinces of upper Tonkin by a system which consisted of a gradual percolation of territory by non-military influences and which became widely known under the nickname tache d'huile. At the time of his arrival in Madagascar the colony was the determinant of French colonial policy, and during his nine years there he introduced an administrative technique which has since become the normal French practise. Breaking with the accepted colonial tradition of "assimilation" and ruthless exploitation in the exclusive interests of the mother country, his administration relied on more generous protectorate methods and on the tache d'huile system. He held that military conquest, while an essential preliminary to constructive organization, should be strictly subordinated to political pacification. In carrying out these principles Galliéni evolved an elastic policy which allowed each native race to develop to the limit of its possibilities. This policy—later called association or the collaboration of races by the French and indirect rule by the British—transformed Madagascar. "Galliéni received an insurgent forest," wrote Gabriel Hanotaux; "he made it a tranquil and prosperous colony." His program—even in such details as social taxation and agricultural education—was ahead of his time and at present is advocated as the ideal native policy for progressive colonial powers. It was this innovation which made Madagascar the seminar of a new system of dealing with native races and which, a successful military career notwithstanding, remains Galliéni's chief claim to fame.

STEPHEN H. ROBERTS

Works: Accounts by Galliéni of his reforms in Madagascar will be found in his Rapport d'ensemble sur la pacification, l'organisation et la colonisation de Madagascar (Octobre 1896 à Mars 1899) (Paris 1900); Madagascar de 1896 à 1905, 2 vols. (Tananarivo 1905); Neuf ans à Madagascar (Paris 1907).

Consult: Roberts, S. H., History of French Colonial Policy, 2 vols. (London 1929) vol. ii, p. 390-406; Ellic, P., Le Général Galliéni (Paris 1900); Grandidier, G., Galliéni: les grands figures coloniales (Paris 1931); Homberg, O., L'école des colonies (Paris 1929) p. 200-55.

GALLUPPI, PASQUALE (1770–1846), Italian philosopher. Galluppi's works are concerned chiefly with the problem of knowledge and with discovering a way out from subjectivism, which he still found in Condillac and Kant, in the direction of an objective doctrine of reality. But he also felt a lively interest in practical problems, and from his conception of an autonomous ethics he was led under the aegis of Filangieri to expound a theory of political liberalism. The state he defined as the guardian and champion of the natural rights of the citizen. It cannot compel its subjects to act against the dictates of conscience and hence cannot deny them civil and religious liberty. All the state can do is to limit the outward manifestations of these rights. Applying this principle to worship Galluppi defended the right of nonconformity and declared that the state can protect public worship from attack, but it can neither impose nor prohibit it. From this right of nonconformity Galluppi concluded that the concordat which left the control and regulation of marriage in the hands of the Catholic church as a sacrament was a violation of the natural right of the citizen. This for the time and place in which it was enunciated was a very bold and advanced idea. RODOLFO MONDOLFO

Consult: Tulelli, P. E., "Intorno alla dottrina ed alla

vita politica del Barone Pasquale Galluppi" in Reale Accademia di Scienze Morali e Politiche di Napoli, Atti, vol. ii (1865) 101-21; Gentile, G., Dal Genoresi al Galluppi (Naples 1903), and "Pasquale Galluppi, giacobino?" in Rassegna storica del risorgimento, vol. i (1914) 389-412; Mondolfo, R.. La filosofia politica in Italia nel secolo XIX (Padua 1924); Di Carlo, E., "Intorno agli scritti politici di Pasquale Galluppi" in University of Messina, Istituto di Scienze Giuridiche, Economiche, Politiche e Sociali, Annali, vol. iii (1920) 79-90.

GALT, SIR ALEXANDER TILLOCH (1817-93), Canadian business man and statesman. Galt was born in London and entered Canadian life in 1835 as a clerk in the office of the British American Land Company organized by his father, John Galt, which held over a million acres in what is now the province of Quebec. Within nine years he was in control of the highly successful colonizing company. Availing himself of the opportunities offered by increasing settlement and economic development, Galt went on to industrial undertakings and later into railway promotion. He became the outstanding figure in the railway activities of the fifties, interested chiefly in the roads which eventually became part of the Grand Trunk system.

It was then a short step from business to politics. Galt entered Parliament as a Liberal in 1849 and with one brief gap held a seat until 1872. He was throughout more a pioneer in policy than a leader of parties. Declining the premiership in 1858 he forced the Cartier-Macdonald ministry, which he entered in that year as minister of finance, to adopt the policy of federation of the scattered British North American colonies. His terms as finance minister, which were marked by administrative efficiency, saw the accomplishment of debt consolidation and the introduction of decimal currency. In spite of his free trade leanings he advocated "incidental protection" and achieved fiscal independence by his successful insistence on the right to tax British imports.

Galt was the most influential factor in shaping the details of the federal scheme which came into force in 1867. After confederation he served as first dominion minister of finance, advocating independence and later imperial federation, neither of which was adopted although both were present in the eventual synthesis of independence within the British Commonwealth of Nations. In the seventies he carried on a vigorous campaign against the ultramontane tendencies of the Roman Catholic church, expressing his views in two brochures, Civic Liberty in

Lower Canada and Church and State (Montreal 1876). His detached outlook gradually led him into international affairs as Canada's ambassador-at-large. He was the dominant member of the Halifax Commission, arbitrating the financial phase of outstanding fisheries questions between the United States and Canada. He became the dominion's foremost diplomat and in 1880 was appointed first Canadian high commissioner to London. Returning to Canada Galt devoted the final years of his life to the opening of the far west, in which he again demonstrated his lifelong trait of being in the forefront of decisive Canadian developments.

O. D. Skelton

Consult: Skelton, O. D., Life and Times of Sir Alexander Tilloch Galt (Toronto 1920).

GALTON, SIR FRANCIS (1822–1911), English psychologist and eugenist. Galton, a grandson of Erasmus Darwin, was born near Birmingham. After studying medicine at the Birmingham Hospital and in King's College, London, he was graduated in 1844 from Trinity College, Cambridge. He traveled extensively as a young man, especially in the Sudan and in southwest Africa. He never espoused an academic profession or specialty but preferred to direct his interests at different times to the diverse fields of anthropology, psychology, meteorology, genetics, natural history and criminology.

Galton has been most influential through his work in eugenics, a movement which he inauguraced in 1905. He founded a laboratory of eugenics at the University of London and at his death left to the university a fund for a professorship in the subject. His studies of genius and heredity, in which he failed to distinguish sharply between biological and cultural determinants of character and success, have had great influence upon later writers on heredity. In psychology he discovered the existence of imaginal types, initiated that branch of the science which deals with individual differences, and administered tests. He did important work in anthropometry and biometry, originating the process of composite portraiture and performing painstaking researches on fingerprints. It was largely through his efforts that Bertillon was persuaded to introduce the fingerprinting of convicts as a means of identification. His work on correlations has given the impetus to many investigations of a functional character in the field of education.

Galton was not crudite. His forte was not analytical philosophical analysis but vivid literary description and the social application of his laboratory findings. He was essentially a social reformer.

A. A. Roback

Important works: Hereditary Genius: an Enquiry into Its Laws and Consequences (London 1869, 2nd ed. 1892); English Men of Science: Their Nature and Nurture (London 1874); Inquiries into Human Faculty and Its Development (London 1883); Natural Inheritance (London 1889); Finger Prints (London 1892); Finger-print Directory (London 1895); articles on eugenics in Sociological Society, London, Sociological Papers, vol. i (1904) 43-50, vol. ii (1905) 1-53.

Consult: Galton, Francis, Memories of My Life (London 1908); Pearson, Karl, The Life, Letters and Labours of Francis Galton, 4 vols. (Cambridge, Eng. 1914–30); Constable, F. C., Powerty and Hereditary Genius; a Criticism of Mr. Francis Galton's Theory of Hereditary Genius (London 1905).

GÁLVEZ, JOSÉ DE, MARQUÉS DE SONORA (1720-87), Spanish statesman. Galvez studied law at the University of Salamanca and later practised in Madrid, where in 1764 he was appointed a municipal justice.

He was chosen visitor general of New Spain and an honorary member of the Council of the Indies in 1765. As visitor he inspected the departments of government in Mexico in order to improve administration and increase the revenues. He centralized the collection of taxes, established the tobacco and other monopolies and reduced peculation among financial and customs officials. He also helped to expel the Jesuits from Mexico in 1767, took measures for the defense of the realm and provided for the pacification of the north Mexican provinces. The frontier provinces were organized into the *comandancia general*, and, in 1769, upper California was occupied under his orders.

In 1775 he was appointed minister of the Indies and governor pro tempore of the Council of the Indies, with the right to vote in the absence of the president. As minister Gálvez considerably improved the whole colonial administrative system by carrying out the reforms he had suggested as visitor general. One of his greatest measures was the systematization of the administration of the colonies through the decree of 1786, which organized them into uniformly governed intendancies. This reorganization was especially directed toward greater centralization and the reform of the fiscal system and put new vigor into the decadent colonial administration. The system of restricted free trade,

established by Gálvez' reglamento of 1778, produced an era of prosperity in the colonies. In 1780 Gálvez became a member of the Council of State.

LILLIAN ESTELLE FISHER

Consult: Priestley, H. I., José de Gálvez (Berkeley 1916); Smith, D. E., The Viceroy of New Spain (Berkeley 1913) ch. vi.

GAMA BARROS, HENRIQUE DE (1833–1925), Portuguese historian. Gama Barros received his degree in law from the University of Coimbra in 1854. In the course of his successful career as a public official he held the office of secretary general and civil governor of the district of Lisbon in 1876 and again in 1878 and was president of the Tribunal de Cuentas, the highest administrative body in Portugal, from 1900 to 1910. He was connected with the liberal reform movement led by João Franco and in 1906 was made a peer of the realm with membership in the upper house. He was an active honorary member of the Academy of Sciences of Lisbon.

Gama Barros' chief work is the Historia da administração publica em Portugal nos seculos XII a xv (4 vols., Lisbon 1885-1922), a vast, thoroughly documented, analytical study of Portuguese social life in the Middle Ages. It begins with a description of the legal systems that governed mediaeval society; Visigothic, customary, charter, canon and Roman law and the general laws promulgated by the first Portuguese kings are explained. Royalty as the central organ of this society is studied in detail, with discussion of the extent of the king's power, of the advisers and officials who assisted him and of the limitations set to his arbitrary power by the Cortes and the immunities of the different classes. Interspersed are pages of critical comment on the old problem of the existence of feudalism in the Iberian Peninsula. A great deal of space in the first two volumes is devoted to a treatment of the various social classes, military organization, the Cortes and the economic and social life of the period. The third volume is a treatise on the regulation of various types of property rights, including possession, fishing, hunting, mining and prescriptive rights. Contracts, inheritance, tenancies and protective legislation are also dealt with. The last volume is devoted to agriculture, commerce and industry, the treatment of which, because of the author's intimate contact with original and largely unedited documents, is distinguished by its originality. Gama Barros'

scholarly work has had great influence and has given its author a leading place among the prominent historians of both Portugal and Spain.

FIDELINO DE FIGUEIREDO

Consult: Ots y Capdequi, José, "Gama Barros" in Anuario de historia del derecho español, vol. iii (Madrid 1926) p. 500-95; Figueiredo, Fidelino de, Historia da litteratura realista (2nd ed. Lisbon 1924) p. 83-86.

GAMBETTA, LÉON(1838-82), Frenchstatesman. Gambetta, a Genoese by birth, went to Paris in 1857 to study law and soon became known for his impassioned oratory and his hatred of the imperial regime. His contributions to the new Revue politique et littéraire gained for him a larger hearing, and in 1869 he was elected deputy. With Gambetta in the Corps législatif the popularity of Thiers' oratory was overshadowed. Like his older rival Gambetta opposed the Franco-Prussian War but once it had been declared he became the great patriotic orator of France. After the revolution of September 4 Gambetta as minister of the interior undertook the reorganization of the French army in the provinces. He came to regard himself as the defender of the frontiers and of the liberties of the people and opposed the peace counseled by Thiers. Gambetta's republicanism resembled that of the Restoration although he was always the advocate of legal and peaceable means. As long as the menace of a monarchical restoration remained, he was identified with the extreme Left, but when this likelihood was passed he used his great influence to rally moderate men to the republican idea. He advocated universal suffrage as a prerequisite to national sovereignty and upheld the principle of a powerful Chamber of Deputies elected by the nation and checked by an upper house. An uncompromising champion of religious toleration, he frustrated the attempt begun under MacMahon's regime to restore the power of the Catholic church. After Thiers' retirement Gambetta was the outstanding statesman of the young republic and upon the resignation of MacMahon was proposed as a presidential candidate. He refused, however, to allow his name to be brought before the National Assembly. Several months before his death, in 1882, he formed a ministry that was short lived. Gambetta in his later years was a strong advocate of a new colonial and foreign policy for France. He advised the establishment of a firm alliance with Great Britain and a policy of cooperation with that country in its Egyptian activities. The Freycinet cabinet,

however, lacked the courage to follow his counsel.

JOHN M. S. ALLISON

Works: Discours et plaidoyers politiques de Gambetta, ed. by Joseph Reinach, 11 vols. (Paris 1880-85).

Consult: Reinach, Joseph, La vie politique de Léon Gambetta (Paris 1918); Deschanel, Paul, Gambetta (Paris 1919). English translation (London 1920); García Kohly, Mario, Gambetta (Paris 1929); Stannard, H. M., Gambetta and the Foundation of the Third Republic (London 1921); Hanotaux, Gabriel, in Revue des deux mondes, 6th ser., vol. lx (1920) 5-23; Pratt, J. W., "Clemenceau and Gambetta —a Study in Political Philosophy" in South Atlantic Quarterly, vol. xx (1921) 95-104; Kühn, Joachim, in Der Nationalismus im Leben der dritten Republik (Berlin 1920) p. 11-20; Carroll, E. M., French Public Opinion and Foreign Affairs 1870-1914 (New York 1931) chs. iv-v.

GAMBLING

GENERAL AND HISTORICAL. The term gambling designates the deliberate wagering or staking of important or valuable considerations upon events which, so far as the parties to the wager can know, lie in the realm of pure chance, or "luck," to use the more or less mystical conception of chance common among gamblers. Games of chance are widely found among primitive communities. They are associated in the primitive mind with the disposition to personify all consequential objects and facts and to attribute events to the work of good or evil spirits. This animistic apprehension of things, which assumed the form of a widespread belief in luck, was and is a very persistent human attribute and constitutes an extremely important element in gambling. To the barbarian bent upon some perilous venture the disposition of the guardian spirit was of preeminent importance. His standing with the favoring or disfavoring deities was presumably disclosed by the results of situations of chance. In fact, the instruments of gambling were frequently used for divination. As the propitious gods shaped circumstances to insure the individual's triumph over the hazards of uncertain existence, they also directed the instruments of chance so as to reward their favorites.

As primitive man gradually came to regard certain aspects of his environment in terms of mechanical cause and effect, gambling became a more specialized activity and in its practise the animistic apprehension continued to enjoy free exercise. An individual had the favor of the deities, or was lucky, when the machinery of chance reacted in his favor. A wager almost invariably fortified his feeling of good luck, for it seemed unlikely to him that the forces com-

monly friendly to his interests would desert his cause in face of a generous display of faith in their benignity. The tense alertness induced by the suspense involved in the gambling situation exhilarated the human organism and very often may have enabled it to accomplish feats otherwise impossible. No doubt this contributed greatly to the persistence of the belief in animism or luck. A belief in luck is anachronistic in a machine age, but nevertheless it persists and goes far to explain the extent to which men still indulge the passion for gambling.

The line between gambling and other activities is often hard to draw. Even in the most static circumstances chance plays an important part in the distribution of gains and losses; and wherever the factor of pure chance can be segregated, activities that are essentially gambling may develop. Ordinary commercial transactions involve calculations based on rational data as to the future course of the market; but the data are never exhaustive, and in default of certainty action may be dominated by a spirit of "plunging" virtually identical with gambling. It is particularly difficult to distinguish the gambling element from others in the specialized transactions known as speculation.

In its simplest form speculation is the act of buying or selling commodities, securities or rights in order to benefit from changes in their prices. In so far as the speculator is governed by rational calculations based on factual data, however inadequate, the transaction is essentially commercial. When he buys or sells simply in the blind hope that the market will turn his way he is gambling. In some jurisdictions the legal distinction turns on the point of bona fide delivery, as on the organized exchanges. Bucket shop transactions are readily and correctly classified as gambling, since they are nothing but betting on the changes of prices. Where delivery is made the gambling element may still predominate, especially where speculation is carried on with perilously narrow margins. As in a lottery, a small sum, although it will probably be lost, may possibly yield enormous gains.

Of purely gambling activities the simplest are those for which the circumstances of chance may be reestablished easily and frequently at the will of the participants and in which the elements of skill and foreknowledge of the outcome are reduced to a minimum. These requirements have contributed greatly in ancient and modern times to the popularity of the die and its variations. For the same reasons simple games of

cards, in which the results are more dependent on fortuitous distribution than on the skill of play, have enjoyed wide popularity among gamblers. In simple dice and card games the duration of suspense and uncertainty between the casting of the dice or the dealing of the cards and the examination of the results is relatively short and allows frequent repetition. Such games are often the chief forms of gambling offered by public gambling houses and have been favorite subjects of ingenious although futile schemes for defeating the laws of probability.

More complicated games and feats, requiring fortitude and skill, have frequently acquired importance as gambling opportunities. These games may be indulged in for their own sake, and when wagers are laid they are as often laid to heighten the winning side's ascendancy at the cost of the loser as they are for profit. Sometimes this love for emblematic representation of prowess is satisfied by a very mild sort of gambling in the form of prizes for the winners. Where the gambling feature emerges as one of the most important features of the contest, the element of pure chance is segregated so far as practicable through odds and handicaps which neutralize the effect of the differing degrees of skill possessed by the contestants. Within this class of gambling situations would be included sedentary games and athletic contests, in which some of the partisans may participate directly in the play, and also horse racing and animal combats, where the partisans simply sponsor one side.

Testimony before the subcommittee of the United States Senate Judiciary Committee in 1920 held that race track gambling in the United States resulted in wagers amounting to \$230,-000,000 annually. In view of the fact that race track gambling is legal in only four states of the union, these figures proclaim the existence of an efficient and far flung under cover organization which is further attested by the ever present "dope" sheets and bookmakers throughout the country. In Great Britain, where race track gambling is the most popular form of gambling in connection with sports, testimony before the House of Commons Select Committee on Betting Duty in 1923 variously estimated that in spite of laws designed to curtail such gambling from £75,000,000 to £500,000,000 was wagered annually on horse races and sports. Public betting in Great Britain was conducted almost entirely through bookmakers until after 1926, when financial difficulties moved the government to tax race track gambling and in order to simplify

the collection of taxes to authorize the adoption of the *pari mutuel* gambling machine. This machine automatically records the bets and determines the odds in accordance with the relative popularity of the different entries among the bettors. Although perhaps occupying a relatively less important position as a gambling opportunity, horse racing is quite popular in France and accounts for a substantial amount of betting. Race track gambling is legally permitted in many other countries, among them Australia, Belgium, Canada, Cuba, India, Italy and Mexico.

In recent years there has developed in the United States a form of public gambling which in its illegality and complicated under cover organization, with thousands of agents and millions of participants, resembles the surreptitiously conducted race track gambling. There are several variations of the conditions of chance employed and the games have different names, such as policy games, numbers and pools. They are in fact lotteries which pay on number combinations taken from the published records of bank clearings, the United States Treasury balance, the total number of runs scored each day by various combinations of baseball teams and so forth. These lotteries are designed primarily although not exclusively for players of small incomes, and wagers as low as one cent are frequently accepted. In this way millions of dollars are wagered annually.

The gaming tables formerly so popular in England, in Germany and on the American western frontier have largely passed from public view. They have been suppressed by law in England and Germany; and in the United States Nevada is now the only state which legally sanctions the public gambling house. That such enterprises exist surreptitiously, however, is a matter of common knowledge and is formally evidenced by the occasional disclosures of law enforcement bodies. An indication that many citizens of those countries in which public gaming tables are illegal are not opposed to this type of play is to be found in their presence in the gambling casinos in Mexico, Cuba and some of the countries of Europe where such gambling is permitted under a licensing system.

In 1902, after Belgium passed a law prohibiting public gambling houses, Monaco stood alone as the only country in Europe openly permitting them. Today the casino at Monte Carlo is still one of the most popular in the world, and the little principality of Monaco secures practically all of its revenue from gaming tables. Hundreds

of thousands of visitors are attracted annually by the mere existence of the casino and these visitors spend huge sums at hotels, cafés and shops. The annual government charge for the gambling concession was £80,000 in 1917, £90,-000 in 1927 and will be £100,000 in 1937. The "take" in 1928 was \$5,766,104 while the net profits were \$3,227,213. The attraction which Monte Carlo holds for tourists has loosened the ban in France so as to permit competing gambling casinos. French casinos enjoyed a combined annual income of approximately 400,000,-000 francs from 1926 to 1929 and numbered 169 in 1931. Since the World War Italy in her effort to attract and to hold tourists has licensed two such establishments. In 1930 the Free City of Danzig on the Baltic, in an endeavor to share in the gambling revenues, licensed an international gambling association for a consideration of 1 per cent of the funds received by the association.

But the gaming communities described above are frequented chiefly by the aristocratic and moneyed elements of society. Although such gaming has attracted most attention because of the dramatic qualities attached to it, gambling among the masses and in the middle class represents a more pervasive influence. Card playing for small stakes is a common accompaniment of middle class social life; small bets on horse racing and the policy and number games are diversions of the masses; and card and dice games have found their way down to the juvenile gangs and the street trades. The earliest opposition to gambling seems to have manifested itself when it began to interfere with activities which in the opinion of the ruling authorities should have first claim upon the time and energy of the masses. In ancient communities laws were passed to discourage the masses from gambling, and at later dates antigambling laws were aimed especially at the activity as practised by the working classes. An edict of the provost of Paris in 1397, for example, specifically prohibited working people from playing tennis, bowls, dice, cards or ninepins on working days.

Present day movements to suppress gambling are also tinged with the opposition that is shown toward anything which impairs the usefulness of the masses. The willingness of people to impose prohibition of gambling upon themselves and others regardless of social status, however, obviously includes other considerations. Gambling sets at defiance the bourgeois philosophy which holds that private property is something which the individual has earned and which in the na-

ture of the case tends to be commensurate with the service rendered. Rewards which are determined by chance have no place in a system based upon such a premise. It is interesting to note that the opposition of the leisure class to gambling within its own circle has never been very pronounced. To the members of this class riches have a more direct relationship to inheritance than they do to personal efficiency in conventional industrial and commercial operations, and therefore the bourgeois philosophy has exerted less influence. In well settled societies where it is virtually impossible for the ordinary worker to save enough to rise out of his class gambling, particularly in forms involving great prizes on small stakes, as in lotteries, is extremely popular among the unpropertied classes. In most of Europe it is widely regarded as the duty of the head of the household to acquire a chance in every lottery drawing.

Gambling is incompatible with Puritan ascetism, which (unlike Catholic asceticism) was carried into the workaday world in the form of industry and frugality. The acquisition of property according to the Puritan outlook was not supposed to be the result of chance, but the evidence of work for the glorification of God. The result was that an accumulation of material goods came to be regarded as symbolic of the attainment of divine grace by the possessor. In urban communities in the past few decades the purely religious opposition to gambling has tended to become less violent. This is partly the result of the difficulty of maintaining a hostile attitude toward the conventional category of gambling when certain activities, highly reputable according to prevailing social standards, have come more and more to resemble it. The religious opposition to gambling is still conspicuous, however, in those communities where Puritanism persists, and may even be extended to opposition to devices usually associated with gambling even when not used for that purpose.

At all times an impo.tant factor in arousing antagonism to gambling has been the association, almost inevitable, with sharp practise. Loaded dice are as old as recorded history; marked cards, sleight of hand manipulations in play, machines rigged to the advantage of the house, race horses "doped" or "sponged," prize fighters bribed by insiders to "throw" the bout, false tips in the bucket shops—such devices are innumerable. The very existence of the professional gambler is evidence of the ease with which crooked practises may be applied.

In recognition of the constant temptation to trickery gambling has developed everywhere codes even more rigorous than are applied to ordinary business transactions. The merchant is easily forgiven even grave misrepresentation of the quality or value of goods. Similar over-reaching in gambling, if detected, carries disgrace and ostracism. In comparatively recent times in the western United States it was not unusual for each party in a poker game to have on the table at his right hand a pistol loaded and cocked for use on the first evidence of cheating. Manslaughter in such circumstances was condoned by the community, even when the killer was a professional gambler covering his dishonesty by murder. How common the civil disorders associated with gambling may be is indicated by the colloquial designation of gambling resorts as "hells." Such resorts may continue to operate in spite of their repute, because the constant movement of population brings ever new victims.

Only in new societies, particularly mining camps, do the public authorities ignore gambling altogether. In established societies more or less serious attempts are everywhere made either to prohibit or to regulate gambling in its more notorious forms. Such regulations are among the most difficult to enforce adequately even by an honest and intelligent police administration because of the ease with which gambling operations can be carried on under cover and because of the extremely spasmodic interest of the public in the suppression of gambling. The administration of gambling laws and regulations lends itself readily to the practises of political corruption, since the outlawed position of both victim and exploiter offers the latter unexampled opportunities for plunder which in times of public apathy may be made entirely safe by the purchase of police tolerance.

COLLIS STOCKING

LEGAL ASPECTS. The law of gambling comprises two types of alcatory transactions: gaming and wagering. Both the criminal and the civil law have dealt with gambling but often upon mutually inconsistent principles. The criminal law has shown a greater instability than any other type of moral legislation. The civil law has been bedeviled by the impossibility of distinguishing objectively between a wager and the contingency of an ordinary business contract. At one time insurance contracts lent themselves particularly to gambling. Contracts of security were once regarded fundamentally as wagers and

the pledge was treated as a stake, as is shown by the terms wadia in the Lombard law and Wette in the early German law.

Very little is known of the ancient law of gambling. The penal provisions of even the Roman law remain very obscure. Indeed it seems that at the end of its development the Roman law discouraged gambling only civilly. It distinguished between prohibited and permissible games. The latter were certain sporting or warlike games (si quis certet hasta, vel pilo iaciendo vel currendo, saliendo, luctando, pugnando, quod virtutis causa fiat), but the stake could never amount to more than one solidus. No action would lie to recover money won at prohibited play or a wager upon an illegal game. A leading feature of the Roman law was that it allowed gambling losses to be recovered. The owner of a house who allowed gambling in it could not sue because of any injury to his person or property during the progress of play, but a right of redress existed as among the players themselves.

A well known passage in Tacitus (Germania, 24) describes the gambling fever of the ancient Germans, who would stake not only their possessions but their very liberty at dice. The utmost gambling freedom continued to prevail legally among all the Germanic peoples in the centuries after the dissolution of the Roman Empire. In both the Germanic laws and the early English common law gambling debts were normally collectible and wagers enforceable, but at common law the keeping of a common gambling house was indictable as a public nuisance. The bewildering profusion of legislation does not begin in European countries until the later Middle Ages. In England the earliest statute appeared in 1388 (12 Rich. 11, c. 6); in Germany, in 1207 in a law for the town of Regensburg; in Austria, in the Salzburg Landesordnung of 1328; in France, in two ordinances of Louis IX in 1254 and 1256 respectively

Most of these postmediacval statutes may be described as police legislation. Sometimes playing at certain times or places might be regulated; thus playing at Christmas might be allowed, while playing in an inn or tavern after curfew time might be prohibited. Some provisions permitted gambling in prisons, which at this time did not offer their inmates any other occupation. The class stratification of the passing Middle Ages showed itself in numerous laws which sought to measure the permissible size of stakes for gentleman, burgher or servant. But often certain games might be prohibited altogether,

and these might include not only cards and dice but such games of skill as are now generally regarded as innocent; for instance, quoits, ninepins, billiards, bowling or tennis. But the motive of such legislation was less to save the subject from ruin than to direct his energies to games of military vantage. Thus the ordinance of Philip the Fair of 1319 interdicted games which distracted men from military drill; the ordinance of Charles v of 1369, which forbade games of chance, enjoined practise with the bow or crossbow. So too did the first English statute of 1388; and the statute of 1541 (33 Henry VIII, c. 9), which is still the basis of the English law of gambling, was entitled the Bill for Maintaining Artillery, and the Debarring of Unlawful Games.

The present criminal law of England with respect to gambling is a conglomeration of statutes old and new. Under the surviving provisions of the statute 33 Henry VIII, c. 9, no games are made absolutely unlawful in themselves, but it is criminal to keep a gaming house for the purpose of playing at games of cards or dice or any other game which is unlawful. Various subsequent statutes expressly declared certain games to be illegal in themselves, for instance: the ace of hearts, faro, basset and hazard by the act of 1738 (12 Geo. 11, c. 28); the game of passage and other games with dice except backgammon by the act of 1739 (13 Geo. 11, c. 19); and roulette by the act of 1744 (18 Geo. 11, c. 34). The most important modern act, the Gaming Act of 1845 (849 Vict., c. 109), expressly excepted games of skill. The keeping of a gaming house is still indictable at common law, but prosecutions are usually had under a long series of statutes intended either to broaden the basis of complicity or improve procedure. A private club, such as the famous Tattersall's, has been held to be within the law. By the Metropolitan Police Act of 1839 (2 & 3 Vict., c. 47, § 48) the players in a gaming house may themselves be liable. By the Betting Act of 1853 (16 & 17 Vict., c. 119) a common betting house was assimilated to a common gaming house.

In the United States the common law has also been almost completely superseded by plentiful statutory provisions, which run particularly to the blue law type. Many laws are aimed at specific games, and sometimes playing for excessive stakes is prohibited. A great deal of legislation relates merely to the time, place or circumstances of play. A favorite form of American legislation is aimed at the act of keeping gambling implements. In recent years many laws

have either prohibited pool rooms altogether or regulated them stringently. The opportunity for gambling provided by such a sport as boxing has motivated antiboxing legislation in some states. A growing amount of legislation is specially directed against slot machines and punch boards.

Probably the chief difference between the modern English law and the continental criminal law of gambling is formal. The provisions of the penal codes are few and brief, with the result that the continental law is largely jurisprudential; despite many textual differences continental courts tend to reach much the same results. The French and Belgian codes speak of keeping a gaming house; the Italian, of conducting a game in a house; the Austrian, of allowing a game of chance in one's place; the German, of running a game of chance as a business; but such provisions tend to become assimilated under the general doctrines of the criminal law. The conduct of a game of chance in a street or public place has also been a common object of prohibition. The German code expressly extends to gambling in a private society or club, but the same result seems to have been achieved jurisprudentially in France. Express provision, however, is necessary to make the players as well as the professionals in a gambling house liable, a course taken by the German, Austrian, Italian and Norwegian codes. The inclusion of the players was one of the objects of the amendments to the German penal code in 1919 which were dictated by a post-war gambling fever.

The Austrian and Norwegian codes attempt something in the way of a general definition of a game of chance, but irrespective of such statutory prescriptions it seems everywhere to be considered as any game in which chance preponderates; thus mixed games of skill and chance are reached. The Austrian code expressly excepts games played for mere amusement, but the innocence of such games has been generally recognized by decisions. The tests are the size of the stakes and the social position of the players. The codes generally contain no express provisions as to betting, but the courts have nearly everywhere assimilated betting to gaming for all practical purposes. Betting becomes criminal when it is indulged less from motives of sustaining opinion than from the desire to gamble and particularly when it assumes indiscriminate or organized forms. In the determination of the legality of particular games or betting transactions the continental law as a result of the silence of the codes is far more flexible than the English.

Indeed the law of czarist Russia generally forbade games of cards or dice or similar games but left it to administrative order to determine the criminality of particular games; this is still true in Austria, where the practise goes back for several centuries.

In continental countries the prohibition of gambling has always had something of a police rather than a truly penal character, for since the mediaeval period gambling houses have often been legally allowed by the sale of governmental concessions at the same time that they have been forbidden by the general criminal law. Whatever scruples may have existed were sometimes satisfied by providing that a part of the revenues should go to eleemosynary purposes, a practise that still sometimes obtains with respect to gambling forfeits. Particularly in eighteenth and nineteenth century France and Germany did the gambling casino become almost a settled feature of the famous watering places or resorts. Gambling casinos were finally abolished in Germany at the time of the formation of the North German Confederation in 1868; the prohibition went into effect in 1873. The Swiss federal constitution of 1874 also interdicted gambling banks but apparently roulette was nevertheless allowed in the large Swiss cure centers until 1925. France has at various times prohibited gambling casinos but has restored them. The most famous of all modern gambling casinos is that at Monaco. Nevada, which in 1931 legalized public gambling, is the only American state to have done so, but elsewhere gambling in political clubs has been virtually privileged; indeed the use of the injunction against police interference is not unknown. Lotteries (q.v.) also represent a legalized form of public gambling in many countries.

The most important form of modern organized betting is in connection with horse racing. In England the Betting Act of 1853, which declared a common betting house a criminal resort, simply drove the bookmakers to the street. Both the French and German courts held bookmaking to be criminal under the codes but also to no avail. These countries as well as many others have legalized betting on the races in one form or another. France first did so in 1891, Germany in 1905 and England in 1928; in the last named country the action was no doubt partly a result of post-war budget difficulties; wherever betting has been legalized the rate of taxation has been very high and the yield large. In the United States race track betting is now legal in Kentucky, Illinois, Maryland and Nevada. The betting scheme which has most frequently been allowed is either the pari mutuel or the totalizator, but recently European countries tend also to permit licensed bookmakers. New York which once allowed race track betting, has not only repealed the enabling law but embodied a clause against the practise in its constitution.

Upon the civil side modern European countries, despite the general reception of the Roman civil law, have followed its example only in part. After much vacillation the Germanic idea that a gambling debt was a debt of honor triumphed in the end in the Bürgerliches Gesetzbuch and those codes which have followed it: neither ganibling debts nor wagers are actionable and gambling losses may not be recovered. On the other hand, with respect to wagers the Code civil and the codes of the Latin countries have generally retained the Roman exception in favor of wagers virtutis causa, which are, however, generally valid only with respect to the contestants themselves and must not be excessive. The Code civil also expressly allows the recovery of gambling losses in cases of cheating. England abrogated the rule of the common law by the Gaming Act of 1845, which made gambling debts and wagers unenforceable. In the United States the same result has been reached either at common law or by statute in many states, although in about half gambling losses may be recovered. In some states the wife or next of kin may also sue; the Italian code contains a similar provision.

A technique of evasion, however, which has met with a large measure of success in the courts, has everywhere tended to nullify the civil gambling restrictions. Loans made for gambling purposes may often be recovered. Negotiable instruments furnish a ready means for evading the law. Valid almost everywhere except in a few American states in the hands of innocent holders for value, a winner can easily collect a gambling debt by negotiating a check or note to another party. Money in the hands of a stakeholder may very generally be recovered so long as it has not actually been paid over. Gambling losses may sometimes be recovered in the case of fraud even in the absence of express provision. The most curious rule of all is one that allows the winner to sue the loser if he has extended the time for payment or refrained from posting him in his club, for such forbearances are held to constitute "new" consideration.

As a problem for the law gambling presents all the usual dilemmas of moral legislation, which always stands a greater chance of success when it attempts to control rather than to prohibit. All laws that attempt to deal with more than the most marked evils of organized gambling tend to become dead letters. Indeed, when the actual range of police activity is realistically considered, there is probably little difference in the operation of the normal law in most countries.

WILLIAM SEAGLE

See: Morals; Speculation; Lottfries; Amusements, Public; Sporis; Animism; Play; Divination.

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GAME LAWS are legal limitations upon hunting and fishing. The earliest forms of limitation were the food tabus of primitive societies, some of which practically led to closed seasons on various kinds of game. Other tabus and customary sanctions in some areas curtailed excessive hunting and fishing and others prohibited entirely the killing of certain animals. Herodotus suggests that the elaborate restrictions protecting the sacred animals of Egypt were of a sacerdotal origin.

Another type of game law is the restriction of hunting and fishing rights to a particular group. This is most remarkably exemplified in the forest laws of feudal Europe, by which the privilege of hunting was confined to kings and noblemen. The restrictions were motivated primarily by the theory generally held in military societies that the pursuit of wild animals is a school for war and that only warriors should engage in it. The Persians certainly held this view. Cicero states clearly that "we take the large savage beasts by hunting, partly for food, partly to exercise ourselves in imitation of martial discipline." That feudal principles were recrudescent in the later Roman Empire is evidenced by the law of Commodus making it penal to kill, even in self-defense, the African lion, which was reserved for the imperial hunt.

The forest laws of western Europe are derived, in the opinion of most scholars, from the Frankish royal ban, of which there is evidence at least as early as Charlemagne, on hitherto lordless forests as well as on the woods hypothetically held in common by the so-called markfellowships. A fully developed theory of hunting as a royal prerogative was put into effect in the mediaeval empire under the Franconians. In

France this privilege was shared by the great fideles of early Capetian times, among them the duke of Normandy, who probably had a well developed forest system in the duchy before William conquered England. The forest laws and administration attained their greatest elaboration in England under the Norman and Angevin dynasties, and because of the opposition they excited in the baronage and community they had an important place in English constitutional history. Henry 111's Forest Charter of 1217 is almost as rich a constitutional document as the Great Charter itself.

In England game was classified as of the forest, park, chase and warren. The king reserved the beasts of the forest to himself and derived considerable revenues from the sale of royal game. The afforestation of lands held by subjects, the chief abuse to which the baronage took exception, was designed to encourage the propagation of royal game and to provide sanctuary. It did not destroy the tenant's basic interests in the tenement but placed many restrictions upon their exercise and saddled the afforested region with a system of administrative officials and courts, with powers and principles unknown to the common law. This system declined under the Lancastrians and was used by the early Stuarts merely as a means of raising money by fines. Gradually the privilege of hunting was extended to the landed aristocracy; yet even Blackstone states that the king's prerogative gives him an exclusive hunting right over his whole realm, adding that this is little known or considered.

After the reception of the Roman law on the continent the Roman doctrine that wild animals were res nullius was interpreted to mean that "a Sovereign, if he thinks it for the Interest of the Kingdom, may, against the consent of the common People abridge them of the Liberty of Hunting without any Injustice." The ancient forest privileges of royalty had been long alienated to feudatories or allowed to lapse. By the sixteenth century, however, a new royal right of the chase was widely asserted by the continental dynasties, based no longer on feudal but on quasi-Roman law, the law of nations principle. In France even the nobility were allowed to hunt only for the royal pleasure and the notorious system of capitaineries, which recalls the rigors of the English forest law, was established. With the decay of feudal society the association between chase and war was replaced by the substituted concept of the chase as sport, a pursuit marking the moneyed man of leisure but unsuitable for the laboring man as drawing him from his work and encouraging robbery.

When the French Revolution wiped out royal and noble privileges, there went into effect the rule derived from Roman law that game belongs to nobody and that it becomes the property of the one who reduces it to possession, whether on his own land or on that of another. This doctrine was probably imported into the English common law. Legislation in most countries where the civil law has been received has tended to increase and protect the interest of the proprietor in the game within his property, although it has not departed formally from Roman doctrine. The decree of the French National Assembly of 1790 reserved hunting rights to the proprietor while the law of 1844 gave further protection to these rights. An analogous series of statutes was enacted by the English Parliament in the eighteenth century and culminated in the Night and Day Poaching acts (9 George IV, 69; 1 & 2 William IV, 32; 2 & 3 William IV, 68). These proceed on the common law doctrine that there can be no property in wild animals until they have been reduced to possession, but they make trespass criminal if it be for the purpose of killing or taking game. Thus, to all intents and purposes, only an occupier is permitted to exercise his common law right to acquire property in game. These laws were a corollary of tenure by free and common socage, which after 1660 replaced all feudal tenures save those of grand serjeanty and frankalmoign and included a grant of hunting and fishing rights within the tenement. These rights had from Norman times been reserved to the crown and had never been included in the ordinary estate of the subject either in England or on the continent.

Since the leveling principles of the French Revolution permitted a great increase in the number of sportsmen, it became apparent that wild life might soon be entirely extinguished. Furthermore, the financial gain from hunting and fishing, by no means overlooked in the mediaeval English forest administration, added to the danger of this eventuality. The poor rapidly passed from the mere assertion of their right to be sportsmen to the legal and illegal exploitation of game for profit. Wholesale and quite unsportsmanlike methods of taking animals and fish were resorted to and the city markets were flooded with the results of the catch. Even birds not ordinarily considered

game, whose insectivorous habits favored agriculture or whose song or plumage delighted the nature lover, were threatened with extinction. The French law of 1844 initiated the modern movement of enacting legislation designed primarily to prevent the extinction of whole species of living creatures; this was slowly followed throughout Europe and North America. Very primitive precedents can be found for this type of legislation. The Mosaic code provides that female birds shall not be taken when they are hatching their eggs or caring for their young. A curious passage in the *Analects* indicates that Confucius favored a similar principle. "The Master said: There is the hen-pheasant on the hill bridge. At its season! At its season! Tzŭ-lu took it and served it up. The Master thrice smelt it and rose."

The general principles of modern game laws vary little in the different jurisdictions of Europe and America. They include a closed season in which the hunting of a given species is forbidden, a limit to the take in the open season, regulation of the sales of game, the absolute protection of non-game birds and of certain species close to extinction and obligatory licenses for hunters, the last chiefly for the purpose of providing revenue for the enforcement of the laws. An international convention was entered into in 1902 for the protection of migratory birds useful to agriculture. In most states of the United States the game law authorities are also empowered to attempt the restocking of forests and waters. In Europe efforts along these lines are generally conducted by private enterprise. Most jurisdictions confer extensive public powers of law enforcement on the representatives of the numerous societies interested in the conservation movement. Soviet Russia confers the right of hunting everywhere within its territories, subject to the usual closed seasons and the reservation of certain sanctuaries and frontier areas.

In western Europe the conservation and reproduction of game and fish belong to the administrative law. In the United States the right of the states to enact laws for these purposes has been challenged on constitutional grounds. Their constitutionality has been maintained upon two grounds. It has been upheld upon the doctrine borrowed from the quasi-Roman principles mentioned above and stated thus: "Wild game within a state belongs to the people in their collective sovereign capacity. It is not the subject of private ownership except in so far as

the people may elect to make it so" [Geer v. Connecticut, 161 U. S. 519, 529 (1896)]. It has also been sustained as a reasonable exercise of the police power "to preserve a food supply," by analogy with decisions upholding pure food laws [New York ex rel. Silz v. Hesterberg, 211 U. S. 31 (1908)]. Many states now include a declaration of the state ownership of game and fish in their legislation.

The arguments presented in favor of preserving wild life through game laws are not completely convincing. So far as its food supply is concerned, the human race could certainly subsist if every wild species including deep sea fish were utterly extinct. The value of birds as destroyers of insects admittedly does not equal that of chemical poisons. The conservation movement of the last hundred years stems not so much from a scientific recognition of man's needs as from romantic humanitarianism. It is probably in part a recrudescence of the primitive human sense of the common destiny of living things; for there is a deep rooted fear that species as well as individuals are subject to death, a fear based perhaps upon a half conscious awareness of the mutual interdependence of all species and of the possibly fatal consequences to the human species if the natural balance is disturbed.

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See: Conservation; Hunting; Fisheries; Sports; Humanitarianism.

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GANGS. The gang is historically significant chiefly as it is associated with frontier conditions or with social or political disorganization. In preliterate groups primary group organization largely precluded the development of gang behavior. In ancient and mediaeval society, however, wherever local or national government had been weak or ineffective there was a tendency toward the formation of aggregations of bandits. Yet these robbing and marauding bands were often organized on a basis of tribal affiliation of blood relationship rather than of common interests economic and otherwise which often bind together groups of diverse membership in modern industrial society. The lack or breakdown of stable agencies of social control in frontier societies, the ease of escape from authority and the lack of settled community life constituted the typical setting of pre-industrial gang activities. As the American frontier, for example, moved westward it was characterized by a great variety of lawless gangs, of which Jesse James and his outlaws were in the public mind the archetype. Australia, Russia, Mexico, China and other areas which were sparsely settled or in process of settlement or which were not readily reached by constituted authority formed a natural habitat for lawless gangs. Before the effective organization of maritime power the pirate group constituted the gang of the sea (see BRIGANDAGE; PIRACY).

Modern life has created a new type of gang whose principal features, best defined in the juvenile stage, are determined by the conditions of life in the modern industrial city. There is, however, a similarity between these and the frontier gangs. A study of the formation of the modern gang reveals that the juvenile gang emerges from play groups and similar aggregations of boys which form most readily in the congested and disorganized portions of the community. It is thus in a sense a frontier product, thriving on the economic, political, cultural and moral borderland of modern life. Since it is so closely correlated with community disorganization it may best be considered a socially interstitial group—one that has its genesis and finds its function in the interstices left by social disorganization.

Although formed spontaneously in response to certain conditions of living the gang is integrated through conflict. It coalesces and acquires solidarity as a result of meeting hostile forces in its local neighborhood or elsewhere. From the standpoint of development three types of gangs are found, each merging into the other and all three constituting stages through which a single gang may pass. The diffuse type is a loosely knit group in the early stages of integration. The solidified type represents the completion of the process of integration and consequently possesses a high degree of solidarity and morale. The conventionalized gang appears when such a group assumes the external characteristics of a club or some other formal pattern. Certain age types may also be distinguished, although there is much less segregation on the basis of age than has been commonly supposed. Many gangs aspire to become clubs, and most of the groups assume some conventionalized form as their members grow older. Some of these clubs try to be financially independent, but it is easier to be subsidized by politicians or keepers of saloons and speakeasies. Most of them retain their basic gang characteristics even with the more formal type of organization.

It is, however, essential to distinguish between the juvenile or adolescent gangs, which although under the sorry auspices of modern urban slum life must be considered as recreation groups, and the adult criminal groups, whether organized as secret societies (see Camorra; Mafia; Secret Societies) or for racketeering (q.v.). Recent developments in American urban life have given the racket a recognized economic status and have made it a definite part of the political texture of the community, so that it has come to be something more than merely the adult stage of the juvenile gang. The juvenile gang is still important as a "feeder" for the racketeering "mob," and its members are increasingly influenced by the argot and behavior of the elders.

The dominant motive in the life of the gang boy is a desire for new experience or some form of excitement. He finds this in his games and sports and athletics, in patronage of commercialized recreation, in stimulants and gambling and in predatory exploits. He lives in a world of adventure which it is difficult for the unseeing adult to comprehend. His imaginative exploits are often meaningless to the unsympathetic outsider but full of significance for the group itself. Gang activities often take on some of the aspects characteristic of political units in warfare or the struggle for power. Each gang has its local territory which it defends against outsiders, and at the center of this is the "hangout," or territorial headquarters. There is a sort of struggle for existence in gangland which necessitates that every gang shall be on the defensive or offensive

for play privileges, property rights, the physical safety of its members and the maintenance of its status in the neighborhood. These conflicts develop into endless hostilities in some cases, taking the form of deadly feuds among the older beer running gangs. In homogeneous neighborhoods gangs are composed of boys of the same nationality who carry on wars with those of other nationalities, particularly if those nationalities were traditionally hostile in Europe. In heterogeneous neighborhoods, however, there is a rough democracy which enables boys of all nationalities and both the white and Negro races to mingle on a basis of equality. Negro and white gangs are found to be bitter enemies only when they live in adjacent neighborhoods that are unadjusted to each other.

Beyond the territory proper of the gang are usually certain favorite "playgrounds," which include congested and exciting business streets, rivers, canals and water fronts, the "bright lights" areas and the parks. In this area the members of the gang spend most of their time, and here they pick up their effective education. In fact, the physical layout of the city may be regarded as part of a "situation complex" which is an important factor in conditioning and directing the life of the gang; this is particularly illustrated by the relation between the location of the railroad tracks and "junking," an almost universal activity of the gang. Beyond this area lies, even further away, the lure of the unexplored.

The gang in the American city is to be found primarily among the immigrant population. This is in no sense to be attributed to biological factors or to innate dispositions but rather to their economic status and the conditions of living that prevail among them and the cultural dislocation effected by their transplantation. The child of the immigrant tends to escape parental control and become superficially Americanized. The normally directing institutions of family, school, church and recreation break down on the intramural frontier of gangland, and the gang is built up as a substitute structure to fill the gap and perform their functions of control. The escape from control seems to apply more to boys than to girls, who except in rare cases when their homes are not functioning do not form gangs. The explanation for this may be in the fact that girls are too well incorporated in the organized life of even the disorganized community to escape control. It may, however, be attributable also to the discrepancy between the traditional forms in which the impulse to play expresses itself in each sex. The effects of social disorganization are more evident among younger girls in individual delinquency than in gang exploits. It is significant in this connection that among the younger gangs the attitude toward girls is largely hostile, since they interfere with gang activities, but that this does not preclude an extensive interest in sex. Among the older gangs, where the play impulse has given way to a more serious interest in crime, this hostility is largely broken down. Their members frequent dance halls and engage in irregular sex relations, and women often participate in the exploits of the criminal group.

The gang thus becomes the major educational agency and control group in the lives of an appreciable portion of each new generation. It performs this function with a precision usually denied to the accredited institutions. Since it is largely isolated from the life of the dominant and reputable groups of the community it comes into constant contact with but few social patterns that are not disorganizing. Its morality is largely determined in this way. The social patterns for the younger gangs in a neighborhood are set by the older groups and gang clubs, which in turn are influenced by the vice, gambling, crime and general lawlessness with which they are surrounded. Gang boys are subjected largely to the education of the streets and this is reflected in their speech, their songs and verses, their nicknames and the names adopted for their clubs. For an earlier generation the dime novel furnished an imaginative release and a pattern of conduct, but this has been replaced by the moving pictures, chiefly "Westerns" and gangster dramas, which the gang boy finds tremendously absorbing. To achieve the unity and solidarity necessary to the execution of common enterprises the gang, like other groups, uses such mechanisms as punishment, ridicule and applause and also the unreflective controls involved in mutual excitation and rapport, which often lead to the perpetration of foolhardy and lawless acts. The gang code, usually an unreflective structure, may be thought of as its "action pattern" and calls for a distribution of the membership according to importance, with a leader, an inner circle, the rank and file and finally the "fringers," or hangers on.

The extent to which the gang has entered into the texture of modern urban life is indicated by the present writer's study of gangs in Chicago, which disclosed 1313 groups in the city

and its environs, composed for the most part of boys and young men between the ages of ten and twenty-five and including or directly influencing from 25,000 to 35,000 persons. Studies in other American cities have revealed similar conditions prevailing in typically interstitial or gangland areas. Hardly any industrial city in the United States is without gang areas and even the smaller towns and rural communities of the industrial type often exhibit similar phenomena. Similar conditions on a lesser scale exist in the industrial cities of western Europe, although the problem is not so acute in London, Paris and Berlin as in Chicago or New York, largely because of more stable community life, more homogeneous population groupings and better police organization and control.

The problem that the gangs pose lies largely in their connection with crime and political corruption. The younger adolescent gangs are responsible for the bulk of minor delinquencies. The outlook and the habits acquired in gang association encourage truancy, running away from home, rowdyism and ultimately criminality. Almost every influence to which the gang boy is subjected leads toward criminality—including his visits to correctional institutions, which in many cases eventually turn him out a finished criminal. The serious crime of the cities is largely carried on by the older gangs, which include many adolescents in their membership. These gangs are often affiliated with criminal rings and rackets, for which they perform tasks requiring action and "strong arm" work. Behind the gang and the racket stands the politician, and the gang structure facilitates a corrupt alliance between crime and politics. The influence of the politician often begins even with the young adolescent group, with which he ingratiates himself by subsidies of various types. He patronizes the dances and celebrations of the gang clubs, gives them money and secures for them charters and immunity from official interference. In return the gangs get the politician good will, support him on election day and do strong arm work at the polls. If a gangster or racketeer gets into a petty difficulty with the law, the local politician knows how to smooth things over, and in the case of more serious crimes it is often possible for the influential politician effectively to hold up or divert the machinery of criminal prosecution.

The analysis of the gang phenomenon points the way to a method of attacking the problem. Traditional methods of dealing with the gang boy, as used by the police and the courts, treat him as if he existed in a social vacuum. What is most essential is the attempt to ameliorate some of those conditions of community disorganization, largely incidental to industrialization and urbanization, which characterize the intramural frontier and of which the gang is merely one symptom. Such a process of achieving basic control would take place only gradually and would involve the reorganization of family life, the integration of the immigrant cultures with the American, the lessening of poverty and the rehabilitation of the school, the church and organized recreation. In the meantime the existing gangs and those in process of formation must be recognized and their energies redirected into channels more compatible with the social interest. This has been done successfully in two ways: by making the gang a club and giving it the supervision necessary to make its activities more wholesome and by absorbing it into some larger institution and creating new interests and new loyalties which will have meaning within the larger framework.

FREDERIC M. THRASHER

See: Lawlessness; Rackettering; Brigandage; Smuggling; Liquor Traffic; Machine, Political; Immigration; Juvenile Delinquency; Boys' and Girls' Clubs; Play; Recreation; Frontier; Feud; Outlawry; Tongs.

Consult: Thrasher, Frederic M., The Gang: a Study of 1313 Gangs in Chicago (Chicago 1927), containing a bibliography; Illinois Association for Criminal Justice, Illinois Crime Survey (Chicago 1929); Bolitho, William, "The Gangster Traumatism" in Survey, vol. lxiii (1929-30) 661-65, 688; Duffus, R. L., "The Function of the Racketeer" in New Republic, vol. Iviii (1929) 166-68. For some of the earlier studies see Sheldon, Henry D., "The Institutional Activities of American Children" in American Journal of Psychology, vol. ix (1897-98) 425-48; Hartson, Louis D., "The Psychology of the Club" in Pedagogical Seminary, vol. xviii (1911) 353-414; Puffer, J. A., The Boy and His Gang (Boston 1912); Furfey, P. H., The Gang Age (New York 1926). See also Warner, M. L., "The Influence of the Mental Level in the Formation of Boys' Gangs" in Journal of Applied Psychology, vol. vii (1923) 224-36; Asbury, Herbert, The Gangs of New York (New York 1928); Glueck, S. and E , 500 Criminal Careers (New York 1930); Moley, R., Politics and Criminal Prosecution (New York 1929) ch. i.

GANIVET, ANGEL (1865–98), Spanish author and political theorist. Ganivet studied philosophy, literature and law at the University of Granada and was subsequently Spanish consul at Antwerp, Helsingfors and Riga. His preoccupation with Spain and his love for that country found their expression in his writings, which

exercised a strong intellectual influence upon the literary generation of the early twentieth century. Many of his writings were published in *Defensor de Granada* before appearing in book form. The popularity of his system of thought, which reveals the influence of the stoics and of Nietzsche's philosophy, has, however, recently declined, because of the unfavorable criticism of Ortega y Gasset.

Ganivet's chief theoretical works are *Idearium* español (Granada 1897, 4th ed. Madrid 1920) and El porvenir de España (1898; published with Hombres del norte, Madrid 1905), in which he attempted to interpret the spirit of the Spanish people and to establish norms for the future development of the country. He saw the origin of Spain's decadence in her conquest of America and in her general policy of imperial expansion. His plea was for a nationalism which would make the homeland the field of its ambitions and which would have as its primary purpose the spiritual regeneration of the Spanish people. He vigorously disapproved of the frivolity of his time, which cloaked itself under pompous rhetoric, thus agreeing with his more profound contemporary Unamuno and with other slightly younger members of the literary generation of 1898, Baroja, Azorin and Valle-Inclan. All of them were keen critics who cleared the air of the false spiritual values which dominated Spain during the period of its colonial disaster.

Ganivet's political ideas contain obvious contradictions. Democrats and those opposed to democracy were able to find in his books arguments in defense of their positions. He was firmly opposed to regionalism, which he regarded as an attempt to create artificial political units. The natural unit, he thought, was the municipality, which should have jurisdiction over all matters except those of a purely national interest.

Ganivet was also the author of autobiographical novels, plays and works on aesthetics and literary criticism. In his *Cartas finlandesas* (1896-97; published Madrid 1905, 3rd cd. 1913) and *Hombres del norte* (Madrid 1905) he introduced to Spain the spirit of the Scandinavian countries and their outstanding literary figures, such as Jonas Lie, Björnson and Ibsen. He possessed a highly personal point of view, but his critical judgments were not always effective.

JOSÉ OTS Y CAPDEQUI

Consult: Fernandez Almagro, M., Vida y obra de Angel Ganivet (Valencia 1925); Jeschke, H., in Revue hispanique, vol. lxxii (1928) 102-246; Navarro de Ledesma, F., and others, Angel Ganivet (Valencia 1905).

GANS, EDUARD (1798-1839), German jurist. Gans became the representative of Hegelianism among the German legal historians of his time. He derived from the historical school but transcended its teachings in his systematic conception of law and legal history, in his insistence upon speculation as well as historical research and in his interest in universal legal history. He early involved himself in a controversy with Savigny; his stand took courage, considering the dominance of the historical school at that time. Gans' point of view in Roman law was based on his identification of obligations with rights of action, and hence he recognized the difference between the actiones stricti juris and actiones bonae fidei as the fundamental ground of distinction in the Roman law of obligations, a distinction which, as he showed in his first book, Uber römisches Obligationenrecht (Heidelberg 1819), could be made very fruitful in treating its problems. A commentary upon Gaius, Scholien zum Gaius (Berlin 1820), also supported his scheme of systematization. In the introduction to his chief work, Das Erbrecht in weltgeschichtlicher Entwicklung (4 vols., Berlin 1824-35), he showed how Hegelianism had led him away from the historical school. Gans distinguished legal science from mere legal knowledge and in legal science distinguished between the philosophy and the history of law. In the former the law is considered as it exists without reference to time, in the latter as it necessarily unfolded and developed in time. From this point of view Gans traced the development of the law of inheritance from the Indian, Chinese, Oriental and Greek law to the Roman law and thence to the Romanic, the Anglo-Germanic and the Scandinavian law of the Middle Ages. His recognition of the different determining factors in these bodies of law makes his work a true excursion into comparative law. The lively political sense of Gans was exemplified in his essays on the revision of Prussian law and on foreign political problems.

MARTIN BUSSE

Other works: System des römischen Zivilrechts im Grundriss (Berlin 1827); Über die Grundlage des Besitzes (Berlin 1839).

Consult: Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880–1910) vol. iii, pt. ii, p. 354–69.

GANTT, HENRY LAURENCE (1861-1919), American management engineer. Gantt was educated at Johns Hopkins University and

Stevens Institute of Technology and was in the employ of Frederick W. Taylor from 1887 until 1902, when he became an independent consultant. His first and most noteworthy contribution to the technique of scientific management was the task and bonus system of wage payment, generally considered the most satisfactory among differential wage systems of reducing labor costs; its elements are a guaranteed daily wage plus a bonus contingent on achievement of a predetermined output. The second was the "Gantt System" of recording graphically current financial, sales, production and other operating conditions in such a manner as clearly to disclose variations from standards. The third was the spirit in which he devised and utilized this graphical system. Being inclined toward opportunism and more interested in practical improvement than in engineering perfection Gantt gradually minimized the methods of precise measurement and predetermination characteristic of Taylor and Gilbreth, relying on voluntary improvement of operating conditions by management and workers jointly through the educating disclosures of his charts.

II S. Person

Important works: Work, Wages, and Profits (New York 1910, 2nd ed. 1913); Industrial Leadership (New Haven 1916); Organizing for Work (New York 1919). Consult: Drury, II. B., Scientific Management (3rd ed. New York 1922) p. 122-25; Clark, Wallace, The Gantt Chart, a Working Tool of Management (New York 1922).

GEORGIY GAPON. APOLLONOVICH (1870-1906), Russian priest and labor leader. Gapon was of peasant origin. He studied at the theological seminary in Poltava and later moved to St. Petersburg, where he continued his studies at the theological academy and acted as priest in a poorhouse. His interest in labor and social reform attracted the attention of the Russian police, particularly Zubatov, one of its officials who at that time was active in organizing a monarchist trade union movement to counteract the growing influence of revolutionary socialism. Gapon, a man of ability inspired by a kind of Christian socialism, undertook the task and succeeded in setting up a number of monarchist workers' organizations in St. Petersburg. He was, however, soon captivated by the growing radicalization of the working masses; and when the demonstration organized by his followers on January 9, 1905 (old style), to petition the czar for constitutional reform ended in the slaughter of the demonstrators by military detachments,

Gapon in and against the czar and called for open rebellion. He was forced to flee the country. As an émigré Gapon enjoyed great popularity, but although he continued to be active in the cause of the revolution he never gained the complete confidence of the revolutionary circles. In the autumn of 1905 he returned to Russia but did not participate in the October revolutionary movement. Premier Witte entrusted him with the task of publishing a Russian paper abroad, but the sheet never appeared. Gapon returned again to Russia; in an effort to obtain funds he offered his services to the secret police and undertook to deliver information concerning the activities and leadership of the socialist revolutionaries. He approached Pinkas M. Rutenberg, a prominent leader of their organization, who agreed to supply the information and who arranged for a secret meeting with Gapon. When the latter repeated his request-this time in the presence of several party members hidden in an adjoining room—he was immediately put to death. Gapon left few followers and his organization soon ceased to exercise any influence in the revolutionary movement of Russia.

VLADIMIR BOURTZEFF

Gonsult: Gapon, G., The Story of My Life (London 1905); Hurwicz, Elias, Staatsmanner und Ibenteurer (Leipsic 1925); Ainzaft, S., Zubatowshehma i Gaponovshehma (The movements of Zubatov and of Gapon) (4th ed. Moscow 1925); Rutenberg, P. M., Ubrystvo Gapona (The assination of Gapon) (Leningrad 1925).

GARCÍA MORENO, GABRIEL (1821–75), Ecuadorian statesman. García Moreno was educated at the University of Quito, where after postgraduate study in Europe he became a professor of chemistry. His political activities were at first journalistic: he founded several polemical journals, including the *Nación*, and initiated the struggle against the military triumvirate consisting of Generals Urbina, Franco and Robles. He was president of Ecuador from 1861 to 1865 and again from 1869 until his assassination in 1875.

During his presidency, which was in effect a dictatorship, García Moreno tried to apply the doctrines he had advanced as a political agitator. His program may be divided into three phases: reaction, organization and finally consolidation. He founded a civil regime and eliminated the reign of militarism, which had rendered material progress and cultural development impossible. Once order was established, financial reforms were instituted and primary and higher education, especially in the natural sciences, was promoted. At Quito there was built an astronomical

observatory which García Moreno hoped with the cooperation of all civilized countries to make the best in the world. One of his important achievements was the completion of 260 kilometers of the great southern highway.

An ardent Catholic, García Moreno believed the church to be the sole instrument for effecting social and political regeneration and accordingly he wished Catholicism to be the nerve center of the Ecuadorian nation. In 1862 a concordat was concluded with the Holy See by which Catholicism was recognized as the sole religion of Ecuador; it guaranteed the church a number of privileges, including the supervision of education, and allowed ecclesiastical law a wider jurisdiction. The preponderant influence of the church during his rule resulted in the establishment of a virtual theocracy. García Moreno has been one of the most discussed of the Spanish-American rulers; a monster and tyrant to some, he appears to others a hero and martyr.

CARLOS PEREYRA

Important works. Escritor y discursos de Gabriel García Moreno, ed. by M. M. Pólit Laso, 2 vols. (Quito 1923). Consult: Velloso Rebello, A., in Instituto Histórico e Geographico Brasileiro, Revista, vol. lxxvii (1922) 75–214; Bunge, C. O., Nuestra Imérica (6th ed. Buenos Aires. 1918). p. 282-300; Gaicía Calderon, F., Les démocratics latines de l'Amérique (Paris. 1912), tr. by Bernard Miali as Latin Imerica: Its Rise and Progress (London 1913). p. 215–21; Tobar Donoso, Julio, "García Moreno y la instrucción pública" in Academia Nacional de Historia, Quito, Boletín, vols. iii—vii (1921–23).

GARDEN CITIES. What have come to be known as garden cities are new communities developed in accordance with certain principles set forth by Sir Ebenezer Howard (1850-1928) in his book Tomorrow (London 1898, 2nd ed. 1002). Howard conceived the idea that the problems of congestion in large cities and depopulation of country districts must be solved together. To accomplish this purpose he advocated the redistribution of industry and population in comparatively small urban units so developed as to provide the combined advantages of town and country life. His proposal was that limited dividend companies be formed to purchase an area of open land of sufficient size to enable the building of a new self-contained town with a belt of agricultural land surrounding it.

It was essential to his project that the town be planned in advance so as to secure adequate facilities for industries and a wholesome environment for the workers' homes; that the town area be restricted in size so as to prevent its encroaching on the agricultural belt; and finally that the interest on the capital applied to the development of the town be limited to 5 or 6 percent, all profit (above the amount of this interest) derived from the increase in the value of the land and from the public utilities to be reserved for the community. It is obvious that such a scheme could be made successful only as a result of the attraction of a sufficient number of manufacturing plants to the site acquired to provide the means of employment for the desired population.

The term itself was originally used in the United States by A. T. Stewart, who founded Garden City, Long Island, in 1869. While this was to some extent a well planned community providing a partial example of industrial decentralization, it had few features in common with the kind of community visualized by Howard.

At the time Howard's book was published two large manufacturers in England had already demonstrated the feasibility and desirability of the dispersal of industries from crowded centers to open suburban areas and of the building of model villages for their employees. One of these enterprises was carried out by George Cadbury in the Cadbury chocolate works at Bournville, and another by W. H. Lever (afterward Lord Leverhulme) at Port Sunlight.

The publication of Tomorrow and the demonstrations given by the Bournville and Port Sunlight experiments led to the organization of the First Garden City, Ltd., in 1903. This company purchased an estate of 3822 acres (which was later increased to 4552 acres) at Letchworth, thirtyfour miles north of London. Capital was obtained in ordinary shares and loan stock at fixed dividends of 5 and 6 percent. In 1930 there were in Letchworth about 15,000 people and many manufacturing plants with the services and facilities of a well equipped municipality. The public utilities are owned by the community, and Letchworth is now on a firm financial basis. The plan prepared for the city provided for a population of over 30,000 and for reservation of an agricultural belt of about 3000 acres. The system of tenure is leasehold; leases are granted for ninety-nine years.

The second English garden city was started at Welwyn, Hertfordshire, twenty miles from London, in 1919. It differs from Letchworth in being near enough to the metropolis to invite a considerable "dormitory," or suburban, population but is also to a large extent a self-con-

tained town with its own industries. The population reached about 10,000 in 1931 and is rapidly increasing.

In the United States the new town of Radburn, New Jersey, is being developed on garden city lines by the City Housing Corporation which was responsible for the cooperative garden suburb Sunnyside in Queens, New York City. The site of Radburn is in the borough of Fairlawn, Bergen county, and is only thirteen miles from New York City. Because of the impossibility of obtaining land so near the metropolis at rural prices the estate is not large enough to permit of a permanent rural belt. It is also limited chiefly to persons who work in New York, Patterson and other large cities in the vicinity. But it has been planned in advance and interest on the capital invested has been limited to 6 percent. The outstanding feature of this American example is that the town has been planned for the motor age and is laid out in a series of main highways for traffic with closed end residential streets and pathways to park areas, playgrounds and schools so laid out that children need not cross streets. In some cases this involves the construction of underpasses or bridges between the main blocks.

In the English garden cities the degree of community ownership is strong and individual ownership weak as a result of leasehold tenure of lots; at Radburn the outright sale of the lots with the houses lessens the strength of community ownership.

Many garden villages have been developed by manufacturers for their employees and contain some of the outward features of garden cities. Such villages include Hershey, Pennsylvania, and Bournville and Port Sunlight in England. Most of the so-called garden cities on the continent are in fact industrial villages sponsored by employers, the only single instance of a near approach to a garden city being that of Hellerau in Germany. In suburban districts model neighborhoods known as garden suburbs have been developed at Hampstead, London, at Forest Hills, New York, and elsewhere, but their cost makes them available for middle class and salaried workers rather than for wage earners.

It has been proved that garden cities have several distinct values as object lessons in housing reform and town development. They provide the opportunity of obtaining a healthy social and physical environment by intelligent planning *ab initio*; they assist in decentralizing industry and population and in reducing the

traffic congestion resulting from the distance between homes and places of employment; and they demonstrate the economy and convenience that can result from a well balanced arrangement of functions and building densities. Moreover, they are so organized as to prevent speculative land subdivision with all the waste that it involves. The movement, which is represented by an international association, has influenced the character of development in satellite cities, cooperative housing schemes and in company and government housing enterprises. While the rapidity of growth and the number of garden cities have not fulfilled the expectation of their founders, they have been successful in educating public opinion and in influencing legislation to a much greater extent than was anticipated. Among other things they have demonstrated in England that it is economically unsound to crowd houses on the land in excess of an average of twelve houses to the acre. They have given a new direction to housing reform and promote lower building densities and higher artistic standards in existing city regions. These results have been achieved partly through new legislation giving effect to garden city ideas and partly by the voluntary adoption of these ideas by private developers of urban neighborhoods.

In spite of these social values it is doubtful that garden cities can be built in great numbers in any country. The chief difficulty lies in obtaining the necessary money for financing them. To initiate the building of a garden city it is essential to form a corporation of persons interested, for the purposes of raising capital, acquiring a suitable area of land, attracting manufacturing plants and organizing the development of the town. Another difficulty arises from the fact that garden cities compete with existing cities, which do not want to lose their industries and taxpaying population. Money for their development has to be obtained from private sources and so far much of it has had to be provided on a semiphilanthropic basis. Experience shows that they can be made to pay their way to a moderate extent. They have neither the prospects of high profits nor the dangers of great losses incidental to ordinary commercial enterprises. To make them pay well rapid building is essential, and this involves more available capital than it has been possible to raise in any of the existing experiments. While some government aid has been given to assist garden city housebuilding in England, it will probably always be necessary to rely on private effort and private finance. While this doubtless means that their number will be limited, as social experiments garden cities will be effective and valuable in proportion as each project is well conceived and well executed rather than in proportion to their increase in numbers.

THOMAS ADAMS

See: CITY; URBANIZATION; HOUSING; CITY AND TOWN PLANNING; REGIONAL PLANNING; COMPANY HOUSING; SUBURBS.

Consult: New York Public Library, Select List of Works Relating to City Planning and Allied Topics (New York 1913) p. 26-28; Purdom, C. B., The Building of Satellite Towns (London 1925); Pink, L. H., The New Day in Housing (New York 1928) chs. viiiix; Nitot, Henri, Les cités-jardins (Paris 1924); Culpin, E. G., Garden City Movement Up-to-Date (London 1913); United States, Senate, Committee on Agriculture and Forestry, Garden City Movement Hearings, 64th Cong., 2nd sess. (1917); Adams, Thomas, "The Planning and Subdivision of Land-Planning and Development of Self-Contained Communities' in Regional Survey of New York and Its Environs, vols. 1-viii (New York 1927-31) vol. vii, p. 254-69; Kampffmeyer, H., Die Gartenstadtbewegung (Leipsic 1909, 2nd ed. 1913), and Grunflächenpolitik und Gartenstadthewegung (Berlin 1926); Lindemann, K. H., "Gartenstadtbewegung, Stadtverwaltung und Bodenreform" in Schmollers Jahrbuch, vol. xv (1931) 225-80; Salomon, II., Gartenstädte (Berlin 1913); Benoit-Lévy, G., La cité-jardin, 3 vols. (Paris 1911); Schiavi, A., Le case a buon mercato e le città giardine (Bologna 1911).

GARDINER, SAMUEL RAWSON (1829-1902), English historian. Gardiner is recognized as the preeminent authority on the first half of the seventeenth century in England, from the accession of James 1 to the death of Oliver Cromwell. Although he took a first class in literae humaniores at Oxford the fact that he was of the Irvingite persuasion rendered a further academic career at the university impossible in those days when religious tests were still rigid. As the result of prolonged studies in the British Museum and the Public Record Office, supplemented by occasional visits to continental archives, he produced between 1863 and 1901 his great work on the history of England, covering the years from 1603 to 1660.

He took infinite pains in his preparation, learning several languages and reading hundreds of letters of contemporary public men in order to become thoroughly acquainted with their personalities. In dealing with a highly controversial period, treated by previous historians with varying degrees of religious or political bias, he displays a remarkably sober detachment, unprejudiced by royalist or parliamentary

partisanship. For the first time James, Buckingham, Coke, Bacon, Charles, Strafford, Laud and Cromwell are portrayed with discerning knowledge and insight. The account of Bacon's impeachment especially is a model of tolerant and discriminating analysis; James' knowledge and intelligence together with his infirmity of purpose are clearly presented; the "apostasy" of Strafford is put in its true setting; and Cromwell is pictured as a sincere opponent of tyranny in church and state forced by the logic of circumstances to become a dictator. The twofold aspect of the Puritan revolution, political and religious, is for the first time adequately unfolded and the interrelation of foreign and domestic history is patiently and skilfully developed.

While Gardiner's style lacks vividness and color, while he paid little attention to social, economic and literary aspects of his theme, and while some inconsistencies have been pointed out in his estimates of men and policies, his extensive research, his thoroughness and grasp and his sincere effort to tell the truth enabled him to produce a survey of the period which in its political, ecclesiastical and military phases will probably never be superseded.

ARTHUR LYON CROSS

Works: History of England from the Accession of James 1 to the Outbreak of the Civil War, 1603–1642, 10 vols. (London 1863–82); History of the Great Civil War, 1642–1649, 4 vols. (London 1886); History of the Commonwealth and Protectorate 1640–1660, 3 vols (London 1895–1901); Constitutional Documents of the Puritan Revolution (Oxford 1889; 3rd rev. ed. 1927); Student's History of England, 3 vols. (London 1890–91; new ed., 1 vol., 1920); Cromwell's Place in History (London 1896, 3rd ed. 1897); Oliver Cromwell (London 1899).

Consult: Usher, R. G., in American Historical Association, Annual Report (1910) 123-32; Rhodes, J. F., Historical Essays (New York 1909) ch. vii; Gooch, G. P., History and Historians in the Nineteenth Century (London 1913) p. 359-65; Shaw, A. W., A Bibliography of the Historical Works of Dr. Creighton, Dr. Stubbs and Dr. S. R. Gardiner (London 1903).

GARIBALDI, GIUSEPPE (1807–82), Italian patriot. The chivalric heroism of Garibaldi's military exploits and the glamour of his idealistic nature made him appeal to the imagination of the masses more than any other figure of the Italian *Risorgimento*. He was not merely a patriot; his ideal of redeeming his native land was but one aspect of a broad humanitarianism which embraced the ideals of justice, liberty and brotherhood for all peoples. His native impulses first received direction in 1833, when after a youth

passed before the mast on Mediterranean merchant vessels he joined Young Italy and imbibed Mazzini's political doctrines. Plunging enthusiastically into the plots by which Mazzini was attempting to further his twofold purpose of expelling Austrian authority and influence from Italy and of uniting the various Italian states into a single republic, he was condemned to death by Charles Albert of Piedmont in 1834. He escaped and from 1836 until 1848 remained in South America. There he participated in the insurrectionary movements in Brazil and in Uruguay's struggle for independence against Argentina, giving evidence of great military valor. The revolutionary movement of 1848 brought him back to Italy, where in the name of the cause of Italian unification he organized his famous troop of volunteers. The two most important exploits in which he engaged as commander in chief of the volunteers were his brave but unsuccessful defense of the short lived Roman Republic which Mazzini established in 1849 and his victorious expedition to Sicily and Naples in 1860, when with his thousand "red shirts" he overthrew the Bourbon monarchy and made possible the accession of these important states to a united Italy. His participation in the movement of 1860, which culminated in the establishment of the kingdom of Italy under the Piedmontese dynasty, came as the result of a momentous decision made in 1854 upon his return from his second exile after the fall of the Roman Republic. At that time he had separated from Mazzini, the uncompromising republican, and allied himself with the Piedmontese monarchy, which under the leadership of Cavour and Victor Emmanuel had formulated a national liberal policy. Since in the critical period between 1855 and 1861 Garibaldi's example influenced other republicans and great numbers of the masses to join the national monarchical party, his decision was of tremendous significance in the course of the Italian Risorgi*mento*. After the expedition of the Thousand his name became a household word; and the hero's glory was enhanced by the modesty and simplicity with which he declined all rewards and withdrew to the remote island of Caprera, there to live the simple life of a farmer while awaiting new opportunities to devote himself to the cause of liberty and democracy. Always the most indomitable champion of the liberation of Rome and the overthrow of the temporal power of the popes, he viewed with great impatience Rome's continued segregation from the kingdom of Italy after 1860; several times he was prevented from

invading the Papal States only by the forceful intervention of the Italian government. He followed the vicissitudes of the American secessionist struggle with intense interest and for a while meditated organizing a force to assist the South. In 1870 he went to France to fight for the republic against Prussia. In the midst of his warrior's career he never forgot that the supreme ideal of humanity is peace founded upon justice, and he offered his name and eloquence in support of the pacifist movement. After the liberation of Rome was finally accomplished in 1870 he dedicated his last years to improving the condition of the masses, openly sympathizing with socialism, which to him seemed a movement of social redemption. His death was mourned by democracy throughout the world.

PIETRO SILVA

Works: Scritti politici e militari, ricordi e pensieri inediti, collected by Domenico Ciampoli (Rome 1907); Epistolario di Giuseppe Garibaldi (1836 82), ed. by E. E. Ximenes, 2 vols. (Milan 1885); Mémoires de Garibaldi, ed. by Alexandre Dumas, 5 vols. (Naumburg 1860-61), tr. by R. S. Garnett (New York 1931); Memorie autobiografiche (Florence 1888, 11th ed. 1902).

Consult: Guerzoni, G., Garibaldi, 2 vols. (3rd ed. Florence 1889-91); Fabieti, E., Garibaldi (Milan 1930); Trevelyan, G. M., Garibaldi and the Making of Italy (New York 1911), Garibaldi and the Thousand (London 1909), and Garibaldi's Defense of the Roman Republic (new ed. London 1908); Holland, R. D., Builders of United Italy (New York 1908); Marriott, J. A. R., Makers of Modern Italy (London 1889) p. 54-78.

GARMENT INDUSTRIES. The garment industries as treated here will be restricted to the "needle trades"; that is, the manufacture of men's, women's and children's wearing apparel, both ready and custom made, together with their auxiliary groupings. The organization and importance of the manufacture of clothing for sale have always been largely influenced by the characteristics and extent of the market. In the Middle Ages the market was of course not only local but small. Such clothing as was produced outside the home was made to order by the guilds of women dressmakers and tailors. The poorer classes were supplied by the second hand clothing dealers, organized in a separate guild, for the sale of new ready made clothing was forbidden except during the merchants' and tailors' fairs. Moreover, as in other industries of the period, production was rigidly controlled. Both the guilds and the municipal authorities carefully regulated the quality and price of the garments, and their control over the industry extended even to regulation and guaranty of the wages of the journeymen.

For many decades after the breakdown of the guild system the lack of a market caused the clothing trades to remain relatively insignificant. Even when homespun was replaced by the products of the textile mill and fabries declined in price, the industry expanded but little. In the eighteenth and the early nineteenth century clothing was not produced in factories employing large groups of workers despite the rapid spread of this system throughout other industries. Traveling tailors and small custom order shops supplied the well to do; shirts and underwear were made at home until the middle of the nineteenth century; in agricultural sections the farmers' wives made all garments. The industry's rapid development during the latter part of the nineteenth century was a phase of the industrialization of handicrafts; it was contemporaneous, whether as cause or effect, with the increasing tendency for families to adopt the method of purchase in place of home manufacture for supplying the needs of daily life. The requirements of the working classes indeed had already brought about a considerable traffic in second hand clothing, and establishments for renovating and distributing such clothing had existed in all parts of Europe in the eighteenth century. Another factor leading to the fabrication of ready made clothing was the desire of the custom tailors to produce for an outside market during the periods of seasonal lull; this resulted in the commercial development of the clothing trades on the small shop and home work basis long before production was organized in the large factory. In Germany the same tendency was to be seen; in the early eighteenth century the master tailors had statutes passed which permitted them to keep ready made clothes in stock-an cifort to ameliorate the effects on the custom trade of the depression of the period. The mass market, however, was still only potential; the wages of factory workers did not yet permit the spending of much money on clothing, especially as prices were comparatively

But the existence of a potential market led to modernization within the industry, facilitated by a series of technical inventions of which the earliest and most important was the invention of the sewing machine in 1846. Steam power was used as early as 1865 in England. Thereafter, beginning about in the seventies, the introduc-

tion of the standard pattern and of the button sewing, buttonhole and pressing machines were rapid stages in the mechanization of clothing production. By the middle of the nineteenth century the manufacture of clothing showed signs of developing from a small home industry producing for a local and restricted market into a modern factory industry with its division of labor, a standardized product and a swiftly expanding market. The development of transportation facilities, urbanization and higher standards of living contributed along with inventions to the growth of the market, as did the social acceptance of uniform and standard goods which accompanied general industrialization.

In England the expansion was rapid after the invention of the sewing machine, and by 1890 wholesale tailoring was well established. At present the industry employs over half a million workers, three fourths of whom are women. The handicraft tailors number only 20,000 and are rapidly giving place to the large manufacturer of high class custom and ready made garments. The village tailor and dressmaker, who never supplied a product of high quality, have been driven out by the growth of wholesale production of cheap ready made and, recently, custom made clothes. Many firms making ready made clothes have developed their own retail stores, as in the United States, while retail tailors now increasingly maintain their own manufacturing, or "inside," shops. The handicraft tailors, one quarter of whom are concentrated in the West End of London, are now chiefly occupied in the making of men's suits, riding breeches and uniforms. All other branches of the trade, including even overcoats and ladies' outer garments, are rapidly being absorbed into the factory industry. Although there has been a marked increase in the use of machinery in the past fifteen years, there is less standardization of process in both the wholesale and retail custom trades than in the United States. Competition remains the dominant factor, but there have been large amalgamations since the World War among the big stores retailing clothing.

The development of the clothing trade in France was similar to that in England, yet France remains today the outstanding example of the custom industry, chiefly because of the leadership of Paris as the international buyers' market for women's clothing. The development of large scale factory production has been checked by the persistence of home work, which exists for the same reason that the subcontracting system is

found in England and the United States-it affords a cheap labor supply and is easily adjustable to market and seasonal requirements, and the cheapness of the sewing machine makes large and concentrated investment of capital unnecessary. Home work is most widely extended in the making of women's wear; in this trade it produces the cheapest and the best garments, while the factories turn out the medium priced garments. A possible explanation of the prevalence of home work and handwork is the encouragement by both government and unions of the establishment of trade schools, which turn out highly skilled workers in the tradition of luxury production pervading most industries of France. The production of ready made garments has gone farthest in the manufacture of underwear, women's cloaks and blouses and men's clothing. The last named branch of the industry is relatively concentrated; the making of women's ready made outer garments is scattered in many small firms, whose volume of business amounts to only several million francs a year. But since the couturiers may employ from 100 to 1000 workers and the large department stores also sell custom made clothes, the custom trade and small scale industry are not necessarily synonymous in France. In general there has been an increase in the number of large and small houses since 1901 to the exclusion of the medium sized firm. In 1921 the clothing workers numbered 1,215,000, of which 280,000 were in Paris and its environs. There has been a tendency for the numbers employed in the trades to decrease, particularly in the women's custom branch, which is at present still the largest, employing over 500,000 workers. The production of ready made clothing, however, has been expanding; the number of workers employed increased from 91,000 in 1906 to 104,000 in 1921, and the spread of industrialization is also indicated by the exodus from Paris to the provinces. Nevertheless, the clothing industries still provide the best case of widespread home work and handwork, especially by women, with their accompaniment of low output per worker.

In Germany factory production is driving out the custom tailors, although to a less extent than in England. A few years before the war the industry lost its foreign markets as the manufacture of clothing in other countries increased, and since that time it has manufactured almost exclusively for a domestic market; the ready made branch now supplies from two thirds to three quarters of the working and middle classes

with clothes. The industry as a whole, including all types of wearing apparel, had an output of 4,500,000,000 marks in 1927 and engaged 1,-427,657 employees in a total of almost 600,000 firms; the garment trades, with the exception of knit goods and hosiery, employed almost one million workers in 397,596 establishments. In the cities, particularly in the men's garment industry, contractors generally give out jobs to workers, who sew at home on the various parts of the garments. In the rural districts direct manufacture for sale to retailers is more prevalent. The organization of the industry is characterized by the small workshop of less than six persons: 58 percent of all the persons engaged in the industry were attached to such shops in 1927; but, on the other hand, the percentage of employees in firms employing over 50 workers increased from 2.62 in 1882 to 20.7 in 1925, and in the underwear trade over 50 percent of the workers are attached to large factories. Thirty percent of all production is still turned out by hand, but factory production is spreading and the number of corporations has increased from 19, with a capital of 39,600,000 marks in 1913, to 312, with a capital of 116,000,000 marks in 1926. Industrial concentration, under the influence of post-war rationalization, has been steadily increasing. There is less geographical concentration than in the United States, but 80 percent of all women's wear is manufactured in Berlin and one firm has practically a monopoly of men's cheap ready made and work clothes.

Nowhere has the growth of factory production been so rapid or so widespread as in the United States. Until the Civil War women's cloaks were largely imported from France, and afterward French tailoresses were employed by American business men to design women's garments and supervise their manufacture in small shops, often attached to retail stores. The most effective fillip to the industry was given by the Civil War, when the clothing requirements of the army led to the establishment of large shops for the manufacture of uniforms in New York City and to the necessity for substantial imports from Prague and Vienna. From 1889 to 1899 the growth of the garment industry in the United States by number of workers and value of product was two or three times as rapid as the average for all industries. This growth continued, at a slower pace, until 1910; since then it has declined, indicating that by that date the making of garments had become completely separated from the home. Since 1910 the industry has taken its place with

other industries, manifesting a normal growth.

By 1930 the United States had come to occupy a preeminent position in the manufacture of all articles of clothing. Only in Soviet Russia and to a certain extent in Germany was there a comparable development of the mechanized clothing factory during the ten years after 1920. The total of all garment industries, excluding leather shoes, in 1929 employed more than 750,000 workers, whose combined value of output was close to \$5,000,000,000. Among the many branches of the industry the manufacture of women's clothing, including suits, dresses, coats, shirt waists and underwear, is the largest, with a total output of nearly \$1,500,000,000; it is closely followed by the men's clothing industry, which in 1929 produced men's and boys' outer garments to the value of \$756,000,000. The remaining half of the output of this group of the garment industries is distributed over the manufacture of shirts, men's and women's hats, furnishings, millinery and lace goods, fur and knit goods and minor articles of clothing.

It is characteristic of the expansion of this industry that the production of auxiliary items, originally of little significance, has become with the rise in the standard of living and with the increasing influence of fashion of first importance. Thus the men's furnishings industry, not including shirts and collars, now employs more than 25,000 workers and the value of its output is close to \$150,000,000. The knit goods and hosiery industry likewise has grown to such proportions that in 1929 it employed 208,397 persons, or more than the men's clothing industry, and had a total output of \$899,717,000. The influence of the march of industrialization is, however, best indicated by the changing position of the women's clothing industry during the past forty years. While in 1899 the value of output of the women's garment industry constituted only 30 percent of the combined value of the men's clothing, women's clothing and shirt industries, by 1929 it represented 59 percent of the value of output of this category.

The history of the development of the hosicry industry has been quite different from that of other branches of clothing manufacture. The large scale production of hosicry by machine methods was inaugurated very early, and neither the method of manufacture nor the product itself shows the characteristics which make the needle trades unique. Originally stockings were made of cloth, then knit by hand; toward the end of the sixteenth century the invention of the square

stocking loom by William Lee in England introduced hosiery production on a larger scale. Later the spinning jenny, the application of power to knitting frames in 1832, which reduced the cost of manufacture to one tenth of what it had been, and the circular knitting machine, invented in 1851, gave new impetus to the industry; but on the whole its growth was slow in the ninetcenth century, in part because of difficulties in perfecting the machinery. The most striking development occurred in the Civil War period, when the government was buying large supplies of hosiery. From that time on the production of hosiery by machine in the United States has been rapidly increasing. The types of hosiery produced, however, have changed radically, particularly during and after the World War. From 1914 to 1923 the production of cotton hose decreased by 6.17 percent, while over the same years there was an increase of 26.77 percent in the output of silk hosiery and of about 417 percent in that of hosiery made of rayon and mixed fibers. Among the influences which account for the expansion of the silk and rayon hosiery industry are the shorter skirts and the thinner and lighter colored stockings worn by women in recent years. The output of the seamless variety of hose has remained practically stationary since 1919, although about 95 percent of men's hose are of this style. Full fashioned cotton hosiery, manufactured chiefly for women, has declined in importance also; but the yearly production of the full fashioned style as a whole, including silk and its imitations, increased over 250 percent from 1919 to 1928 and in 1930 reached 25,000,-000 dozen pairs, slightly more than the output of seamless hose. Continued increase in the per capita consumption of full fashioned silk hosiery is, however, doubtful, since style changes in dresses and the use of mending service for stockings discourage the purchase of many pairs of

Since 1923 there has been an overexpansion of the full fashioned hosiery industry; the mills, which often begin their operations on a large scale, increased in number from 92 in 1919 to 263 in 1929, although in 1928 there was a drop of 8 percent in the output of one half the mills. As the machinery used is both complicated and expensive and not readily adjustable to changes in output and style, the financial burden on the manufacturers has become heavier. Export markets have been a negligible factor; foreign consumers lack the income to buy such a luxury article, and only about 3 percent of the total

output of full fashioned hosiery was exported in 1929. On the other hand, foreign competition has been slight, with imports restricted to the cheaper cotton hose and to fancy styles made on a small scale. Efforts to avoid the consequences of overexpansion have been made along two lines: there has been a movement toward the south, where wage scales are about one half as high as in the northern states; and there have been widespread attempts to decrease overhead charges by running the mills on double shifts and using the multiple machine system whereby one worker tends several machines. The industry is still largely localized; thus the Philadelphia and Reading areas account for 62 percent of the machinery used, and 10 percent of the mills are in New Jersey. But the most rapidly growing area is the south, where 15.6 percent of the mills were located in 1929.

The hosicry workers are organized in the American Federation of Full-fashioned Hosiery Workers, affiliated with the American Federation of Labor. Of a total of 113,000 workers in the industry 15,000 are organized in the full fashioned branch. In the past few years the union has also attempted to penetrate the south. The average wage for "leggers" and "footers," who are highly skilled operators, ranges from \$60 to \$75 a week in the north and around \$34 in the south. Other workers in the trade receive much lower rates-from \$13 to \$27 a week, depending on locality and unionization as well as on the type of work performed. The union has opposed the double shift except as a temporary emergency measure and is particularly antagonistic toward the multiple machine system. The hours worked vary widely according to the task and to economic conditions, but the union is making efforts to introduce the forty-four hour week.

In structure and business organization the garment industries are marked by peculiar features. In the early stages of the industry the wholesale distributor of clothes rarely ran his own factory but farmed out the materials to contractors, who had the garments made either in the homes of workers or in small shops. Thus the term manufacturer, generally used to describe the wholesale distributor or the retailer, is not really descriptive of his function except where he maintains an "inside" shop, doing at least part of his own manufacturing. The "outside" shop, or contracting system, began in the United States in the eighties; it was fostered by the small, cheap sewing machine, which could

GROWTH OF AMERICAN GARMENT INDUSTRIES, 1889-1927

YEAR	NUMBI R	NUMBI R	VACUADDED BY	Value of
	ESTABLISHMENTS	Wagi Parairs	MANUFACIURI (IN \$1000)	(0001\$ 741)
Men's Clothing *	-		(1 ((1 () () () () () () () ()	(17 \$1000)
1889	19,527			
1899	6,568	248,477	216,532	411,662
1909	6,500	158,493	152,155	324,422
1919	13	240,526	271,238	568,858
1929	6,261	215,357	513,207	1,369,403
• •	5,009	234,811	590,910	1,190,464
Women's Clothing *	 		1	
1889: dressmaking		0.4		
factory	19,587	48,613	33,678	57,072
1899: dressmaking	1,224	39,149	33,887	68,164
factory	14,470	45.595	31 852	48,356
1909 †	2,701	83,739	74,635	159,340
1919 †	4,558	153,743	175,964	384,752
1929 †	7,711	165,649	528,136	1,208,543
1929	7,978	183,506	763,388	1.678,496
Fur Goods *	₩			
1880				
1899	484	6,947	8,784	20,527
1909	734	7,758	11,618	25,899
1909	1,241	11,027	24,161	55,938
	1,815	13,639	67,541	173,138
1929	2,844	15,938	101,405	277,059
Knit Goods and Hosiery *	-			
1889: hand knit		0,		
machine	28	186	118	205
1899: hand knit	796	59,588	31,429	67,241
machine	86	304	228	352
	1,006	83,691	44,639	95,834
1909 ‡	1,374	129,275	89,902	200,143
1919 ‡	2,050	172,527	286,140	713,140
1929 ‡	1,888	208,397	443,000	899,717
Jaco and Cons #				
Hats and Caps *	11			
1889	737	29,431	23,679	42,642
1899 **	815	31,424	24,783	49,204
1909 **	865	40,070	42,711	82,978
1919	1,073	34,799	81,267	166,211
1929	796	27,587	79,768	164,705
#* 11 #				
Aiscellaneous *				
1889	7,749	78,271	61,196	120,703
1899	18,294	121,151	130,314	189,821
1909	3.850	133,044	131,000	277,181
1919	5,032	131,099	285,067	587,624
1929	2,902	104,074	254,699	539,581

^{*}Men's clothing includes men's and boys' outer wear, work clothing, parts of men's outer clothing made in separate establishments, buttonholes for both men's and women's outer garments, shirts. Women's clothing includes women's and girls' outer clothing and women's cloth underwear. Fur goods include men's, women's and children's outer garments, sets, trimmings, hat's, caps and gloves of fur. Knit goods and hosiery include all knit goods, both under and outer year. Hats and caps, miscellaneous items for 1880 in the the following census classifications: custom nullinery (30 percent of total by value of output), artificial flowers and feathers, buttons, corsets, men's furnishings and cloth underware, etc.), gloves and mittens, milimery and lace goods (untrimined hats appear pautly under hats and caps). For 1809: custom nullinery (37 percent of total by value of output), artificial flowers and feathers, buttons, corsets, men's furnishings, men's collars and cuffs, gloves and mittens, milimery and lace goods. For 1000: artificial flowers, furnishings, men's collars and cuffs, glather gloves and mittens, milimery and lace goods. For 1900: artificial flowers, feathers, buttons, corsets, men's furnishings, men's collars and cuffs, leather gloves and mittens, milimery and lace goods. For 1910: artificial flowers, feathers, buttons, corsets, men's furnishings, men's collars and cuffs, leather gloves and mittens, cloth gloves and mittens, for 1920: artificial flowers, including preserved flowers and plants, feathers, buttons, corsets and allied products (i.e. brassières, corset covers and like goods), leather and cloth gloves and mittens, men's furnishings, millinery. In spite of apparent similarities in name the classifications under miscellaneous for the various years are not comparable, as changes in the composition of the items were made throughout this period. Figures on the industry as a whole are of strictly comparable because prior to 1809 census statistics apply to factories, hand and neighborhood industries; fig figures.

Dressmaking not listed separately.

Hand knit industry does not appear separately.

* Not including wool hats, which were included with woolen, worsted and felt goods in 1899 and 1909.

Source: Census of Manufactures for the years quoted.

be easily installed in tenement houses, and by the freedom afforded to the manufacturer, who was relieved of responsibility for managing a factory and could give his entire attention to the expanding market. In 1890 the successful struggle for union recognition and better working conditions encouraged the growth of inside shops, since the advantages of cheap labor under the contracting system were thus lost. Friction resulting between the contractors and workers led the former to become small manufacturers, driving out the large distributors; and for a time the contracting system declined. From 1900 to 1910 these small manufacturers began to expand their operations and to adopt the contracting system again. But when higher wage rates were established in these new contracting shops, the manufacturers tried to escape the high labor costs by becoming jobbers; and a new type of relationship was developed, that of manufacturer-jobber-submanufacturer. The jobber is a middleman who does not employ workers or accept any of a manufacturer's functions. He buys from the true manufacturer—the subcontractor or submanufacturer-and sells to the wholesale or retail merchant, called the "manufacturer." The jobbing system grew rapidly from 1916 to 1919, both because of labor pressure and because the jobber's offer of "immediate delivery" made it unnecessary for the manufacturer to maintain a large stock and risk loss due to the high prices of materials during the war.

At present the importance of these three types of organization—inside shop, contracting and submanufacturing-varies in the several branches of the industry. No data on the relative importance of the three systems exists; but in New York City, which in 1924 supplied about 80 percent of the national production, three quarters of the dress and cloak business is carried on under the submanufacturing system. Chicago and Rochester, on the other hand, are characterized by inside shops. There is practically no submanufacturing in the underwear and children's wear trades and relatively little contracting. But in the dress and cloak and suit trades all three forms of organization are found and frequently overlap. Characteristic features of the industry continue to make the submanufacturing type of organization attractive and account for the recurring competition between the two main types of business organizationthe manufacturer who follows the modern tendency toward large scale factory production by buying his own materials, manufacturing in his own plant and selling his own finished product to the retailer and the manufacturer who is preeminently a merchant and has his manufacturing done outside. Probably the most important factor responsible for the persistence of an archaic method of production is the low capital requirement of the industry. In spite of the progress in mechanization it is still possible for persons with a small capital to start in business and compete on favorable terms with large producers. Many of the advantages which large scale operation derives from the use of machinery and division of labor (large shops show in their specifications more than 200 distinct operations on the coat alone) are more than balanced by the low overhead, elasticity in business policy and the opportunity to use the cheap labor supplied by the submanufacturers.

Fashion changes are a second factor leading to the persistence of the small shop. The ability to alter rapidly the organization and stock of a small shop creates a competitive advantage not easy to overcome by superiority in manufacturing facilities. External conditions are often favorable to the submanufacturing system; thus during the past few decades many large inside factories were built up in the men's clothing industry in response to the demand for a uniform product, which can be provided only with difficulty under the conditions of management prevailing in the contract shop. But under the adverse conditions of the last ten years, culminating in the depression of 1930-31, the steady downward movement in retail prices and the drop in volume of business to about one half its former figure turned even many of the large buyers again to the small producer. Accordingly in the men's clothing industry the average number of workers per establishment, which increased from twentyfour in 1899 to forty-seven in 1927, declined to forty-six in 1929 and has probably suffered a further substantial decline since then. In the women's clothing industry the trend in the size of shops has been downward since 1905, when the number of employees per establishment was 34.5. By 1929 this number had declined to 23 and it is not unlikely that the average establishment has become much smaller in the past two years. On the other hand, the average shirt factory, with a relatively standardized product, has always been larger than the men's or women's clothing plant; it reached its greatest size, 68 employees per establishment, in 1929.

New supplies of immigrant labor and the movement of manufacturers to small American

towns have also contributed toward the instability of the industry and the periodic rise of the small shop. Particularly after 1880 the successive waves of immigration of Jews, other eastern Europeans and Italians, all more accustomed to employment in small handwork shops than in factories, made available to the small enterprisers in the garment industries large supplies of low priced competing labor. This process was in full swing until the eve of the World War and was responsible for the existence of a great labor surplus in practically all branches of the industry. Only during several of the war years and the inflation period of 1919-20 was there anything like a full utilization of the available labor. After 1920 the restrictions on immigration; the further employment of women as the work became less skilled; the displacement of labor by machinery; and the entrance into the industry of many native born, attracted by high wages, improved working conditions and the "open door" policy of the unions, again created a serious labor surplus and aggravated the already strong tendency toward severe competition and falling prices. During depression periods the practise of sending work like hand finishing and buttonhole making to the homes is also revived.

Removal from cities for the purpose of exploiting new supplies of labor likewise grows in frequency under the influence of depression and price cutting. Historically the centers of the industry have shifted much after the manner of the great changes in the localization of industry that have occurred in the cotton textile industry. Thus Boston, which was formerly one of the largest men's clothing centers in the country, now occupies only a minor position; Cleveland's importance in the industry, on the other hand, began to grow in 1925 almost entirely because of the rise of one firm. Cincinnati has had somewhat the same experience. In its latest phase, starting with the depression of 1921, the tendency has been toward decentralization. Especially for the production of garments whose manufacture is relatively simple shops have been organized in districts which constitute the hinterland of metropolitan centers in New Jersey, Connecticut, Pennsylvania, Michigan and Illinois, and in some sections of the south such shops now constitute a fairly considerable industry. Started with a nucleus of skilled labor from the cities, these shops give employment to rural labor, as in the agricultural sections of Wisconsin, or to the women members of impoverished wage earners' families, as in the mining towns of Pennsylvania.

Only tradition, the assistance of a supply of experienced labor and proximity to consuming markets can retard this movement from cities, which is accelerated in bad and checked in good times. High quality products are still made almost exclusively in the established centers. New York City has remained the primary center for the manufacture of both men's and women's clothing. It has had the benefit of a large supply of the most skilled and experienced tailors. Close to the largest retailing establishments in the country and consequently sensitive to the swift changes in taste and fashion, it has been able to serve the demands of important buyers throughout the country. The New York industry under the jobber system has also acquired the characteristics of a spot market for both expensive and cheap garments, quick to open its shops and quick to shut down. The effects of powerful forces of competition, however, have been felt even in New York and its output in relation to that of the country as a whole has shrunk since the close of the war.

In an industry thus organized it is inevitable that bankruptcies and waste should be prevalent. It has been estimated that one third of the New York submanufacturers go out of business annually. The work processes and appliances are not standardized in large sections of the trade; much work is done according to traditional methods rather than in any "one best way." Moreover, it is questionable whether the seasonality of the industry is entirely due to whims of the consumer. With such a high degree of competition the retailer is afraid to guess as to future styles and also demands many small and unimportant style changes which cause the direct labor per garment to be far too large. In a study made in 1921 it was discovered that the retailer was accustomed to order in minute lots -as few as three suits, for example. At the same time tests made in three large retail establishments showed that the customer does not require much variety; in one case 11 out of 31 suit models accounted for 78.25 percent of the sales; in a second, 9 out of 22 models accounted for 94 percent of the sales; and in a third, 11 out of 43 models accounted for 94 percent.

The custom trade in the United States, which is now largely confined to the more expensive items of clothing and probably employs less than fifteen thousand workers, has had to meet competition from three sources: the ready made trade, the "special order" factories doing custom work of a rather cheap grade and the "team"

system in factories, a result of the efficiency movement. The relative unattractiveness and difficulty of the work have led to a decline in the number of apprentices, as in Great Britain; and the custom industry maintains itself chiefly in New York City, although even there it is of decreasing importance.

The rapid expansion of the market in the nineteenth century led to extreme competition, and the technical possibility of small scale manufacturing retarded factory organization; hence it is not surprising that working conditions and wages were ill regulated. Security of the job was unknown throughout the industry. Wages were extremely low, and through the practise of employing apprentices and learners a substantial portion of the workers would receive for a time either no pay at all or only a few dollars per week. In addition the workers were quite generally required to buy or rent their machines, supply their own tools and pay a variety of fines, which frequently exhausted their meager earnings. By the terms of the task system, whereby an employee would receive his fixed weekly wage only upon the completion of a specified quota of work, the majority of the clothing workers were required to work seven days a week, and in the busy seasons custom tailors frequently worked as long as twenty hours a day.

By the last decade of the nineteenth century public attention was focused particularly on the sweatshop evils in the manufacture of clothing. The Australian Factory and Workshops Act of 1896 and the New Zealand Compulsory Arbitration Act of 1894 marked the establishment of minimum wage machinery which applied to the clothing trade as well as to other sweated trades. In England agitation over the low wages, irregular employment, long hours and unsanitary conditions of the garment trades began in the eighties with the spread of the outworker system. In 1909 the first Trade Boards Act was passed, establishing control over industries where unusually low wages prevailed, and a board for the wholesale tailoring industry was the first to be set up. After 1918, when the jurisdiction of the trade boards was extended to industries without effective machinery for collective bargaining, all branches of the garment trades came under trade board control and a marked improvement in wages and factory conditions and a decline in the number of home workers resulted. The Aliens Immigration Restriction Act of 1911 produced a shortage of labor which also contributed to the rise in wage rates and the extension of

mechanized factory work. Working conditions in the handicraft and outworkers' divisions of the industry, however, are still far from satisfactory. Unionization has progressed slowly; in 1928 only 10 percent of the insured workers in the clothing trades were unionized. The two leading unions in the men's trade are the Amalgamated Society of Tailors and Tailoresses, a conservative craft union which numbered ir 1926 only 13,000 members, and the Tailors' and Garment Workers' Trade Union, whose policy has been influenced by Communist leaders and which has amalgamated with many of the small unions, reaching a membership in 1926 of about 50,000. The custom tailors, whose strongest nucleus of organization is in the West End of London, have recently arranged to join the Amalgamated Society, and a larger group of garment workers is affiliated with the Shop Assistants' Union and the National Union of General Workers. The women's dress and cloak industry is marked by weak unionization and lower wages than those prevalent in the men's trade; so too is the shirt, collar and pajama branch of the industry, which has lost in large measure its formerly active export trade. Employers' associations exist in the men's retail and wholesale trades but are weakly organized in other branches of the industry. They are interested less in relations with the unions than in production and market problems; the Master Tailors' Association, composed of Jewish subcontractors, is the only group primarily concerned with wages and prices.

The most rapid improvement in the working conditions of the French garment employees has occurred since the World War, although by 1906 inspection of health and safety conditions had been established for both factory and home work, and by 1914 night work had been completely suppressed. In 1915 the Homework Act established a minimum wage for home work by women in ready made clothing and its auxiliaries; and at the present time similar provisions are made for men. A placement service has also been functioning since 1915. In general, however, the widespread existence of home work and small shops in France has made the industry not only difficult to control from the social point of view but also difficult to unionize. The Fédération des Ouvriers de l'Habillement, affiliated with the Confédération Générale du Travail, had 26,000 members in 1919 and the "free syndicates," which represent conservative employees' groups, claimed 18,000 members; nevertheless,

the great majority of the French garment workers are outside the unions. The handicraft workers, with their low incomes and irregular employment, are difficult to organize and in France the unions have not only encouraged the custom trade by supporting trade schools but have preserved a prejudice against woman members which has militated against effective unionization of the women's clothing trade in particular. There are no national employers' organizations, and the employers have consistently opposed union recognition. But some gains have been made for the garment workers through the activities of the unions. Since 1919 the Parisian workers on men's and women's clothing have had the forty-eight-hour week, and since the war there have been rapid increases in wages following successful strikes. The free syndicates have also organized the home workers to some extent, although at the same time the Fédération des Ouvriers de l'Habillement has been voicing opposition to home work. After the war the syndicates were the activating force in the establishment of family allowances, widows' pensions and other measures which protected the woman garment worker.

In Germany the clothing factories have been subject to inspection as to sanitary conditions and safety since 1901, and as elsewhere the attempts to evade the factory laws have encouraged the persistence of home work. An attempt to stamp out home work was made after the war, and the Home Work Act of 1923 created trade committees to give advice on wages, hours and sanitary conditions with the expectation that the committees would make use of collective agreements as far as possible; but since these are not adequate there is still no satisfactory arrangement for fixing wages for home work. Where collective agreements with the employers' associations exist, piece rates are general (with the exception of the ladies' tailoring trade) and the ten-hour day has been won. The German clothing trade, over half of whose workers are women, is at present the only industry in which women receive the same wages as men; and it can be said that where unionization exists the women are organized in proportion to their participation in the occupation. In 1927 the union membership reached a total of 95,000, but the persistence of small shops and home work makes the German clothing industries among the more difficult to organize.

In the United States there has been little protection of the garment worker by public regu-

lation. In so far as the public was concerned with the plight of the clothing worker it engaged in agitation against the unsanitary conditions prevailing in the contract shops and homes of the tenement house workers, hoping to create effective demand for the reform and control of the industry by arousing the fear of the consumer. On the other hand, the extent and achievements of unionization in the United States are striking. For generations the garment industries have been the scene of an uninterrupted struggle for the organization of a labor movement. The first signs of permanent organization appeared in the eighties under the contagious influence of the Knights of Labor. By the beginning of the next decade the United Garment Workers and the United Hatters had been organized in the men's clothing, fur and felt hat industries. By the use of the union label the United Garment Workers gradually gained control over the shops producing work clothing. By vigorous campaigns of boycotting the hatters' union penetrated the large factories of the country until 1915, when it was dealt a blow from which it has not yet recovered, by the decision of the United States Supreme Court in the famous Danbury Hatters' Case that its boycotts were illegal under the Sherman Act and that individual union members were financially liable for damages and costs resulting from the boycotts.

The most familiar unions in the garment industries, however, had a different origin and pursued a novel course. Their foundations were built by young immigrants from Europe, particularly from Russia and Poland, who settled in the metropolitan cities of America from the eighties onward. These men and women, impregnated with the doctrines of revolutionary socialism, began the organization of the machinery of mass education and solidarity which is essential to the creation of mass movements. The earliest of these was the fraternal and beneficial organization of Jewish working men, the United Hebrew Trades, which throughout the following decades became the source of propagation of labor ideas and organization campaigns. A Yiddish daily newspaper, the Forward, was founded in 1897 and wielded a powerful influence in the rise of many of the unions in the needle trades.

The earliest of the great national organizations in the clothing industries was the International Ladies' Garment Workers' Union organized in 1900. For the first decade it struggled, like its predecessors, for mere existence. After tremendous strikes in the dress, waist and cloak indus-

tries of New York City, however, a Protocol of Peace was signed in September, 1910, and the union was established. In the remaining years of the decade the union spread rapidly to Chicago, Boston and Cleveland, to the principal centers of Canada and to the other branches of the industry. By 1920 it had achieved substantial control over the industry; its membership, however, has since been cut from 105,400 in 1920 to 32,300 in 1929 as a result of business conditions in the trade and factional struggles within the union. Composed of the same classes of workers living in much the same communities, the strong national unions of the cap makers and the furriers likewise rose to power in this period; the former union was practically 100 percent organized in 1930 and the latter in spite of depression in the trade and factional splits included about 80 percent of the fur workers.

The uprisings in the women's clothing industry were not without repercussions in the other needle trades. The periodic strikes called and managed by the United Garment Workers did not bring permanent organization in the men's clothing shops. But in 1910 a city wide strike broke out in Chicago. A bitter fight lasting for many months soon settled down into a struggle between Hart, Schaffner and Marx, the largest clothing manufacturing company in the country, and its employees. In 1911 the strike ended with an agreement recognizing the union and establishing a scheme of arbitration of future disputes. This settlement marked the beginning not only of a campaign to organize the whole of the men's clothing industry but also of the conflict between the Jewish, Italian and eastern European immigrant membership of that organization and its native leaders. The revolting groups, who were refused seats at the Garment Workers' convention in 1914 and whose request for recognition was denied by the American Federation of Labor, formed early in 1915 the independent union known as the Amalgamated Clothing Workers. Within four years the Amalgamated, assisted partly by the favorable economic conditions arising out of the war, had organized the majority of the leading clothing factories of the country and had established local organizations throughout the United States and Canada, reaching a membership of about 150,000 in 1927. The United Garment Workers, which was reduced to 47,500 members in 1930, retained jurisdiction over employees in work clothing and raincoat factories, where ownership of the union label constitutes its chief source of strength. In the

Journeymen Tailors' Union, whose membership has been cut in half since 1920 because of competition from other branches of the industry and the economic depression, the question of merging with the Amalgamated has frequently arisen. The membership of the Communist Needle Trade Workers' Industrial Union is difficult to estimate; during the factional struggles of which it was a product it drew many members from the International Ladies' Garment Workers' and Fur Workers' unions.

With the advent of the unions recruited from the new immigration the period of struggle for the right to organize was largely ended, and the industry and its organized workers entered the phase of constructive experiments in industrial control. The "new unionism" developed, representing a sharp divergence from the prevailing policies and practises of the typical American labor organization. Aims were not defined as "a fair day's work for a fair wage," but involved plans for the fundamental reorganization of the industry, many of which have on occasion been put into practise. In the choice of weapons for the advance of the labor movement the needle trades' unions have not hesitated to join the ranks of radical political parties, from the Socialist and Communist parties to the Conference for Progressive Political Action in 1924. By opening their doors, with rare exceptions, to all applicants for membership regardless of skill, race, color or sex they have challenged the old belief that women, workers of diverse nationalities and those of different crafts cannot be permanently organized. Probably more than one half of the organized woman labor of the country is to be found in the garment workers' unions. These organizations have carried on pioneer experiments in the United States with workers' education; their press has been distinguished by a type of discussion of current economic, social and political issues that could not fail to affect profoundly the outlook of their members.

The strength of the clothing unions, however, rests finally on the comprehensive industrial policy which they have applied to the problems of the clothing workers. The old autocratic management of the shop has in a large part of the industry entirely disappeared. Early in the history of the organization the principle of the preferential shop, whereby vacancies must be filled by union members unless there are none available or willing, was won. Discharge and even the most petty questions of discipline are no longer functions of the management alone; the

practise of reorganizing the shop in each slack period and discharging employees with whom the management is displeased has been brought under rigid control. By protection against discharge and by the provision that in slack seasons the work must be apportioned among all workers, security of the job is practically guaranteed. The many attempts of the employers since 1920 to retrieve the right of reorganizing their shops have not been successful, although an agreement with the union in 1928 granted the cloak and suit manufacturers some concessions in this regard.

The rise of the factory, the mounting productivity of labor and the progressive union policy have been reflected in striking improvements in the working conditions and earnings afforded by the industry. While there are still violations of the rules of the industry, prevailing hours of work since the war have been less than fifty a week and the two most important branches, men's and women's clothing, were in 1930 operating on a forty-four and forty-hour week respectively. Except for the small shops that persist in New York City and to a lesser extent in other large American cities the sanitary conditions in the modern clothing industries compare favorably with the most advanced plants of other industries.

Wages and methods of wage payment have been equally revolutionized. It is probably no exaggeration to say that wage rates in the unionized shops of the men's and women's clothing and fur industries were 300 percent greater in 1923 than in 1914. The task system has been completely abolished. Wages, whether piece or week, are everywhere fixed jointly by union and management. In fact, the extent of control over wages has in more than one instance imposed upon the union the responsibility for assuming similar control over the production of its individual members. Under the stress of stiff competition and adverse economic conditions union manufacturers have constantly sought relief from what they regarded as excessive labor costs by demanding either piecework or a substantial increase in production. In men's clothing the union has met this problem by accepting the practise of piecework, but in the women's garment industry, where an attempt to meet the difficulty was made by the use of production standards, the matter is still a subject of serious difference of opinion.

The record of wages and earnings is confused by seasonal and otherwise irregular employment,

to which all the garment trades are subject. Since 1914 the rise in the money incomes of all employees in the industry has been much more rapid than the increase in the cost of living, but in the most important parts of the industry earnings appear to have been decreasing since 1923. The range of wages, however, varies widely as between the union and the non-union shops and amounts in some cases to as much as 25 percent. Where the union is strong the prevailing rates of wages are among the highest in the country, and it is possible to find many shops in which average earnings for both men and women, skilled, semiskilled and unskilled, are between \$.80 and \$1.00 an hour. Such earnings are far above the wages which prevailed in these trades before the war. Annual incomes, nevertheless, everywhere remain low. In 1929 the average annual earnings of women's clothing workers were \$1309, of the men's clothing workers \$1184 and of the shirt makers only \$723.

The most difficult problem for the unions in all the needle trades is the policing of non-union shops, or, as it is described in the industry, the control of the "bundle." This problem, implicit in the character of the clothing business, is a perennial one and since the drop in prices in 1920 constant efforts have been made by the industry to revert to conditions prevailing before unionization. For the regulation of these conditions the unions have resorted to an elaborate machinery of control involving the registration of contractors, specifying the legal size of a contract shop, the conditions under which a contractor may accept work and the like; but the long struggle for the protection of union standards is not yet ended.

The problems arising from joint control by union and management have created many systems of industrial arbitration in the garment industries in the last twenty years. Both the Protocol of Peace in the cloak industry and the Hart, Schaffner and Marx agreement made provision for the arbitration of industrial disputes. From these slender beginnings in 1910 the practise of arbitration as a continuous function has become general in the organized sections of the industry. Under this system, which has had its most complete development in the men's clothing industry, there has been set up a detailed code of industrial law and judicial decisions, constituting in substance the rules and regulations for the conduct of labor relations in the industry.

Since bad years occur with appalling fre-

quency, the problem of unemployment has occupied a place of prime importance in the programs of the unions in the needle trades. Even in very good business years the average clothing worker will rarely work more than forty-five weeks, and neither the rule of division of work nor the steady reduction in hours has solved the difficulties of a year broken by long spells of idleness. Soon after the war the unions began to experiment with unemployment insurance, not in the form of traditional trade union benefit funds but as industrial insurance funds set up by agreement between the industry and the union. The first, based on a Ladies' Garment Workers' plan, was organized in the cloak and suit industry of Cleveland in 1921. It combined a guaranty of employment (set at 40 weeks in 1929) with provisions for the payment of unemployment benefits equal to one half the worker's wage. The fund is established by the employer and is not to exceed 75 percent of the pay roll. Over \$175,000 has been paid in benefits to the Cleveland workers since 1921. This plan was followed by the agreement between the Amalgamated Clothing Workers and the Chicago manufacturers which in 1923 created an insurance fund to which both workers and employers contribute. Over \$5,000,ooo has been paid in benefits under this plan, which was adopted in 1928 in New York City and Rochester. In the same period the Ladies' Garment Workers' Union introduced the plan in New York and the cap makers' union created unemployment funds throughout their industry. These various arrangements have suffered from the vicissitudes of all such experiments and the plan of the Ladies' Garment Workers in New York has been temporarily suspended, but their adoption should be regarded as another significant step in the attempt of the clothing workers to solve their industrial problems through the power of their own organization.

Other activities of these unions, far afield from the customary preoccupations of organized labor, have been substantial gifts to Russia and investment of capital in Russian industry by the Amalgamated Clothing Workers in sympathy with the Russian Revolution, and the organization of two banks in Chicago and New York which were pioneers in the development of the small personal loan department and the lending of assistance to various cooperative enterprises. The cooperative apartments built and managed by the Amalgamated in New York City were among the first and most successful experiments in cooperative housing in the city. Since 1924

the Amalgamated has entirely changed the aspect of collective bargaining by making temporary loans to union employers in order to keep its members in employment and by setting up shops of its own under the management of the union, on one occasion to procure employment for striking members of the union and on two others to prolong the lives of businesses that were on the verge of liquidation.

In 1930 the garment workers' unions were again beset by old problems. Ten years of uninterrupted competition for the consumer's dollar against the lure of the automobile, the radio and the products of the electrical industry left the producers of clothes ill prepared to face a long and deep depression. The unions themselves have seen much of their strength sapped in the internal battles fought by adherents of the Socialist and Communist parties. This latest phase of their history, however, they entered with experience and resources which were not possessed by any of their predecessors in the cycle of attempts to organize the garment trades.

LEO WOLMAN

See: SEASONAL FLUCTUATIONS; FASHION; HOME WORK, INDUSTRIAL; INDUSTRIAL HYGIENE; 'TRADE UNIONS; LEFT WING MOVEMENTS, LABOR; TRADE AGREEMENTS; LABOR-CAPITAL COOPERATION; UNION LABEL; LABOR BANKING.

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GARNEAU, FRANÇOIS XAVIER (1809-66), Canadian historian. Of humble birth, Garneau educated himself to be a public notary. Later in life he became a civil servant and in 1844 clerk of the municipal council of Quebec.

Garneau's reputation as a historian rests upon his Histoire du Canada (3 vols., Quebec 1845-48,

6th ed. by Hector Garneau, 2 vols., Paris 1920; tr. by A. Bell, 2 vols., 3rd ed. Montreal 1866), which introduced the scientific method into Canadian historiography. He was the first in Canada to regard history as "a rigorously analytic science," requiring a "severe criticism" of events and documents and obligating the historian to be well informed, independent and accurate. Faithful to his doctrine Garneau employs whenever possible original sources, orders his narrative methodically and is, if not always impersonal, invariably impartial. Although he occasionally lacks historical perspective and leaves almost untouched the fields of administration, religion and economics he has produced a work which has survived the test of new research and documentation. His style, while lacking color and movement, is impressive and dignified.

Conceived shortly after the punitive Act of Union of 1840 as a manifesto of the French Canadian tradition and rights Garneau's history revitalized nationalist pride and aspirations. Generations of French Canadians have been inspired by his story of a glorious past—basis of an inevitable survival. His doctrine that French Canadian destiny was bound to "the conservation of our religion, our language and our laws" became a leitmotif among Quebec historians and from it sprang a school of nationalist literature deep and far reaching in its influence and firmly establishing Garneau's reputation as the national historian of French Canada.

GUSTAVE LANCTOT

Consult: François Xavier Garneau, ed. by Gustave Lanctot (Toronto 1924); Casgrain, H. R., Un contemporain, F. X. Garneau (Quebec 1866); Chauveau, P. J. O., François-Xavier Garneau, sa vie et ses oeuvres (Montreal 1883); Beaudé, Henri (Henri d'Arles), Nos historiens (Montreal 1921) p. 83-123.

GARNIER, GERMAIN (1754–1821), French economist. As a politician Garnier was remarkable for flexibility. In the early stages of the revolution he won the confidence of Louis xvI and escaped the disfavor of the advanced revolutionaries by sojourning in Switzerland between August 10, 1792, and 1795; after the 18th Brumaire he adhered to the Napoleonic regime, under which he became president of the Senate between 1809 and 1811 and was made a count; in 1814 he voted for the deposition of Napoleon and was rewarded by the Restoration with a post in the Council of State and the title of marquis. Garnier's principal importance in economics arises from his having produced the first com-

petent French translation of Adam Smith's Wealth of Nations (5 vols., Paris 1802). Partly because of his innate flair for conciliating opposites, partly because of the ambiguity of the Wealth of Nations itself, Garnier was able to subscribe to the work of Smith without abandoning the ideas of Quesnay. His predominant point of view is contained in a lengthy note appended to the fifth volume (p. 290-315) and entitled "Des pouvoirs législatif et judiciaire et de leurs rapports avec la propriété." In this note, which constitutes a synthesis of ideas and arguments presented by Garnier in a number of works and pamphlets ranging in time from 1792 to 1818, he adheres to the remnants of physiocracy in Smith's treatise rather than to its embryonic industrialism. The intrinsic value of the ideas contained in the note is that they represent the translation into political terms of the physiocratic exaltation of agriculture. Garnier insists that by virtue of their monopoly of the sources of sustenance the landed classes are the real controllers of the realm; that the fixity of their investments makes them in contrast with the mobile industrial class the only responsible repositories of power; and that for the general good their predominance should be recognized by the constitution. Since Garnier's interpretation stimulated the development of an opposite school of economic thinkers, men like Roederer and J. B. Say, who ignored the agrarian tendencies of Smith's treatise and derived from it the elements of a science appropriate to the regime of the industrial class, he had considerable indirect influence upon the beginnings of French classical economics. Among his few original contributions the most important is a timidly asserted theory of immaterial products, later to be developed by Say, Destutt de Tracy and Dunoyer.

ERNEST TEILHAC

Other works: De la propriété dans ses rapports avec le droit politique (Paris 1792); Abrégé élémentaire des principes de l'économie politique (Paris 1796); Théorie des banques d'escompte (Paris 1806); Appel à tous les propriétaires en Europe (Paris 1818); Histoire de la monnaie depuis les temps de la plus haute antiquité jusqu'au règne de Charlemagne, 2 vols. (Paris 1819).

Consult: Allix, E., "L'oeuvre économique de Germain Garnier," and "La rivalité entre la propriété foncière et la fortune mobilière sous la révolution" in Revue d'histoire économique et sociale, vol. v (1912) 317-42, and vol. vi (1913) 297-348.

GARNIER, JOSEPH CLÉMENT (1813-81), French economist. Garnier studied and later taught in the École Supérieure de Commerce

at Paris, and was also a lecturer in the Athénée. In 1842 he founded, with other economists, the Société d'Economie Politique. Having won recognition in 1846 by the publication of his *Elé*ments de l'économie politique (3rd ed. Paris 1856), he was chosen the following year to inaugurate the chair of political economy at the Ecole Nationale des Ponts et Chaussées and occupied similar chairs at several other institutions in Paris. He also became editor in chief of the Journal des économistes in 1845, a post which he retained with some interruptions until his death. Garnier played an important part in the French as well as in the international peace movement. In 1873 he became a member of the Institut de France. Garnier was an exponent of classical economics; his doctrine constitutes a mean between the extreme liberal doctrine of de Molinari and Yves Guyot and the less aggressive liberalism of J. A. Blanqui and Dunoyer. Garnier was encouraged by Blanqui to compile and edit the latter's Cours d'économie industrielle (3 vols., Paris 1837-38), and Dunoyer in a report to the Académie des Sciences Morales et Politiques praised his orthodoxy. Garnier lacked originality and instead of adapting the classical theory to his own times rigidly adhered to the principles elaborated by men like Turgot, Smith and Say for theirs. He edited and annotated Malthus' essay on population (Paris 1845; 2nd ed. 1852) for the well known series, the Collection des principaux économistes. He used the pessimistic conclusions of the Malthusian doctrine in his opposition to the reforms proposed by the socialists.

ERNEST TEILHAC

Consult: Renaudin, E., in Nouveau dictionnaire d'économie politique, vol. i (Paris 1891) p. 1097-98, with bibliography; Mischler, E., in Statistische Monatschrift, vol. vii (1881) 560-63.

GARRETSON, AUSTIN BRUCE (1856–1931), American trade union leader. Garretson was the son of a Quaker lawyer. After a brief apprenticeship to a wheelwright he took to railroading at an early age. Shortly after his initiation into the Order of Railway Conductors in 1884 he became prominent in its national organization and in 1889 left active railroading to assume the office of assistant grand chief. In 1906 he became grand chief (the title was changed to that of president in 1907), an office which he held until 1919. He remained with the organization in an advisory capacity until his death.

During his thirty years of office Garretson exerted a powerful influence in the general labor movement as well as in his own organization, which he helped to convert from a benevolent brotherhood into a protective union. He served actively as a member of President Wilson's Federal Commission on Industrial Relations from 1912 to 1915. He was chosen as chief spokesman for the four transportation brotherhoods in their espousal of the eight-hour movement which culminated in the passage of the Adamson Act of 1916 whereby a national strike was averted. In negotiations, debates and hearings before congressional committees he displayed keen wit and shrewd logic and an amazing knowledge of history, religion and philosophy as the product of self-education. He was a potent force in the progressive development of railway labor organization and an energetic supporter of the Plumb plan for the control and operation of the railroads.

DONALD R. RICHBERG

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GARRISON, WILLIAM LLOYD (1805–79), American reformer and abolitionist leader. Dissatisfied with the tepid humanitarianism of the time Garrison challenged public attention by his vigorous demand for the immediate and complete emancipation of the slaves. The agitation was carried on through the activities of the American Anti-Slavery Society, which he helped organize in 1833, and through the pages of his newspaper, the Liberator (1831-65). Garrison was a skilful journalist with a polemic style well adapted to the current standards of editorial writing. The virulent tone of his paper, which provoked rabid denunciation in the south and tended to prejudice even moderate antislavery opinion in the north, was not conducive to commercial success. Yet the Liberator, quoted and widely commented upon, exerted an influence far beyond its limited list of subscribers in aligning opinion and clarifying issues. Garrison struck at slavery from the outside, rallying

freedmen and a small, aggressive group of enthusiasts with his resounding words of execration. Although the dramatic quality of his agitation has tended to overemphasize at the expense of more fundamental economic factors his influence in the ultimate overthrow of slavery, he did succeed in forcing discussion which many sections of society, especially in eastern commercial circles, considered out of deference for the southern market impolitic. His uncompromising emphasis upon the moral evil and degradation inherent in the institution of slavery and his continued strictures upon various political leaders and groups tended more and more to isolate his radical followers from the main body of the antislavery movement. His distrust of the government because of its attitude toward slavery caused him to formulate doctrines which in their constitutional aspects partook of the anti-authoritarianism and antiunionism prevalent in certain quarters. He stigmatized the constitution as "a covenant with Death and an agreement with Hell," and under his extremist leadership the great majority of the abolitionist party repudiated a union with slaveholders. The continued attempts of politicians to dodge the slavery issue were frustrated by the passage of the Kansas-Nebraska Act in 1854, which reopened the question as to the extension of slavery into the territories and precipitated the problem into national politics. Garrison's insistence on placing the abolition of slavery before the preservation of the union put him in a dilemma at the outset of the Civil War, but with the Emancipation Proclamation he urged support of Lincoln's administration.

E. PENDLETON HERRING

Works: Selections from the Writings and Speeches of William Lloyd Garrison (Boston 1852); The Words of Garrison: a Centennial Selection, 1805–1905 (Boston 1905).

Consult: William Lloyd Garrison, 1805–1879; the Story of His Life Told by His Children, 4 vols. (New York 1885–89); Johnson, O., William Lloyd Garrison and His Times; or, Sketches of the Anti-Slavery Movement . . . (new ed. Boston 1881); Swift, I., William Lloyd Garrison (Philadelphia 1911), with bibliography p. 387–90; Villard, O. G., "William Lloyd Garrison, Editor . . ." in his Some Newspapers and Newspaper-men (new ed. New York 1926) ch. xviii; Parrington, V. I., Main Currents in American Thought, 3 vols. (New York 1927–30) vol. ii, p. 352–61.

GARY, ELBERT HENRY (1846–1927), American corporation lawyer and executive. Gary was for twenty-five years counsel for large corpora-

tions, in many of which he served as director, and participated in several important consolidations in the iron and steel industry. These consolidations culminated in the organization of the gigantic United States Steel Corporation in 1901, a combination arising directly out of increasingly turbulent competition. J. Pierpont Morgan, the financier of the combination, made Gary chairman of the board of directors with very wide powers.

Gary realized that the prevalent practises of large combinations were dangerous to the security of large scale enterprise. Competition had to be eliminated but combinations had to be "good." To avoid the charge of monopoly the United States Steel Corporation confined its direct control to less than half of the producing capacity of the industry. Gary openly preached cooperation in the industry: by means of the famous "Gary dinners" between 1906 and 1909 and the American Iron and Steel Institute, of which he was president from its organization in 1910 until his death, he fashioned machinery for the limitation of competition and the maintenance of prices. Uniform prices and minimum standards of competitive practise were accepted by the "independents," who in turn were tolerated by the dominant corporation. Public opposition, however, did not abate. The Gary dinners were abandoned under pressure and the institute could not become as effective as Gary might have wished. The federal government entered suit to dissolve the corporation but after more than a decade of litigation the United States Supreme Court in 1919 decided against the government.

Gary was always an ardent advocate of the open shop. The United States Steel Corporation crushed a strike in 1901 and has since never dealt officially with organized labor. Gary's administration developed one of the earliest schemes of employee stock ownership, which in practise was largely limited to the better paid employees, and an elaborate program of welfare, sanitation and safety. Union organization was repressed and Gary crushed the general strike of 1919. Although experience in the industry failed to support the validity of his arguments for the economy of the twelve-hour day, he consistently opposed reduction in hours until forced to capitulate in 1923 in response to an avalanche of public opinion.

Gary's distinctive contributions to industrial organization and practise lie in the fields of competitive policy and public relations. Through

the annual reports of the corporation he introduced greater publicity regarding corporate affairs than had hitherto been prevalent. He must be credited with an important share in the creation of the current attitude of tolerance toward industrial combinations in contrast with the earlier hostility of the public and government.

MEREDITH GIVENS

Consult: Tarbell, Ida M., The Life of Elbert H. Gary (New York 1925); Cotter, Arundel, The Gary I Knew (Boston 1928); Robinson, Maurice H., "The Gary Dinner System" in Southwestern Political and Social Science Quarterly, vol vii (1926) 137-61; Pringle, Henry F., "Vox Mazuma" in American Mercury, vol. x (1927) 434-41; "Mr. Gary and His Times," in Nation, vol. cxxv (1927) 221.

GAS INDUSTRY. The gas industry of the United States is essentially a public utility business supplying fuel gas for industrial, commercial and household uses. It includes a few publicly owned and operated municipal plants, but in 1927 the value of their output was only \$7,428,-000 as compared with \$509,000,000 in the case of the public utility companies producing manufactured gas. This situation is in striking contrast with that in certain European countries, where a very large number of gas enterprises are publicly owned, usually by the municipalities. In England, for example, approximately three eighths of the gas works are public enterprises, and in Germany over three quarters of the gas is produced by public undertakings. The industry in other countries has a quasi-official status with intimate participation by the government in either ownership or operation. In the United States the gas industry is under public supervision, usually by state commissions or boards which have authority to regulate rates, services, security issues and general public relations.

The discovery of gas as a product which could be made by heating coal is commonly credited to van Helmont, a sixteenth century alchemist, who characterized the product resulting from the heating of certain solid fuels in a closed crucible as the Geist, or spirit, of the fuel. It is generally believed that the word gas has been derived from this original characterization. Gas remained a Geist until after the industrial revolution, when simultaneously in different countries intense efforts were made to develop the economic possibilities of gas. The first practical application of gas fuel was apparently made by William Murdock in 1792, when he used coal gas to light his house and grounds in Cornwall, England. About the same time Philippe Lebon in Paris developed

a method of gas lighting, upon which he secured a patent. A German, F. A. Winsor, studied Lebon's ideas and tried to introduce gas lighting in Germany; he was unsuccessful there but went to London and in 1807 illuminated Pall Mall with gas. In the United States a number of attempts were made to use gas for street lighting. Winsor was one of the promoters of the first British gas company, which was chartered in 1812, and four years later the first American company started business in Baltimore. The development of the gas industry was the combined work of the three most industrially developed nations of the time.

Once its practicability had been demonstrated, gas lighting spread rapidly in spite of opposition which combined skepticism, prejudice and fear. Paris adopted gas lighting for its streets in 1820 and New York in 1823. By 1823 fifty-two cities in England were lighted with gas. In 1826 an English company introduced gas lighting in Berlin; a few years later a French company was formed to promote gas works in France and elsewhere on the continent. The use of gas in homes and factories also spread rapidly—the first American factory was lighted by gas in 1813. By 1859 there were nearly 1000 gas works in England, where the industry was most highly developed; 297 companies in the United States, capitalized at \$42,816,000 and serving 227,605 customers; twenty-three companies in Canada and fourteen in Latin America. The development of the gas industry was bound up with the general movement of economic advance, especially in England, where there was an intensive exploitation of the by-products of gas manufacture—carbon, coke, coal tars, ammonia. Where the tempo of economic advance was slower, the gas industry was retarded; in Germany, for example, only thirty-four cities were served by gas in 1850.

Despite its early crudity gas lighting proved superior to candles and fish oil. For a time its progress was threatened by kerosene and improved oil lamps, but the danger was overcome by cheapening the price of gas and improving its illuminating quality. The first gas burners were wasteful and smoky; the German Bunsen burner, invented in 1855, mixed gas with the air, produced complete combustion and gave a more intense, smokeless flame. This development was paralleled by more efficient production and distribution, including reduction of leakage from gas mains. After 1860 the industry made tremendous progress; in Germany expansion was

bound up with the growth of the dyeing industry and its demand for coal tars, a by-product of gas manufacture. In 1873 the successful production of water gas gave the industry a new basis for expansion. The threat of electric lighting was for a time met by again improving the quality of gas light. The open flame burner gave way to various kinds of mantles, particularly the Austrian Welsbach mantle, which by being heated with a non-luminous gas flame glowed brightly and gave more light than the bare flame. The use of the incandescent gas mantle, however, was not general until about 1890; and the inverted gas mantle, which permitted a large extension of illuminating service, was not introduced until about 1900. Despite these improvements gas, especially in the United States, was unable to meet the competition of electric light: as an illuminant gas was increasingly limited to low income homes, and its use still survives in many of the older tenements. In most European countries, however, gas and electricity are still competitors. But while gas was superseded as an illuminant by electricity, gas consumption in the United States increased enormously from other sources. At the same time that gas mantles were developed there was an active promotion of various types of gas cooking and heating devices, crude from a contemporary standpoint but for their time relatively convenient. The improvement of these devices opened up a great new demand. New uses were found for gas in industry, as a source of power and as a factor in many industrial processes, such as smelting. In 1860 an internal combustion engine driven by gas was perfected in France, and by 1880 there was a considerable manufacture of improved gas engines in both Europe and the United States. The increasing use of gas in industry and for cooking and heating stimulated gas output, which doubled between 1900 and 1914. The electric power industry is itself a large consumer of gas fuel: in 1929 power plants used 112,707,000,000 cubic feet of gas, an increase of 426 percent over 1919 and equal to the total output of the gas industry in 1901. Domestic, industrial and commercial customers of the manufactured gas industry increased from 4,200,000 in 1901 to 12,139,000 in 1929.

These developments were accompanied in the United States by the almost phenomenal growth of natural gas as a factor in the industry. For centuries natural gas had been a curiosity in Europe and Asia, and "burning springs" often inspired worship of gas as a fire god. Natural gas

was apparently first used for fuel or light in 1823 in Fredonia, New York, where the gas was piped to supply thirty burners. It was not, however, until 1872 in Pennsylvania that natural gas was collected and piped on a commercial scale. The exploitation of natural gas developed rapidly, until in 1930 it supplied more than half of the gas consumed in the United States, particularly for industrial purposes, and accounted for one half of the \$5,000,000,000 invested in the gas industry. Domestic consumers of natural gas increased from 875,000 in 1906 to 5,116,000 in 1929. The American natural gas industry is duplicated nowhere in the world either in type or in size. In a number of European countries where petroleum is found there is a tendency to develop a natural gas industry, especially in regions where other fuels for household use have been comparatively expensive; Bucharest, for example, is supplied with natural gas at the lowest rates in the world. But these developments are still comparatively insignificant.

TABLE I

Gas Consumption in the United States
(In billions of cubic feet)

YEAR	Manufactured Gas	Natural Gas
1906	123	389
1910	149	509
1915	204	629
1920	320	798
1925	421	1119
1929	524	1918

Source: American Gas Association, Annual Statistics of the Manufactured Gas Industry (New York 1930), United States, Bureau of Mines, Natural Gas in 1929 (1931).

The two branches of the industry in the United States, although formerly quite distinct, have become so intertwined in a corporate as well as a technical sense that no sharp economic distinction can be made between natural and manufactured gas. In many cases the gas supplied to the public is a mixture of the natural and manufactured products and a large number of corporations, especially the major holding companies which dominate the gas industry, have subsidiaries of both types. Recently through the interlocked interests of public utility and petroleum enterprises in the production of natural gas there has developed a close relationship in some parts of the industry between the gas industry and the industry which produces, refines and markets petroleum and its products.

As the competition of gas with electricity in the illuminating field became less conspicuous, a large number of mergers of gas and electric

enterprises were effected in the United States. Electricity was applied most generally for lighting and power service; gas almost exclusively for heating service—water heating, incineration and many special operations as well as cooking and space heating. The gas and electricity supply industries are dominated by the same major holding companies, and competition is almost completely eliminated. This situation is in striking contrast with that in other countries, where competition between gas and electricity is still vigorous. In Great Britain, for example, gas lighting has retained an important place, as only the more modern homes are wired for electricity. Hence the supply of gas for household illumination is an extremely important part of the industry's public service. Furthermore, street lighting with gas still retains the more important place there, while it has been almost completely abandoned in the United States. The recent participation of public officials in stimulating electrical development in Great Britain has aroused considerable controversy and in some cases bitter political disputes between those groups urging a national electrical system and those interested in promoting the welfare of existing gas enterprises, especially those publicly owned.

In the United States the competition which exists between gas and electricity is almost completely confined to industrial heating. In this field gas because of its much lower cost per unit of energy supplied has usually been dominant. Yet in those types of industrial heating for which extremely close control is required or where automatic operation or regulation is essential electricity has gained an important foothold. The more modern types of industrial heating equipment using gas have been so perfected that this use is growing rapidly and invading many areas of activity, displacing oil and coal with great success. Greater cleanliness, improved factory conditions and the tendency to improve products because of closer heat control are the outstanding advantages which have enabled gas to displace the solid and liquid fuels which are often considerably cheaper per unit of energy supplied.

In 1930 in the United States approximately two thirds of the manufactured gas sales and approximately half the natural gas sales of public utility companies were for household purposes, including in each case a significant but not accurately determinable percentage for house heating. Industrial and commercial sales, including sales to restaurants and hotels as well as shops

and factories, account for the balance. There is a steady growth in the percentage of each type of gas sold for industrial heating purposes, a tendency that has not been altogether interrupted even by the industrial depressions of 1921 and of 1930–31, although total gas sales declined considerably during the latter period. Use for house heating has also increased in even larger percentage, but the quantity so employed in 1930 was still approximately only 5 percent of the total public utility sales of manufactured gas and probably not over 12 or 15 percent of the total sales of natural gas.

Because of the wide seasonal variation in the requirements a considerable use of gas for house heating offers some difficulty to the management of a utility enterprise, since short season use of equipment necessarily increases capital charges per unit. Industrial demand is, on the contrary, usually quite uniform throughout the year. These differences in the utilization habits of various classes of customers have led the industry to devise important and complicated rate structures, which have frequently occasioned controversy between gas companies and public officials (see RATE REGULATION). To lessen the variation in household demand new uses for gas during the summer non-heating season are especially encouraged. Both natural gas and manufactured gas companies have undertaken campaigns to develop interest in the fields of garbage and trash incineration, refrigeration and even house cooling. Especially in the two latter fields gas is intensely competitive with electricity, and in a number of cases holding companies with subsidiaries of both types have had difficulty in determining which source of energy should be given preference. Because of the earlier development of satisfactory equipment electrical devices have generally attained considerable advantage in this competition.

Typical operating companies in the manufactured gas industry are financed through issue of long term bonds covering a third to a half of their total capitalization, with both preferred and common stocks, often of several classes. Considerable capital is secured by sale of securities to customers; 245 companies in 1927 reported 684,438 customer stockholders owning considerably over \$500,000,000 in shares. Because of the high capital cost per unit of productive capacity the gross sales of such companies are typically about one third of the total investment. Capital charges consume a large percentage of the gross income. In many jurisdictions

state authorities govern the issue of securities and all other financial matters, including details of rates charged, cost keeping systems used and amounts which must be allotted to different reserves set up for retirement of securities or for provision against various contingencies.

High capital costs in the manufactured gas industry are accompanied by comparatively low labor costs. In 1929 wages constituted only 19 percent of the "value added" by manufacturing as compared with 36 percent for manufacturing industries as a whole. Although the output of manufactured gas rose from \$220,238,000 in 1914 to \$507,000,000 in 1929, the number of wage earners decreased from 43,792 to 42,853. Their average yearly earnings in 1929 were \$1393—slightly above the average of \$1308 for all manufacturing industries. Labor in both the natural and the manufactured gas divisions of the industry is rather highly specialized and in general is afforded continuous employment with comparatively low turnover. The only highly seasonal employment is in the construction work on mains and city distribution systems, where common laborers are usually laid off in slack times. As in the electric power industry, unionism is unimportant among gas company employees, although there are a few local unions of gas workers and sporadic attempts to organize. The industry carries on intensive "educational" work in order to "promote efficiency and co-operation" and to "set the employees right in relation to many fallacies, rumors and hostile movements." Employee ownership of company securities, retirement plans of numerous types, illness and accident benefits and employee representation schemes are essential elements in the relations between employee and management within practically all of the public utility divisions of the industry. These conditions also prevail generally in the British gas industry, where employee stock ownership was introduced by some companies as far back as 1890; in the United States employee stock ownership has been a considerable factor only since the World War and is as yet inconsiderable in the gas industry.

The manufacture of coal gas, the oldest division of the industry, waned rapidly, until in 1930 only approximately 11 percent of the manufactured gas was produced with retort coal gas equipment. Over 40 percent of the total send out of manufactured gas was, however, made in coke ovens; two thirds of this was produced in oven plants not owned or operated by the utility

companies, generally belonging to metallurgical enterprises such as steel or blast furnace plants. Such metallurgical enterprises frequently sell their "surplus" gas to public utility companies for city distribution, finding it more profitable to do this and to supply fuel gas for their own metallurgical furnace uses by cheaper means. A considerable number of public utility companies have built and are operating coke oven plants of their own. In these cases the gas becomes the principal product and the coke a by-product which must be sold either for metallurgical purposes, as a household fuel or otherwise. This development has been materially restricted because of the comparatively high value of coke as compared with gas, even though the net cost of the gas is very low whenever there is a favorable local coke market. To a limited extent the development has been restricted by the opinion of a few gas managements that it is inexpedient to enter the coke business and thus produce a household and industrial fuel which competes with their principal product, gas. A limited number of coke oven enterprises organized under independent ownership with long time contracts for gas with utility companies dispose of the coke and other by-products in markets outside the utility and the metallurgial fields. In general, however, the ownership and management of independent coke enterprises have been on terms of intimacy, if not actually interlocked, with the nearby gas utility companies.

During 1930 water gas manufacture accounted for approximately 45 percent of the total manufactured gas sent out of the United States. In this process anthracite coal, coke or bituminous coal at extremely high temperature reacts with steam to make first a "blue" water gas, which is then enriched by "carbureting"; i.e. by mixing with it a product of cracking of oil in the generating machine. The result, carbureted water gas, is of approximately the same heating characteristic as coal gas, although of somewhat different chemical composition. The relative advantage to the producer of making coal gas or water gas depends largely upon the comparative cost of the fuels used and the prevailing local market for coke, which is an essential coproduct with gas when the coal gas or coke oven process is used. Very frequently the most advantageous arrangement is to use both types of processes, operating the coal gas plant continuously at a substantially uniform rate throughout the year and using the water gas process to make the additional gas required by the distribution system in amounts

varying according to the seasonal fluctuation in demand. This use of water gas instead of coal gas as a means of varying send out results from the fact that the capital charge per unit of capacity is much lower in water gas plants than in any coal gas system, and seasonal use results in less unfavorable capital cost burden on the product.

Oil gas made by a variety of processes, principally in Pacific coast states, played an important part in the manufactured gas industry until the extension during 1930 of natural gas throughout practically all of California. The almost complete replacement of such oil gas processes by natural gas may be anticipated in the western states.

By-products of petroleum production and refining include several gaseous fuels which were formerly used merely as refinery fuel or thrown away. By liquefaction under pressure some of these products are now transported and utilized not only for admixture with other gas to furnish richer city supply but also independently both for small town gas supply and for independent isolated factory fuel gas service. The further development of the gaseous by-products of petroleum has been undertaken by certain refineries in cooperation with nearby public utility gas companies, and it is expected that a large amount of petroleum refinery by-product gas will be utilized for enrichment of city supplies. The total quantity of this gas available in 1930 was probably in excess of the total quantity of coal gas and coke oven gas utilized for public utility distribution, but only a very small percentage of the total was utilized outside of the petroleum refinery.

Natural gas production in the United States almost doubled between 1910 and 1920 and tripled between 1920 and 1930. Of the total production in the latter year about 20 percent was used for household supply through public utility systems. Over half of the total production was used in field operations of the natural gas and petroleum industry and in the manufacture of carbon black. The balance, about 30 percent, was utilized as a boiler fuel in electric public utility power generating stations, as a petroleum refinery fuel or in other industrial heating or steam raising operations. Only a small part of the 80 percent used industrially was distributed through public utility systems, the balance being handled by producing companies generally affiliated with petroleum enterprises. Natural gas production is concentrated in a small number of

states: in 1929 three quarters of the total output was produced in Texas, Oklahoma, California and Louisiana. Thus it is necessary to construct long distance lines to deliver natural gas over wide areas. In 1929 deliveries of natural gas to Mexico and Canada amounted to 242,000,000 cubic feet.

TABLE II AMOUNT AND DISTRIBUTION OF GAS CONSUMPTION IN THE UNITED STATES, 1929

Sales (billions of cubic feet	Manufactured Gas)	NATURAL Gas
Total	524	1918
Domestic	359	360
Industrial *	163	1558
Value (millions of dollars)	533	413

In the case of manufactured gas industrial includes commer-

cial sales.
Source: American Gas Association, Annual Statistics of the
Manufactured Gas Industry (New York 1030), United States,
Bureau of Mines, Natural Gas in 1929 (Washington 1031)

Between 1927 and 1930 there was an intensive development of long distance transmission lines, which considerably increased the quantity of natural gas made available for city distribution. Formerly transmission lines more than 100 miles in length were considered generally uneconomical, but by 1930 lines were frequently over 500 miles long; in 1931 a pipe line of nearly 1000 miles was completed, at a cost of \$100,-000,000, connecting Chicago with the natural gas fields of Texas. The distances at which gas can be delivered and sold are constantly increasing. With this development natural gas has invaded many areas where it is intensely competitive with manufactured gas, and in a large number of small communities it has completely displaced all older systems of supply. Almost invariably the displacement has been accomplished by the adoption of natural gas by existing public utility companies and the closing down of their former manufacturing works. In larger communities the displacement by natural gas has frequently been only partial and in those cases the city supply consists of a mixture of natural gas and manufactured gas. Long distance transmission of gas is being developed in Germany by the coke industry in the Ruhr, from where transmission mains convey the supply to distant towns and cities in competition with municipal plants.

The long distance transmission of natural gas in the United States has extended the use of gaseous fuel into many rural areas and particularly into small communities that were not sufficiently populous to warrant manufactured gas supply. This has increased the percentage of the

population which is served as interurban networks for gas distribution are completed. It is estimated that during recent years new investment for transmission systems and their accessories exceeded \$100,000,000, yearly. The distribution of natural gas within the city involves only minor technical differences; frequently, however, a skeleton manufacturing department must be maintained in order that production at the stand-by works may be quickly begun in case a breakdown in a transmission line prevents continuous flow from the natural gas field to the city. The development of natural gas in many areas formerly unproductive and the extension of transmission mains over much new territory have resulted in a physical interconnection of distributing systems formerly wholly independent. As a consequence gas can now be moved freely from city to city over wide areas, much as electricity is transmitted over interconnected networks. This physical interconnection has stimulated and accelerated the corporate mergers already set in motion by other factors.

The increase in plant efficiency, the substitution in some cases of natural for manufactured gas and the growth of interconnected systems have lessened the number of operating establishments. In 1929 there were only 715 establishments producing manufactured gas as compared with 1022 in 1919 and 1296 in 1909. Industrial concentration is, however, exceeded by the concentration of corporate control in the form of dominant holding companies with subsidiaries producing and distributing natural and manufactured gas, electricity and on a smaller scale other products. One of the most conspicuous is the Electric Bond and Share Company, which, with assets in 1930 of \$1,002,000,000, controls numerous subsidiary gas companies as well as electric power, water and traction enterprises. The Consolidated Gas Company of New York, with assets of \$1,282,000,000, controls numerous gas as well as electricity supply companies. The Cities Service Company, with assets of \$1,282,000,000, extends its influence beyond gas and electricity to include traction, water and petroleum enterprises. Another major holding company, the Associated Gas and Electric Company, had assets in 1930 of \$922,000,000. These and a few other great holding companies interlock the interests of the formerly independent gas and electricity supply industries.

The most recent world statistics give the following per capita consumption of gas: San Francisco, 12,500 cubic feet; London, 10,000; Toronto, 9,000; Frankfort, 5,900; Brussels, 4,100; Lille, 2,800. Not only has the use of gas increased in Europe, but there has been considerable modernization of production methods, particularly in Germany, France and England. Germany is the most important producer in Europe; its gas industry in 1928 had approximately 60,000 employees and an output of 129,000,000,000 cubic feet of gas. The use of gas is also increasing in the cities of Latin America and Australia. In Asia, however, with the exception of Japan, there has been little progress; thus the two gas works in Bombay and Calcutta are the only ones in India.

Gas sales per capita in the United States increased steadily during the decade 1920 to 1930 and in the latter year reached the highest point in history. In 1930 it was estimated that natural gas furnished approximately 8 percent of the total energy supply from all fuels and water power used in the United States, a percentage approximately double that of ten years before. Manufactured gas and other gaseous fuels made as by-products of coking and petroleum refining furnished approximately the same percentage of the total national energy supply. Hence nearly one sixth of the country's energy is utilized as a gaseous fuel. If present trends continue it is estimated that by 1940 fully 20 percent and perhaps as much as 30 percent of the energy supply as ultimately consumed will be in this form of gaseous fuel.

RUSSELL S. McBride

See: Power, Industrial; Public Utilities; Government Ownership; Rate Regulation; Valuation; Fair Return; Holding Company; Electric Power; Coal Industry; Oil.

Consult: Clark, V. S., History of Manufactures in the United States, 3 vols. (new ed. New York 1929) vol. ii, p. 251-54, 516-17; Norman, O. E., The Romance of the Gas Industry (Chicago 1922); American Gas Institute, Lectures Delivered at the Centenary Celebration of the First Commercial Gas Company . . . (New York 1912); Youngberg, J. C., Natural Gas, America's Fastest Growing Industry (San Francisco 1930); Ferris, E. E., The Industrial Gas Salesman (New York 1927); Apmann, A. M., Domestic Gas Appliances (New York 1931); Reyes, N. I., Financial and Operating Ratios of the Gas Industry (New York 1926); Illinois University, College of Commerce and Business Administration, Bureau of Business Research, "The Financial Plan of Gas Companies" in Bulletin, vol. xxvii, no. 1 (Urbana, Ill. 1929) p. 1-49; Bemis, E. W., Municipal Ownership of Gas in the United States, American Economic Association, Publications, vol. vi, nos. iv-v (Baltimore 1891); American Gas Association, Annual Convention . . . Proceedings, vol. x (New York 1928) p. 28-76; Douglas, P. H., Real Wages in the United

States, 1890-1926, Pollak Foundation for Economic Research, Publication no. ix (Boston 1930) p. 329-41: International Gas Congress, San Francisco, 1915, Proceedings (Easton, Pa. 1916); "Gas Supply in Foreign Parts and Multi-Part Tariffs" in Gas World. vol. xciii (1930) 514-20; Hale, Walter, The Distribution of Gas (4th ed. London 1921); Evetts, George, The Administration and Finance of Gas Undertakings (London 1922); Wigginton, Reginald, Coal Carbonisation (London 1929); Sander, A., Die Gasindustrie, Deutsche Arbeit, vol. iv (Stuttgart 1914); Greineder, Friedrich Die Wirtschaft der deutschen Gaswerke (Munich 1914): Elsas, Fritz, Ferngas; kommunal- und wirtschaftspolitische Überlegungen (Berlin 1928); Albrecht, Richard, "Die deutsche Gaswirtschaft" in Technik und Wirtschaft, vol. xxi (1928) 253-57; Wolff, Georg, "Die Ferngasversorgung aus dem Ruhrgebiet" in Wirtschaftskurve, vol. ix (1930) 67-71; Hanauer, Wilhelm, Die Berufskrankheiten der Gas Arbeiter (Berlin 1930); Schmidt, Fritz, Einfluss technischer Fortschritte auf die Arbeits- und Lohnverhältnisse in den Berliner städtischen Gasanstalten, Volkswirtschaftliche Studien, vol. i (Berlin 1919); Grebel, A., "L'état actuel de l'industrie du gaz en France" in Technique moderne, vol. xvii (1925) 392-98; Thibeault, J., "La régime du personnel au gaz de Paris" in Génie civil, vol. xciv (1929) 388-89.

GASCA, PEDRO DE LA (1485-1567), Spanish colonial administrator. Gasca studied at the Seminary of Alcalá de Henares and at the University of Salamanca, became a priest and was subsequently chosen a member of the Council of the Inquisition. His diplomatic and energetic handling of the panic in Valencia, caused by the fear of a French-Turkish attack and the suspicion that a rising of the Moors was imminent, won him considerable renown. Probably because of his conduct on that occasion the crown appointed him president of the Royal Audiencia in 1546, entrusting him with the arduous task of dealing with the disturbances in Peru. The former viceroy, Blasco Nuñez de Vela, had failed to pacify the country because of his intemperance in enforcing the New Laws of 1542, which regulated the work of the natives; and as a result Gonzalo Pizarro ruled over Peru without authorization from Spain.

In his mission to Peru Gasca acted with consumate diplomacy. Adopting a policy of conciliation, he persuaded Hinojosa, the chief of Pizarro's fleet, to turn over his vessels to him. Pizarro himself was less inclined to accept Gasca's generous terms, especially after an unexpected victory at Huarina. He was, however, decisively defeated in 1548. During his stay Gasca undertook a series of reforms, which were facilitated by the fact that the program with which he had been entrusted had already been anticipated by Pizarro. He ordered uniform and

less burdensome taxes for the Indians, forbade the sacking of their villages and insisted that all encomenderos be provided with clergymen. While Gasca did not solve all the problems of the complicated Peruvian situation he nevertheless did succeed in establishing, primarily by peaceful persuasion, the authority of the crown, which had been accustomed to assert itself only by recourse to armed force of its loyal subjects.

CARLOS PEREYRA

Consult: Prescott, W. H., History of the Conquest of Peru, 2 vols. (rev. ed. Philadelphia 1882) vol. ii, bk. v; Salillas, Rafael, El pacificador del Perú (Madrid 1892).

GASOLINE TAX. A gallonage tax was first imposed in 1919 by the states of Oregon, Colorado, New Mexico and North Dakota to aid in the construction and maintenance of public roads. It was adopted in other jurisdictions in rapid succession, until within ten years it was in force in all states of the union, the District of Columbia and in several foreign countries. The charge is variously classified—simply as a tax, as an excise, as a license tax, an occupation tax and a privilege tax—and may be regarded as a commercial charge for the privilege of using vehicles of specified types on the public roads. It therefore closely resembles a toll, although not for the use of a particular piece of road. This theory had been developed by the courts in the registration fee cases before the advent of the gasoline tax. Such charges, it was held, are valid whether made under the police power to secure safety or made to secure "compensation for the use of facilities provided at great cost" by the state or its subdivisions [Hendrick v. Maryland, 235 U. S. 610 (1915); Kane v. New Jersey, 242 U. S. 160 (1916)]. The same reasoning has been applied to the gasoline tax and the same conclusion reached. While justifying the tax on these grounds in particular cases the courts have gone further, holding it an excise tax and its legality not dependent upon the use to which revenue from it is put.

The states have applied the use theory with a varying degree of rigidity and rarely with complete consistency. A few states devote a part of the revenue to non-highway purposes, although only 2.2 percent of the total yield was so used in 1929. Another practise inconsistent with the toll theory is that of collecting the tax from city consumers for use exclusively on roads outside city limits. There is, however, a tendency to recognize a city equity in the revenue by allocating a percentage of the receipts to

cities or by making a mileage allowance for state roads within city limits. A dozen states now make some such provision and the number is increasing. Another inconsistency lies in taxing gasoline not used in motor cars. Gasoline is usually defined in such a way as to include all liquid fuels usable in motor vehicle engines. Kerosene is generally excluded. Some states, e.g. New York and California, carry out the design to tax "persons who use the public highways," by reimbursing those who consume the fuel in "any manner except in the operation of a motor vehicle upon or over the highways." Other states exempt fuel used for specified purposes, as in agriculture, stationary engines, airplanes, motor boats, cleaning and dveing. One third of the states, however, allow no exemption or refund on account of use, although some of these exempt fuel sold for exportation. Some exemptions are made because of the type of service the user performs. Rural mail carriers are often so exempted and all states are debarred from taxing gasoline used by a federal agency [Panhandle Oil Co. v. Mississippi, 277 U. S. 218 (1927)].

The administration of the tax except as to the provisions for refunds is comparatively simple and the cost is low, rarely exceeding 1 percent of the yield. Collection is generally made at the point of greatest concentration, i.e. as the fuel passes out of the hands of the "importer" or of the refiner. It is a common practise for major companies to pay the tax on all gasoline shipped into a state for sale at their service stations, but sales to jobbers and to retailers are made f.o.b at the refinery, and these dealers thus become the taxpayers. The collection is made in most states by a state fiscal officer but in a few cases by the oil inspector or by the licensing authority Dealers complained of the early laws that no allowance was made for losses by evaporation. A third of the states now make such an allowance.

The rate has shown a steady increase. As late as 1922 the rate in seventeen states was one cent, only two charging as much as two cents. The subsequent increase in the rate and in the number of taxing states is shown in Table 1.

Whether viewed as a charge for the use of a public utility or as an excise for general revenue purposes, the tax has high merit. The extent of highway use and the damage to roadbed depend upon the weight and speed of the vehicle and the distance traveled, and the consumption of fuel is largely determined by the same factors.

Encyclopaedia of the Social Sciences

TABLE I

RATES OF THE GASOLINE TAX IN THE UNITED STATES, 1923-29.

Year	Number of States with Rates Prevailing at End of Year*							
	1 ¢	2¢	214	3¢	334	4¢	5 ¢	6¢
1923	15	11	1	7				
1925	3	21	1	12	3	4	1	<u> </u>
1927		13		16	1	11	5	_
1929		8		9	1	19	8	3
1931 (June)		6		9	_	18	11	6

Source: Compiled from Public Roads, and from Facts and Figures of the Automobile Industry (New York 1931).

* Not including the District of Columbia, which has had a two-cent tax since 1924.

Gasoline is a commodity well suited to excise taxation. It is an article of wide consumption and within the range of prices prevailing in the United States the demand for it is highly inclastic. The yield is abundant: in 1929 it exceeded the motor vehicle fees for the first time; the expense of collection is low; and the usual monthly payments accord with the canons of convenience and economy. The tax meets with little opposition, although the automobile and petroleum interests protest against the tendency toward excessive rates and against the diversion of the revenue to non-highway uses.

TABLE II

GASOLINE TAX YIELD IN THE UNITED STATES, 1925-29

YEAR	TI	NE CONSUMP- ON (IN 000 GALS.)	NET TAX Earnings	TOTAL REGISTRA- TION FEES (IN \$1,000,000)	
	TOTAL	NET AMOUNT TAXED	(IN \$1,000,000)		
	1925	9,362	6,458	146.0	260.6
	1926	10,708	7,884	187.6	288.3
	1927	12,466	9,367	258.8	301.1
	1928	13,811	10,178	304.9	322.6
	1929	15,618	13,400	431.3	347.8
	1930	16,613	15,763	494.6	355.7

Source: Compiled from Public Roads, from Facts and Figures of the Automobile Industry (New York) for 1930 and 1931, and from the New York World for May 4, 1920.

The tax has been adopted in other countries. All the Canadian provinces now levy on the imperial gallon a five-cent tax dedicated to highway use. Restricted by the act of 1867 to direct taxation, the provinces require retailers to collect the tax from consumers and pay them $2\frac{1}{2}$ to 5 percent of the receipts for the service.

GEORGE O. VIRTUE

See: Revenues, Public; Taxation; Tax Administration; Roads.

Consult: Crawford, F. G., The Administration of the

Gasoline Tax in the United States, Municipal Administration Service, Publication no. xv (rev. ed. New York 1930); Learned, E. P., State Gasoline Taxes, University of Kansas, Bulletin, vol. xxvi, no. vi (Lawrence, Kan. 1925); United States, Bureau of Public Roads, Public Roads, published monthly since 1918; North American Gasoline Tax Conference, 1918; North American Gasoline Tax Conference, United States, Bureau of Foreign and Domestic Commerce, "Motor Vehicle Regulations and Taxation in Foreign Countries," Trade Promotion Series, no. 108 (1930).

GASPARIN, COMTE DE, ADRIEN ÉTIENNE Pierre (1783-1862), French agronomist and economist. Gasparin brought to the study of agricultural economics a scientific spirit and exact methods of observation unusual in his time. In 1807 he was appointed to the veterinary school at Lyons, where his interest in scientific study of the problems of agricultural improvement was aroused. He first won attention by the publication of various papers: Le croisement des races (Paris 1810), Les maladies contagieuses des bêtes à laine (Paris 1821), L'éducation des mérinos (Paris 1822) and a Manuel d'art vétérinaire (Paris 1817). Returning to his home in Provence, where he cultivated his own extensive property, he published observations on the condition of agricultural labor. Students still consult his Des petites propriétés considérées dans leurs rapports avec le sort des ouvriers, la prosperité de l'agriculture et la destinée des états (Paris 1820), in which he defended the system of small peasant holdings at a time when the partisans of absolute monarchy were endeavoring to obtain the reestablishment of large domains. Later he published a Guide des propriétaires des biens soumis au métayage (Paris 1828, 2nd ed. 1853) and a Guide des propriétaires des biens ruraux affermés (Paris 1829, 3rd ed. 1862). These fragmentary studies were a prelude to his Cours d'agriculture (5 vols., Paris 1843-51; 3rd ed., 6 vols., 1863), which has remained the foundation of agronomic studies in France. In it he discusses as an expert and with great thoroughness not only the systems of cultivation, organization and administration of rural enterprises but also the economic importance of agriculture and its relation to the state. From 1830 to 1839 he rendered valuable service in politics as representative, prefect, minister of the interior and minister of agriculture; in 1840 he was elected to the Académie des Sciences. In 1851 Gasparin was appointed director of the Institut National Agronomique, which had been founded as part of the government program for the furtherance of scientific agricultural education but was suppressed under the Second Empire. From 1839 to 1856 Gasparin presented several papers, notably one on *La valeur des engrais* (Paris 1842), to the Société Centrale d'Agriculture and he published numerous articles in the *Journal d'agriculture pratique*.

MICHEL AUGÉ-LARIBÉ

Consult: Barral, J., in Journal d'agriculture pratique, vol. ii (1862) 287.

GATSCHET, ALBERT SAMUEL (1832-1907), Swiss-American ethnologist and philologist. Gatschet is best known for his work on the aboriginal languages of America, pursued in the interest of the Bureau of American Ethnology from its foundation in 1879 until 1905 when he retired from its staff. While he made some valuable contributions to ethnology, particularly in his Migration Legend of the Creek Indians (2 vols., Philadelphia 1884 and St. Louis 1888), his great service lay in his records of various languages of the New World and the stimulus which these studies and his synchronous contributions to technical and other publications gave to linguistic research. He interested himself in an enormous number of languages—his manuscript material preserved by the Bureau of Ethnology, which represents only a part of his linguistic contacts, touches upon nearly a hundred. He recorded some languages, such as Atakapa, Karankawa, Comecrudo, Cotonam, Chitimacha, Tunica and Natchez, which are now entirely extinct or survive in the memories of but two or three individuals, and supplied much of the data entering into Major Powell's classification of the Indian languages ("Indian Linguistic Families of America North of Mexico" in United States, Bureau of Ethnology, Seventh Annual Report, 1885-86, 1891, p. 1-142), a work upon which all ethnological investigations in North America have been based since its appearance in 1891. Gatschet's monumental The Klamath Indians of Southwestern Oregon (Contributions to North American Ethnology, vol. ii, Washington 1890) was one of the first objective proofs of the extent and richness of Indian tongues and furnished an example of the possibilities for their study. Later and greater specialization, accompanied by modern linguistic technique, has superseded much of his work.

Gatschet was critical of the theoretical generalizations of Lewis Henry Morgan on aboriginal democracy in America and insisted on the existence of hereditary castes among the Natchez, Toltecs, Incas and Aztecs, a position

which has been substantiated by modern anthropologists.

JOHN R. SWANTON

Consult: Mooney, James, in American Anthropologist, n.s., vol. ix (1907) 561-70.

GAUDENZI, AUGUSTO (1858–1916), Italian jurist. Gaudenzi was professor at the University of Bologna and is important in the study of legal history because of his work with mediaeval legal sources. In 1885 he rediscovered in the library of Lord Leicester of Holkham a manuscript of Italian origin which he believed to date from the end of the ninth or the beginning of the tenth century. It consisted of texts representing an admixture of Romanic and Germanic law and contained fourteen fragments of ancient Visigothic laws, which he attributed to King Euric (466-c. 84). He published these fragments (which today are known as the Gaudenzian texts) with interesting comments and augmented them by means of deductions made from a manuscript belonging to the Vallicelliana Library at Rome. The Bibliotheca juridica medii aevi, the publication of which he initiated, contains in the three volumes which were published in 1888, 1892 and 1901 (new ed. Bologna 1914) numerous unedited texts of the Bolognese glossators. In this study of public and private documents of the Middle Ages he used new methods to depict the history of mediaeval forgeries, expounding original doctrines concerning the preparation of documents and the office of the notary. In various periods of his life he devoted a great deal of energy to the history of the law schools at Bologna, Rome and Ravenna, presenting new hypotheses as to their interrelationship.

Arrigo Solmi

Consult: Brandileone, F., "Commemorazione del Professore Augusto Gaudenzi" in Reale Accademia delle Scienze dell' Istituto di Bologna, Classe di Scienze Morali, Rendiconto, 2nd ser., vol. i (1917) 17-55, where a bibliography of Gaudenzi's works is given; Solmi, A., La storia del diritto italiano (Rome 1922) p. 14-16; Conrat, Max (Cohn), Geschichte der Quellen und Literatur des römischen Rechts im früheren Mittelalter (Leipsic 1891) p. 277-84.

GAUDIG, HUGO (1860–1923), German educator. From 1900 to 1923 Gaudig was director of higher studies of the second girls' high school connected with the normal school and the practise school in Leipsic. He was an unusually suggestive and creative educator. His reforms grew directly out of the needs of his daily school work, and his writings are devoted to a discussion of

given and desired educational conditions. They present no systematic pedagogy, but a wealth of suggestion and great insight into matters of detail. Gaudig's first works dealt with the form of instruction. He tried to get away from the formalism of the Herbartian grades, seeking a psychologically sounder procedure. He argued from the standpoint of the pupil who must learn to work mentally, and he desired to teach through self-activity. Among advocates of the Arbeitsschule Gaudig became the champion of the idea of education chiefly through mental self-activity as opposed to the largely manual program of Kerschensteiner. The teacher's main task was to organize the child's activity so that a personality might develop out of each individual by selfdetermination and self-education. The self-development of the natural person into a more perfect human type was the subject of Gaudig's chief writing. Arguing that a personality takes an active part, to the extent of its faculties, in the cultural life of the surrounding world, he demanded that the school be made into a realistic living experience, a cooperative community. Games, hikes, visits to factories and farms, and celebrations were to be part of a living school as much as formal teaching. Since the forces of life have their unity in national culture, he argued that the school must be founded on the latter.

Gaudig at first received little attention except abroad, but after the overturn of 1918 many of his demands were unusually rapidly recognized and many of his ideas accepted generally by pedagogues.

HELMUT WIESE

Important works: Didaktische Ketzereien (Leipsic 1904, 6th ed. 1925); Die Schule im Dienste der werdenden Persönlichkeit, 2 vols. (Leipsic 1917, 2nd ed. 1922; 3rd abridged ed. by O. Scheibner in 1 vol. 1930); Freie geistige Schularbeit in Theorie und Praxis, ed. by Hugo Gaudig (Breslau 1922, 5th ed. 1928).

Consult: Lehmann, Reinhold, "Germany" in Columbia University, Teachers College, Educational Yearbook of the International Institute, 1924 (New York 1925) p. 277-327; Marx, K., Die Persönlichkeits Pädagogik Hugo Gaudigs (Paderborn 1924), with extensive bibliography; Scheibner, Otto, "Hugo Gaudig als pädagogischer Denker" in Zeitschrift für pädagogische Psychologie und experimentelle Pädagogik, vol. xxi (1920) 323-30.

GAUDIN, MARTIN MICHEL CHARLES, Duc DE GAËTE (1756–1841), French minister of finance. During his training in the national bureau of the head clerk of finance, which he entered in 1775 at the age of nineteen. Gaudin prof-

ited by the extensive investigations which his superiors were making with a view to ameliorating the tax situation. He acquired an extraordinary knowledge of all matters pertaining to land taxation, upon which their efforts were principally concentrated. In the early stages of the revolution he was appointed one of the six commissioners of the Treasury but the atmosphere of revolutionary confusion was too repugnant to his superlatively systematic nature to allow his abilities scope. Twice he refused to accept the Ministry of Finance in the inefficient administration of the Directory. On the day following the eighteenth of Brumaire he eagerly accepted the same post from Napoleon.

Knowing how to take advantage of Gaudin's special knowledge and talents Napoleon found in him a highly valued and much heeded adviser. Gaudin retained his office through the entire period of the Consulate and the Empire and proved to be one of the most capable financial ministers in French history. It was he who was chiefly responsible for all those Napoleonic measures which so splendidly restored the nation's shattered finances: the abolition of progressive forced loans, an implicit declaration that revolutionary procedure had been abandoned; the creation of an office of direct taxation as a substitute for the system of leaving the assessment and collection of these taxes to elected officials, who had been remiss in the discharge of their duties; the revival of the practise of bonding receivers general in order to bind them to regular acquittal of their obligations; the creation of the Caisse d'Amortissement and of the Bank of France; the at first timorous but later more systematic reintroduction of indirect taxation; and, finally—the work in which Gaudin delighted—the preparation of the cadastre. So ardently and thoroughly did he perform this last task, which was enjoined upon him by a law of September 15, 1807, that by 1813, 10,000 communes had already been surveyed and 6000 of these had been audited by experts. The military reverses of 1812 and 1813 forced Gaudin to levy new taxes, which, however, the exhausted condition of the nation made it impossible to collect. After Napoleon's downfall Gaudin defended his government against the exaggerated charges of critics-such as Baron Louis, whom he answered in Observations d'un anonyme—concerning the amount of the financial deficit it left. During the Hundred Days he once more served as minister of finance, under the Restoration was member of the Chamber of Deputies and from 1820 to

1834 held the governorship of the Bank of France. Gaudin left several works of great importance for the financial history of his time; particularly significant from this point of view are Mémoire sur le cadastre (Paris 1818) and Notice historique sur les finances de France (de l'an VIII-1800 au 1st avril 1814) (Paris 1818), both of which are included in Mémoires, souvenirs, opinions et écrits (3 vols., Paris 1926).

MARCEL MARION

Consult: Marion, M., Histoire financière de la France depuis 1715, vols. i-v (Paris 1914-28) vol. iv; Liesse, A., Portraits de financiers (Paris 1908) p. 121-57.

GEBHART, NICOLAS ÉMILE (1839-1908), French historian. From 1879 until his death Gebhart was professor of Italian literature at the Sorbonne. For him, however, a knowledge of literature was only one aspect of a comprehensive aesthetic and spiritual understanding with which he desired and was able to unlock the portals of the past, from antiquity to the end of the Renaissance. His two principal books are the work of a historian. Les origines de la renaissance en Italie (Paris 1879), published while he was still professor of foreign literatures at the Collège de Nancy, was an attempt to discover why the Renaissance began in Italy rather than in France and then to analyze in the early writings and works of art the genius of Renaissance Italy. To the study of this movement Gebhart brought not only the technique of a historian but the eye of a painter, the heart of a poet and the sympathy of a scholar who had served his apprenticeship in the study of ancient Greece. With unfailing insight he sheared the inconsequential element from the essential and united the latter in an illuminating synthesis. L'Italie mystique (Paris 1890, 3rd ed. 1899; tr. with introduction by E. M. Hulme as Mystics and Heretics in Italy at the End of the Middle Ages, London 1922) dealt with the spiritual life of Italy during the period of transition from the mediaeval age of faith to the Renaissance age of reason. If the very conception of L'Italie mystique implied a dismissal of the more realistic aspects of Italian life, Gebhart's treatment of such figures as Joachim of Flora, Francis of Assisi, Frederick II, John of Parma, Fra Salimbene, the Spirituals of the Franciscan order and Dante-like the study of Catherine of Siena contained in his Les moines et les papes (Paris 1896, 4th ed. 1907)-reveals a superb faculty of penetrating the religious and moral sides of the mediaeval mind. The

work as a whole is an invaluable synthesis of the results of researches made both by previous scholars and by himself. With the same rich yet always lucid style, with the same flair for the picturesque and the same insight, Gebhart wrote a series of biographies of individual Renaissance artists: Rabelais, la renaissance et la réforme (Paris 1877, rev. ed. 1895); Sandro Botticelli (Paris 1907, 2nd ed. 1908); and Michel-Ange (Paris 1908).

EDWARD M. HULME

Consult. Benoist, C., "Notice sur la vie et les travaux de M. Émile Gebhart" in Académie des sciences, morales et politiques, Séances et travaux . . . Compte rendu, n.s., vol. ccii (1925) pt. ii, 324-49; Longnon, Jean, "Le dernier humaniste: Émile Gebhart" in Revue critique des idées et des livres, vol. xviii (1912) 641-53; Bordeaux, H., Quelques portraits d'hommes (2nd ed. Paris 1913) p. 119-49.

GEIGER, ABRAHAM (1810-74), Jewish theologian and religious reformer. Geiger served as rabbi in Wiesbaden, Breslau, Frankfort and Berlin and wrote several valuable Jewish historical studies. He maintained that the Old Testament text had not been handed down intact but that intellectual currents of different ages had introduced prepagandist changes. His studies cast new light upon the origin and tenets of the Pharisees and Sadducees and stimulated interest in the Jewish background of the gospels. Geiger applied the historical approach to contemporary Jewish life, which following the emancipation and the entrance of the Jews into the European cultural community was faced with a serious crisis. He was the first to use the concept of theology in Jewish circles and to propose its systematic treatment and founded the Wissenschaftliche Zeitschrift für jüdische Theologie (1835-47). He examined the existing Jewish ritual as the result of a process of development and drew practical conclusions from the historical criticism of the phases of its development. He sounded a call for fundamental, comprehensive reform of Jewish religion, tracing the crisis of Judaism to an overemphasis upon forms. He emphasized the teachings of the Old Testament prophets and their religious views and proclaimed the universality of Judaism as the goal of all religious training. He opposed the prevailing Jewish view of the oral tradition as the transmission of a doctrine received from God and handed down from generation to generation, holding it to be "the inward spirit, continually and creatively transforming, as it has awakened, come to expression, and continued in Judaism." Geiger advocated these ideas in numerous published writings and sought adherents for them among his colleagues and in his congregation. Since he was regarded as the chosen champion of the Jewish reform movement he was refused membership in the rabbinical body of the Breslau congregation by its orthodox chief rabbi, who alleged that Geiger's attendance at a university proved him to be no true believer. The Breslau congregation thereupon in 1842-43 published a dissenting collection of rabbinical opinions regarding the compatibility of free inquiry with the rabbi's office which strongly influenced the future intellectual development of Judaism even among the orthodox. In the important rabbinical assemblies of 1844 to 1846 Geiger was a leader of the radical wing, advocating especially a reform of the marriage and Sabbath observance laws as well as the gradual elimination of Hebrew as the language of worship. Nevertheless, the prayer book he prepared in 1854 retained considerable Hebrew and varied from the traditional text only where urgent logical or dogmatic reasons made it imperative. He took no part in the far reaching reforms of 1845 made by the Berlin Reform-Gemeinde, because they seemed to him to constitute too radical a break in historical continuity. Later, however, in his Jüdische Zeitschrift für Wissenschaft und Leben (11 vols., 1863-74) he showed lively interest in and sympathy for American Reformed Judaism, which openly championed his principles. Although he failed in his lifelong effort to found a Jewish theological faculty in a German university, from 1872 on he lectured on the history of religion and Biblical criticism in the new Hochschule für die Wissenschaft des Judentums, where Felix Adler and Emil G. Hirsch, both of whom had an important influence on religious thought in America, were among his pupils.

ISMAR ELBOGEN

Important works: Urschrift und Übersetzungen der Bibel (Breslau 1857); Nothwendigkeit und Mass einer Reform des jüdischen Gottesdienstes (Breslau 1861); Das Judenthum und seine Geschichte, 3 vols. (Breslau 1865-71), tr. by C. Newburgh (2nd ed. New York 1911); Über die Errichtung einer jüdisch-theologischen Facultät (Wiesbaden 1838); Nachgelassene Schriften, ed. by L. Geiger, 5 vols. (Berlin 1875-78).

Consult: Geiger, L., and others, Abraham Geiger, Leben und Lebenswerk (Berlin 1910); Philipson, D., The Reform Movement in Judaism (new ed. New York 1931).

GEIJER, ERIK GUSTAF (1783-1847), Swedish historian and social thinker. Geijer was educated at the University of Uppsala and

taught there for a long time. After some years spent in collecting materials and after a preliminary work, Svea rikes häfder (Uppsala 1825), in which he analyzed the sources of Swedish history and revealed his point of view, he published his Svenska folkets historia (3 vols., Örebro 1832–36; tr. by J. H. Turner, London 1845), which was the first national history of Sweden and which carried the narrative down to 1654.

Throughout most of his career Geijer was a romanticist in his outlook upon history and literature and a conservative in his attitude toward social and political problems. But he gradually came to see that the old aristocratic regime could not be maintained indefinitely. Through his study of German philosophy he had learned to appreciate the dignity, the rights and the importance of the human personality. This principle of personality became the central thought not only in his philosophic system but also in his religious and political beliefs. A man who was worthy of citizenship in the kingdom of God was, he believed, worthy of every other citizenship. Holding this doctrine he could not long remain in the conservative camp. Early in 1838 he issued a manifesto in which he declared for better public schools, free competition, widening of the suffrage and a more liberal program in higher education.

Geijer was at the time one of the most influential men in Sweden. Through his lyrics, his hymns, his musical compositions, his public addresses, his philosophic essays and his historical writings his name had become known in every village in the country. His "apostasy" was therefore an event of the first importance It gave a new direction to political thought and forced the current of history into new channels.

LAURENCE M. LARSON

Works: Samlade skriften, 13 vols. (Stockholm 1849-55).

Consult: Erdmann, Nils, Erik Gustaf Geijer (Stockholm 1897); Nielsen, Jörgen, Erik Gustaf Geijer (Odense 1902); Molin, Adrian, Geijer-studier (Göteborg 1906); Wahlström, Lydia, Erik Gustaf Geijer (Stockholm 1907).

GEISTESWISSENSCHAFTEN. The term Geisteswissenschaften first came into use as the German translation of John Stuart Mill's "moral sciences" and in its most general sense is applied to the moral and mental as distinguished from the natural sciences. The peculiar connotation which it has acquired, however, in the course of its development in Germany makes it almost

impossible to translate the term into any other language. It has been recognized since the dawn of scientific thought in ancient Greece that the approach to reality for scientific knowledge varies, depending on whether this reality is physical or mental and whether the approach is based on outward experience or introspection. The strong prevalence of mathematical and quantitative methods of observation and induction that has characterized the development of modern natural science since the time of the Renaissance implanted in the leading western nations an equally strong inclination to identify this particular scientific ideal with knowledge generally. The world of mental experience was consequently either to be left outside this exclusive pale or admitted only on condition of a more or less complete subjection to this ideal. The nineteenth century even brought a further victorious extension of the realm of natural science by the effective constitution of an experimental psychology on the foundations of David Hume's doctrine of apperception and association.

The German concept of Geisteswissenschaften is an open revolt against this conquest of mental experience by western science. Germs of this concept are found in the protest of the Italian, Giambattista Vico, against the mathematical treatment of language, culture and society, and more especially in the works of F. A. Wolf, A. Böckh and J. G. Droysen. The methodical and systematic preoccupation with this problem, however, began at the end of the last century with the two markedly antinaturalistic positions of Wilhelm Dilthey and the "southwestern school" of German philosophy led by Windelband and Rickert. Dilthey combated John Stuart Mill's logic of moral sciences and the experimental psychology and Comtian sociology that followed it and in their place aimed to set up a system and methodology based on an understanding (verstehen) sui generis of history and society. The southwesterners developed a distinction drawn in western science by A. A. Cournot between the nomothetic, or generalizing, character of the physico-mathematical group and the ideographic, or individualizing, character of the historical or cultural group of sciences; and they superimposed on this distinction their doctrine of the difference between the knowledge of being (Sein) and the consciousness of and relation to norms (Sollen), thus inaugurating the famous discussion on the role of value judgments in science; the debate of this question crucial to the young social sciences has since spread

beyond Germany. These ideas soon began to permeate the whole range of the social sciences in Germany and have been especially influential since the World War. The writings of Rudolf Stammler and Hans Fehr in jurisprudence and the historical works of Troeltsch, Meinecke and the whole group of writers of Geistesgeschichte reveal the imprint of these methodological principles. In economics and political science a sort of compromise between the attitudes of Dilthey and the southwesterners has been worked out by Max Weber in his doctrine of "ideal types" that are to take the place of mechanical laws in the analysis of social facts and by Werner Sombart and his Geistwissenschaft (as he says instead of Geisteswissenschaft); that is, to replace the two older forms of political economy, the "value judging" (richtende) and the "law finding" (ordnende), by a third, a kind of synthesis of the former two, to be called the "understanding" (verstehende) from the peculiar relationship and imminent character of this knowledge.

Several valuable strains of genuine feeling for the constitutive principles of the social sciences seem to be contained in the concept of Geisteswissenschaften. It is true that there is a certain danger that unscientific mysticism might result from this violent rupture of the unity of scientific effort. But even in Germany the original sharp distinctions drawn between the different aspects of the concept have been giving way to a more continuous interpretation of the methods of mental knowledge in their relation to physical knowledge; this development has been promoted, it is important to note, by the contemporaneous process of transformation of the rigid classical and atomistic concept of causality in the natural sciences. The "understanding" of social phenomena as mental facts and complexes is no longer viewed as quite the immediate and direct approach which it appears to be to naïve introspection. The peculiar role of values in social reality is ceasing to be regarded in the light of a dualistic split between factual and non-positing statements, and as a result of the writings of Edmund Husserl, Max Scheler and Nicolai Hartmann the ban on "value judgments" in the social sciences has given way to careful and critical researches into their structure and systematic connection. The lasting merit of the German idea of the Geisteswissenschaften is that it has drawn attention to the impossibility of the uncritical parallelism frequently found in the western social sciences between mechanical evolution in the naturalistic sense and a rigid system of values thought to be realized through the "progressive" unity of this evolution.

CARL BRINKMANN

Consult: Dilthey, W., "Einleitung in die Geisteswissenschaften" in his Gesammelte Schriften, 8 vols. (Leipsic 1921-31) vol. i; Rickert, Heinrich, Die Grenzen der naturwissenschaftlichen Begriffsbildung (5th ed. Tübingen 1929), Rothacker, Erich, Logik und Systematik der Geisteswissenschaften (Munich 1926); Friess, H. L., "The Progress of German Philosophy in the Last Hundred Years" in Journal of Philosophy, vol. xxvii (1930) 396-415; Brinkmann, Carl, "The Present Situation of German Sociology" in American Sociological Society, Papers and Proceedings, vol. xxi (1926) 47-56; Abel, T. F., Systematic Sociology in Germany (New York 1929) ch. iv; Sombart, Werner, Die drei Nationalökonomien (Munich 1930), and discussions of this work by Alfred Amonn, Edith Landmann, Kurt Singer, Edgar Salin, Herbert Schack, Ludwig Mises and Carl Brinkmann in Schmollers Jahrbuch, vol. liv (1930) 193-343, and vol. lv (1931) 193-212; Wach, Joachim, Das Verstehen, 2 vols. (Tübingen 1926-29).

GELASIUS I (died 496), pope from 492 to 496. The work of Pope Gelasius I is of great importance in the development of the mediaeval and modern ideas of the relation between church and state. It was he who first formulated in clear and precise terms the dualistic conception of their relation. Since the conversion of Constantine there had been some tendency even in the west toward the idea of a unified Christian society under the leadership of a Christian emperor. But the western church had finally repudiated such a view; its own claims had been stated before Gelasius' time by St. Ambrose, who dogmatically asserted not only the freedom of the church but its sovereignty in spiritual matters even over the emperor himself. It remained, however, for Gelasius to give clear expression to the complementary conception of the state's independence and supremacy in temporal matters. In his fourth Tractatus Gelasius declares that before the coming of Christ certain persons were legitimately both kings and priests but that in view of the feebleness of human nature Christ. who was himself the true and perfect embodiment of the priest-king, separated the two offices and gave to each its peculiar functions and powers. In his twelfth Epistola Gelasius states this view as a principle. The world is ruled by two authorities, the sacred authority of the pontiffs and the royal power. The Christian emperor needs the pontiff for the attainment of eternal life; the pontiff depends upon the government of the emperor in temporal matters. Gelasius thus provided the Middle Ages with the literary form for the dualistic principle of authority which it

was their normal tendency to accept and which in spite of their difficulties and conflicts they in their turn handed down to the modern world. These writings of Gelasius may be found in *Epistolae romanorum pontificum genuinae a S. Hilaro usque ad Pelagium 11*, edited by A. Thiel (2 pts., Braunsberg 1867–68).

A. J. CARLYLE

Consult: Carlyle, R. W. and A. J., A History of Mediaeval Political Theory in the West, vols. i-v (Edinburgh 1903-28), especially vol. i, ch. xv, and vols. ii and iv; Roux, A., Le pape Gélase 1er (492-496) (Paris 1880).

GENERAL PROPERTY TAX. The general property tax is a tax on property in general without differentiation according to class or characteristics. The concept embraces three elements: first, all property is taxed as a homogeneous mass; second, the entire mass of property is assessed or valued for taxation according to a uniform rule; third, all property within any taxing jurisdiction is taxed at the same rate. This emphasis upon uniformity of rate and valuation has caused the system to be designated popularly as the uniform rule. The theory underlying insistence upon uniformity of tax rate and valuation was apparently that the aggregate of property of all sorts owned by any individual provided a suitable and all sufficient measure of his tax obligation. The taxation of all property by a uniform rule was presumed to reach all who should pay taxes and to reach them in an equitable manner.

The general property tax represents an intermediate stage in the evolution of property taxes. The course of this evolution, which is characteristic of the fiscal development of practically all countries, is illustrated in the fiscal history of the older American states. In the earliest stage of property taxation different kinds of property were enumerated and were taxed sometimes ad valorem, sometimes on a specific basis. As the wealth of the community expanded, the statutory enumeration likewise grew longer. The transition from specific property taxes to a general property tax occurred when the legislature abandoned the detailed enumeration and substituted a blanket reference to taxable property. Instead of enumerating the forms of property to be taxed, the tables were reversed and all property not specifically exempted was declared to be taxable. The uniform application of certain rules of valuation and assessment completed the change to a general property tax. The differentiation of property, and especially the increased

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importance of intangible property have rendered the uniform rule of property taxation wholly inadequate. In a number of states the general mass of property is being broken up into classes, each of which is being taxed by methods appropriate to its peculiar characteristics.

Conditions of early American life were favorable to the acceptance of the general property tax. Property ownership, especially in land and the type of movables commonly associated with the land, such as livestock, carriages and farm products, was open to all persons with initiative. The abundance of free land prevented the development of large social classes that were traditionally dissociated from property ownership. There was comparative absence of those groups which derive incomes from personal services rather than from property. The early exemplars of the personal service groups, whether laborers or lawyers, had not yet begun to command such rewards for their services as to bring them conspicuously to the notice of the taxing authorities. Economic and social conditions favored the assumption that property ownership was the chief if not the sole index of taxable capacity. Property was the mark also of political importance, since the suffrage was generally restricted by a property qualification until after the close of the eighteenth century.

The intensely dynamic character of early American life favored also the development of other characteristics of the general property tax; namely, the use of the capital value rather than the annual income value as the basis of the tax and the reference to the market for the determination of the capital value. In a stable, more or less static society the annual income from fixed property becomes the significant aspect of property ownership; in a dynamic, unstable society future increments in capital value are more important than current returns. The tax laws naturally adopted, both in Europe and America, the predominant characteristic of property. In Europe this led long ago to the taxation of real property on its annual income value, and in America it led to taxation on the capital value.

The abundance of land and the migratory habits of the population from early colonial times prevented the American people from developing the disposition to cling to chosen land-holdings and other possessions. The European land market was frozen. Land hunger led to hereditary holdings, even with minute subdivision, to keep the land in the family. This reluctance to sell extended in a lesser degree to other

property. There were always enough persons in America who were ready to sell "lock, stock and barrel" to provide a free market for practically all forms of property. The general property tax assumed a free market in which the assessor could always ascertain and measure values from the actual sales of property similar to that which he was assessing for taxation.

The pattern of the general property tax followed a conventional design which became well nigh universal through the process of statutory imitation. In nearly every state it acquired constitutional status and thereby a sanction which caused it to endure long after its defects had been thoroughly exposed. The typical constitutional provision declared that all property except that specifically exempted should be taxed on a uniform basis and at a uniform rate. The exemptions included public property and that used for religious, educational and charitable purposes. Small amounts of personal property were ordinarily exempted to each taxpayer, while larger amounts were sometimes exempted to selected classes such as veterans and their widows. In some states the full scope of the exemptions reflected the predominant economic interest, agriculture, and the further exemption policy applied more frequently to young livestock, growing crops, products unsold on the farm and the like than to other forms of wealth.

The basis of assessment was expressed in a variety of phrases, such as "true value," "market value," "fair value in money." All of these expressions were simply variations of the basic concept that value for taxation purposes is established in a free market. It is the amount that would be paid for the property in a voluntary transaction between a willing buyer and a willing seller.

The assessment of property was made by an assessor or a board of assessors. This official was ordinarily elected in the district which he served, although in some of the larger cities he was appointed by the mayor or the governing body. The assessment district was the city, town or township in all of the older states in which the town form of local government was important. In some southern and western states the county was the important unit of local administration, and the assessor there became a county official.

The assessment was made as of a fixed date and the selection of this date was determined in large part by the convenience and advantage of the dominant rural group, although the fact that the assessor usually had another occupation may have contributed somewhat to the practise of arranging that the work be done in the slack agricultural season. Assessment dates were therefore either in the late autumn or the early spring. These dates have persisted even in the states in which industry and trade have overshadowed agriculture, although they have no necessary relation to the prevailing fiscal periods for business or for the governmental bodies themselves. To obviate seasonal variations in the case of merchants' and manufacturers' stocks many states introduced the assessment of such property at its average monthly value.

In theory, the assessor was to inspect and appraise the several parcels or pieces of property and fix his valuations in the light of his knowledge of selling prices or by reference to market conditions. In practise, there was much copying of the records of previous years and a minimum of that vigorous exercise of the judgment and the intellect which the theory of the general property tax required. Elaborate blank forms were designed, particularly for personal property, in order to aid the assessor in securing complete statements of taxable property. These returns were to be sworn to by the taxpayer, and the assessor was usually required to support his assessment with an affidavit that he had actually complied with the law.

The total tax levy upon the assessed value was made up of the separate rates for state, county, municipal and school purposes together with any levies for other specific purposes as determined by law. The state tax might be collected at a fixed rate, or the rate might be determined by dividing the total state assessment into the sum required for state purposes. The former method has been the more usual, and some states have limited by constitutional provision the rate which might be levied on property for state purposes.

The taxpayer became delinquent if the tax was not paid by a certain date, and the tax lien thus established could be satisfied by seizure and sale of the property. The owner was usually given a period of years during which he could acquire title again by paying the accumulated taxes, with interest and sometimes a penalty in addition.

The general property tax served during a long period as the principal source of both state and local revenue. Although the general property tax is dissolving into a series of taxes on classes of property, a large proportion of all state and local taxes is still obtained from property taxes despite the development of supplemental revenue sources.

With the increase in the amount and complexity of wealth, the general property tax proved to be an increasingly unsatisfactory form of taxation. The most fundamental defects were those inherent in the basic theory of the tax itself. Because of these defects the administrative difficulties became increasingly serious.

The theory of the general property tax proved defective in two essential respects. In the first place, the course of economic evolution during the nineteenth century produced an extensive differentiation in the character and composition of property. There was a vast division of property into tangible things and intangible rights and interests. The rise of the modern credit structure and the growth of the corporate form of business organization were the two most significant factors in this process of differentiation. While these intangible rights and interests are in fact a species of property and while their development has had highly important consequences from the standpoint of the use and management of and the income from the tangible wealth of the community, they are for the most part merely representative wealth. The general property tax treated representative wealth as independent property to be taxed exactly as the underlying physical wealth. It added together the corporation's tangible assets and its stocks and bonds. Many states recognized the essential injustice of this kind of double taxation to the extent of exempting the stocks of domestic corporations. Although such legislation was often clearly unconstitutional it was seldom contested.

The second defect in the theory of the general property tax was in its assumption that property is an all sufficient measure of taxable ability. This assumption ignored the development of the personal service occupations and the large incomes which were obtained by many skilled and professional groups. Full information on this point is still lacking, but the federal income tax returns show that wage, salary and other personal service incomes comprise about 40 percent of all incomes reported by the small group of persons subject to that tax.

The failure to recognize the changes in the forms and character of property gave rise to serious administrative difficulties. The assessor could not assess intangibles on inspection, since he could not see them and could have no certain knowledge of their existence. The escape of intangibles from taxation continued, and tax

rates on tangible property rose rapidly as governmental costs increased. Each advance in tax rates stimulated further evasion, and even in those states which made most strenuous efforts the amounts of intangibles actually assessed were but a very small proportion of the total amount owned. In 1928 Ohio assessed \$723,332,000 of intangible property owned by individuals and corporations. A special investigating commission has recently estimated the total intangible wealth owned in the state at \$15,703,985,000.

The pressure of rising tax rates gave rise to other administrative difficulties. Undervaluation was attempted where sequestration could not be accomplished. As the size of individual property aggregates increased, the technical equipment and the intellectual capacity of the average assessor were subjected to greater strain. These problems of valuation would appear under any system of property taxation; they appeared first. however, under the general property tax. A partial solution was provided by transferring the assessment of public utilities to state boards of assessment. This reform left untouched the fundamental problem of uniform property assessment, since the local assessors continued to produce very unequal results in their treatment of the general mass of property. These results may be summarily stated as a tendency toward regression; that is, small properties were often assessed at higher percentages of true value than large properties. An exception to this tendency was recently disclosed in Chicago, where the proportions of assessed values to real values were greater in the high value districts with a small voting population than in the residential sections where the voters lived. Detailed analysis of assessment tendencies in some states, notably Wisconsin, has revealed a higher assessment basis for rural than for urban property.

The assessment of personal property has given rise to administrative problems of another sort. The difficulty here has been in finding the property rather than in its correct appraisal, although the proper valuation of large stocks of merchandise or materials has been as much beyond the capacity of the average local assessor as would be the proper assessment of high value real estate. In some castern states, particularly New York, the taxation of personal property has been largely discredited by *pro forma* assessments of nominal amounts or by the doomage assessment of large amounts against individuals chosen more or less at random, with the privilege of "swearing off" the assessment.

Inequalities in assessments proved to be a serious administrative difficulty from the earliest stage of the general property tax. The first step in providing for the review and adjustment of assessments, known as equalization, was the creation of local boards of equalization. These were supposed to hear appeals from aggrieved taxpayers, examine the assessor's lists and equalize the assessment. The obvious inability of local boards of equalization to afford adequate relief led to the creation of state boards of equalization. These boards had no technical equipment for the task and no great relish for it. The resulting state equalization was usually a "logrolling" process. The creation of state boards of equalization and of state boards of corporate assessment was followed by the organization of state tay commissions. These commissions often absorbed the duties of the earlier boards, but their distinctive function was the supervision of the local assessment. The more vigorous commissions were able to show decided improvements in the direction of more equitable assessments, but they were wholly unable to restore the general property tax as an equitable form of taxation.

A similar result befell other administrative remedies. "Tax ferrets" were authorized in a few states to ferret out evaders on a percentage basis. Naturally they aimed at the few conspicuously wealthy taxpayers but did nothing to correct mass evasion by the rank and file of taxpayers. Inheritance tax laws provided for disclosure of the contents of safety boxes for the purpose of imposing penalty assessments on unlisted intangibles. While these devices somewhat broadened the taxable base, they were quite incapable of securing a complete assessment of intangibles for taxation at high rates.

As a consequence of the theoretical defects and the practical administrative difficulties, the adequate assessment of personal property became increasingly difficult, and the general property tax moved steadily in the direction of a tax on real property only. Had this tendency been allowed to continue without interruption, the American experience with property taxation would have paralleled the English and continental experience. The combined influences of statutory exemption and of unchecked evasion would in time have effected the transformation of the general property tax into a real property tax.

There is some sentiment in the United States for permitting and encouraging this transforma-

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tion, but there is an even greater weight of opinion in favor of retaining a fairly broad system of property taxation, under which the mass of property should be resolved into classes, each of which should be taxed according to its peculiar characteristics. The strength of this movement for a diversified property tax is derived from the belief that personal property is a beneficiary of governmental services in the same or even in greater degree than real property.

The passing of the general property concept meant a transition from taxation in personam to taxation in rem. Modern diversified property taxes are not aimed at the ability of the owner as a person to pay taxes. This element of personal ability to pay is now being reached by another tax which is far more exact for the purpose, namely, the personal income tax. Realization of the superiority of this test of personal ability hastened the abandonment of the effort to measure total ability by total property, a method which could never be adequate even as regards property owners except under a single comprehensive taxing jurisdiction, to which each would report his entire property. The property tax therefore ceased to be regarded primarily as a form of personal taxation, but rather as a tax against the property as a thing.

Under this view, it is difficult to justify logically any exemption of classes of property. Each class receives governmental protection and other services which are given to the property as such and not to the owner as such. The owner of a stock of merchandise may live in another county or another state or a foreign country; yet the merchandise is protected by police and fire departments and by the courts, and it is served by every governmental agency as fully and completely as if the owner were a resident of the district in which it is located. The substitution of any kind of lieu tax for the property tax on any class of property, whether for reasons of administrative advantage or otherwise, should be recognized for what it is, and should not operate to relieve the owner of his personal obligations under any form of personal taxation which may be developed.

The diversification of property into classes, for the purpose of taxing each class in a manner and at a rate appropriate to its characteristics, has resulted in two principal methods of reform, as the evolution of property taxation advanced from general to specific property taxes.

The movement for the classification of property for taxation was the first important reform

development. The primary segregation was between tangible and intangible property, and many states adopted this classification. Intangibles are taxed at low, flat rates. As a result of this reform enormous gains have been registered in the volume of such property assessed and substantial increases in the revenue collected. It has not always been realized, however, that the successful operation of a low, flat rate tax on intangibles demands strict supervision by the tax commission.

Elaborate classification of tangible property has not been undertaken in many instances. The practical result of such schemes in Minnesota and Montana, for example, has been the singling out of a specific type of activity, particularly mining, for relatively severe taxation. It must be concluded that the principal benefits from a scheme of classification are realized in providing for separate treatment of intangibles and that little advantage is to be derived from an elaborate grouping of tangible property into classes to be taxed at different effective rates.

A second line of reform, which has been less generally adopted, has been the taxation of intangibles on an income rather than a capital value basis. Massachusetts taxes at fixed rates interest and dividends, income from annuities and gains from dealings in intangibles. New Hampshire taxes interest and dividends at the average rate of taxation on other property. The comparative tax burden on a 6 percent bond for \$1000 in these states and in Minnesota, where the rate is three mills on the dollar of capital value, would be in Massachusetts \$3.60, in New Hampshire \$1.69 (at the average property tax rate of \$2.80 per \$100 in 1929) and in Minnesota \$3.00. While the tax in New Hampshire is less than half that of Massachusetts, the general result of these newer methods, that is, of a flat tax on the capital value or a moderate tax on the income value, is roughly the same. Either is a satisfactory and equitable remedy for the excessive taxation of intangibles under the high rates of the general property tax. From this standpoint the choice of remedies becomes a matter of preference or of political expediency. The Minnesota plan will derive revenue from nondividend stocks which have a market value because of prospective earnings, just as the capital value method derives revenue from idle land held in anticipation of an increase in value.

The taxation of intangibles in Massachusetts and New Hampshire, although popularly known as income taxation, is not to be confused with the personal income tax, which is levied against the person and is based usually on the entire personal income from all sources. The two states mentioned are employing the income rather than the capital value basis for taxing specific forms of property. In other words, they are employing the principle of property classification, with a further differentiation in the basis of the tax in the case of intangibles. They are therefore observing the rule of universality in that all property is taxed in some manner; but they have abandoned the rule of uniformity of method and rate, which is an essential feature of the general property tax. Should either of these states introduce a thoroughgoing personal income tax, it would be entirely proper to include interest and dividend income along with the income from tangible property and personal services without modifying or repealing the existing taxes, which have here been considered to be special types of property taxation. In a number of states which now use the personal income tax the error has been made of assuming that the inclusion of income from intangibles was a sufficient warrant for the complete exemption of intangibles as property.

Another aspect of the reform movement is the development of special business taxes. The general property tax applied to the property used in business as to other property, but the growth of large business units demonstrated anew the inability of the local assessor adequately to value such properties. There was no free market for factories, steel mills, apartment houses and similar large aggregates. In the absence of a suitable technique for arriving at a taxable basis an effort was made to overcome the deficiencies of the local assessment by taxing the corporate excess; that is, the excess of the value of the corporate stock over the taxable value of the tangible assets. The stock market valuation of the stock was accepted, although the judgment of this authority is not always reliable. Closely held stocks were valued by the tax commissioner, whose judgment and knowledge of such values were better than those of the average assessor. Massachusetts and other states which once used the corporate excess have found it unsatisfactory and have reacted toward a business tax based directly on net income instead of on a valuation of stocks based on other people's judgment of the significance of the income.

Thus at least three different taxes are found to be necessary to cover the field which was

once supposed to be covered adequately by the general property tax. These are a tax or taxes on the several classes of property, a business tax and a personal income tax.

The evolution of tax systems toward a highly diversified group of taxes has proceeded much farther in Europe than in the United States. There the pressure for revenue has been such that no conspicuous taxable object could escape notice for very long. The general property tax disintegrated centuries ago in England and on the continent, but the taxation of specific forms of property, of business and of incomes has continued with increasing severity. The general property taxes in Germany, the Netherlands, Denmark, Austria and Hungary, are of a supplementary nature. They are intended to reach wealth escaping other forms of taxation, particularly the income tax, and to subject earnings from property to a heavier tax burden by taxing the property as well as the income. The rates are kept low and the yield has been moderate, both absolutely and in relation to total revenues.

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Sec: Taxation; Tax Administration; Assessment of Taxes; Land Taxation; Corporation Taxes; Business Taxes; Income Tax; Local Finance.

Consult: Seligman, E. R. A., Essays on Taxation (10th ed. New York 1925), especially ch. ii and p. 628-50; Lutz, H. L., Public Finance (2nd ed. New York 1930) chs. xvii xviii, and The State Tax Commission, Harvard Economic Studies, vol. xvii (Cambridge, Mass. 1918); Leland, S. E., The Classified Property Tax in the United States (Boston 1928); National Tax Association, "Preliminary Report of the Committee Appointed . . . to Prepare a Plan of a Model System of State and Local Taxation' in Proceedings, vol. xii (New York 1920) p. 426-70; Bullock, C. J., "The State Income Tax versus the Classified Property Tax" in National Tax Association, Proceedings, vol. x (New Haven 1917) p. 362-84; Fux, Boleslav, "Die Vermögenssteuer" in Handbuch der Finanzwissenschaft, vol. ii (Tübingen 1927) p. 133-58; Moll, Bruno, Zur Geschichte der Vermögenssteuern (Leipsic 1911); Winter, Curt, Die Vermögenssteuern der deutschen Bundesstaaten und der schweizerischen Kantone (Geithain 1915).

GENERAL STRIKE involves the sympathetic cessation of labor by the majority of the workers in all the vital industries of any locality or region. The term cannot properly be applied to generalized strikes within single industries. On the other hand, the assertion that there has never been and cannot be a genuine general strike rests on the arbitrary assumption of a completely universal cessation. The vital element in the general strike, whether it involves an entire nation or is restricted to a single locality, is the

more or less complete paralysis of the economic life of that community in order to bring about certain desired ends. These ends determine the classification of the general strikes which have occurred. The general strike may be economic, aimed at the redress of specific injustices in industrial relations, sympathetic in nature and directed at the outset at least against employers. Or it may be invoked as a weapon to wrest some new constitutional right for the working population; in this instance it is directed against the government and is political and reformist in character. Finally, it may be considered the opening wedge in a revolution against the entire established order, in which case it is revolutionary in character. It is obvious that these lines of demarcation are not always clear and may be obliterated in the course of the strike.

The effectiveness of this weapon was realized in the prelude to the French Revolution when Mirabeau warned the privileged classes of his day against irritating "this people which produces everything and which to make itself formidable has only to become motionless." What Mirabeau had in mind was primarily a revolutionary strike, and this was true as well of the publicist Girardin, who in 185: urged a universal strike against the coup d'état of Louis Napoleon, and of the sociologist Auguste Comte, who a few years later spoke of this weapon of the proletariat "against serious and prolonged violations of the sociocratic order."

It was only, however, with the advent of industrialism that the full force of the general strike as an economic and political weapon was realized. Credit for conscious advocacy of a strike which was something more than a revolutionary demonstration probably belongs to the Chartist pamphleteer and free lance agitator, William Benbow, who in 1832 advanced the idea of a Grand National Holiday or Sacred Month of the working classes for the purpose of reforming society. In 1842 an attempt was made to put this in practise in Richard Pilling's unsuccessful Plug Plot; factory boilers were unplugged and workers "pulled out" in several counties, but the strikers were deserted by the Chartist political leaders.

The congresses of the First International (the International Association of Workingmen) from 1864 to 1872 furnished the first debating ground for the merits of this weapon in the hands of the working class. It was introduced by the English delegation, which advocated its limitation to the economic sphere, and soon became one of the

moot points in the split between anarchists under the leadership of Bakunin, who advocated it as a means of overthrowing the government, and the socialists under the leadership of Marx, From that time on, especially as other types of strikes expanded into organized often nation wide affairs, the concept of the general strike has cropped up in many countries in trade union as well as in political labor circles. It was in connection with a proposed general strike for the eight-hour day in the United States that the fatal Haymarket Riot of 1886 occurred. That event aroused a new interest in the general strike especially in France, where it was enthusiastically included in the program of antiparliamentarian "direct action," and in Belgium, where it was conceived as an instrument for political reform. In the eighties and nincties of the last century it was the French labor movement which most vigorously advocated the general strike in its own federations and in the international labor movement. Curiously enough France is the one important industrial country in which the general strike has never been put into practise. An incipient strike in 1910 was broken under threat of court martial by Premier Aristide Briand, who as a socialist in 1888 and again in 1892 had been responsible for the commitment of the Fédération Nationale des Syndicats to the general strike; in 1920 another attempt at a general strike failed miserably. Beginning with the agitation of a worker anarchist, Tortelier, in the eighties, reaching a high point of development in the effective propaganda of Emile Pouget, who was responsible for the acceptance of the general strike in the Confédération Générale du Travail in the nineties, the glorification of the general strike reached its final theoretical culmination in the Réflexions sur la violence (Paris 1908, 5th ed. 1921; tr. by T. E. Hulme, New York 1912) of Georges Sorel (1847-1922), who believed in the general strike not as an actuality but as a "social myth" and the most significant form of propaganda to keep alive the class struggle.

By the time Sorel's work had appeared the influence of French theory and of actual general strikes, economic, political and revolutionary, in other countries had brought the general strike into the foreground to such an extent that in 1905 it was probably the most vital issue in the labor movement. Belgium had made use of the political strike in 1893 and in 1902 to win universal manhood suffrage from the conservative and Catholic majority in the government. In 1893 the strike had brought out 200,000 work-

ers; in 1902, almost 300,000. Both strikes lasted only about a week; the suddenness of the former resulted in the passage of a bill revising the electorate but not granting unqualified universal suffrage. The second found the authorities fully prepared and adamant. Many workers met death at the hands of the military and the garde civique; the Belgian labor movement suffered its first great defeat in twenty years. In Catalonia there had been a revolutionary strike of some magnitude lasting for ten days. In Italy in 1904 over 1,000,000 workers took part in a strike which ended in rioting and violence as a protest against the use of the military in labor disputes. Finally, the revolutionary uprisings of 1905 in Russia had been ushered in by nation wide general strikes; one in January, based ostensibly on industrial grievances but transformed into a revolutionary political strike, resulted in some industrial reforms and some months later in the grant of a popular parliament, or Duma. The later strikes ended in wholesale slaughters, in the loss of the democratically elected Duma and all other ostensible gains. It was this strike movement, however, which led Lenin to give up the antagonism to the general strike which had characterized his views up to 1900.

The discussion of the revolutionary general strike which had come up recurrently in the nineties in the second labor International became a vital issue at the Amsterdam congress of 1904 and clearly marked the division between the extremists and the moderates, between the syndicalists and the parliamentarians. By this time no national lines could be drawn as to the advocacy of the notion: one of its most fervent advocates was Ferdinand Domela Nieuwenhuis of Holland; another was Dr. Raphael Friedeburg, the leader of a new syndicalist group in Germany, the Lokalisten; to the French socialist Hubert Lagardelle it was the simplest and most effective weapon to carry out the class struggle, the advocacy of which was the "yardstick of socialism." In the United States in 1905 William D. Haywood and the newly formed Industrial Workers of the World supported without any very definite program for its execution what Arnold Roller had called the "social general strike." To the politically minded and more conservative leaders, Jean Jaurès in France, Émile Vandervelde in Belgium, Karl Kautsky and August Bebel in Germany and to the majority of the English speaking socialists the revolutionary general strike was a dangerously double edged weapon which "could not fail a single time with-

out involving the whole working class in an immense disaster." They were aware of the usefulness of a threat of the general strike and even advocated its use against some overweening and despotic curtailment of popular rights or on an international scale against the possibility of an outbreak of war. To his persistent belief and outspoken advocacy of an international general strike Jaurès fell a martyr shortly before the beginning of the World War.

Although the 1904 international labor congress rejected the revolutionary strike, the advocacy and practise of the general strike continued In Germany the Jena congress of 1905 endorsed the strike and later Rosa Luxemburg and Karl Liebknecht, whose father had opposed its use, carried on the agitation for the revolutionary strike. In 1900 the first important economic general strike occurred in Sweden as a protest by the Sveriges Landsorganisation (Swedish National Federation of Labor) against the growing use of the lockout by the powerful employers' associations. This strike, which lasted a full month and brought out 300,000 of the 500,000 industrial workers, ended in the virtual surrender of the workers. It disclosed not only the solidarity of the working class but also the forces with which the government and middle and upper classes would oppose a strike. Local transportation was seriously impeded, but the government's threat of loss of jobs and pensions held the railroadmen at work. Professional men, students, the titled and leisure classes, formed a public security brigade to carry on the most essential services.

In the same year a revolutionary strike broke out again in Catalonia, lasted for six days and was followed by the unconstitutional trial and swift death sentence imposed upon Francisco Ferrer. The Spanish anarchists who fled from Catalonia to the New World exercised considerable influence upon agitation for the general strike, particularly in Argentina, where in 1919 under the direction of the anarchist controlled Federación Obrera Regional Argentina (F. O. R. A.) a strike took place resulting in some economic gains but failing from a revolutionary standpoint and causing hundreds of deaths.

A localized general strike in Dublin in 1913 under the leadership of the syndically minded James Larkin awakened great sympathy throughout Great Britain, especially among that group headed by Tom Mann, who had come under the influence of the I. W. W. in Australia.

It was in 1913 that Belgian labor called its

third great strike for political reform, a proof perhaps that it had by no means taken its previous defeats as final. This time, however, there was a ten-month period of preparation, and 400,000 workers maintained a two-week struggle, in which the only weak point was the failure of the public service workers to respond. The immediate political result was not striking and universal suffrage was not granted until the end of the World War. But the magnitude of the strike, its effective preparation and orderly conduct awakened fear among the middle and upper classes of Europe and encouraged the growth of those citizens' emergency organizations which were called into being in the post-war general strikes.

Immediately prior to the war in 1914 another revolutionary strike took place in Italy, in which Benito Mussolini, then a socialist, played a con siderable part. At the close of the World War a wave of sympathy strikes turned Italy into a center of revolutionary disturbances; this was followed by the Fascist reaction and its excesses.

In the turbulent post-war period the most important of the general strikes appeared in countries which had previously had no experience with them—Germany, the United States, Canada, Argentina, China and, finally, almost a hundred years after William Benbow's advocacy, Great Britain.

The influence of the Russian revolution was evident in an abortive revolutionary strike under the leadership of the Spartacist Workers' and Soldiers' Council of Berlin, which heralded the abdication of the emperor and the creation of the German Republic in 1918. The following year the Spartacists again led a revolt and there ensued the strange spectacle of a Socialist government suppressing such strikes through reliance upon officers and soldiers of the old regime. In the resultant reign of terror 1500 men, women and boys were executed in one week in Berlin. It was in this struggle that Rosa Luxemburg and Karl Liebknecht, Germany's two outstanding advocates of the general strike, were put to death. The folly of using such officers and troops showed itself in the monarchistic Kapp Putsch of 1920. The Ebert cabinet, which had fled to Stuttgart, met this threat by the proclamation of a general strike for the unusual purpose of saving the existing government. After Kapp's defeat and flight to Sweden the Ebert government ordered the strikers back to work against their will; and although few of the Kappists were punished, strikers who refused to

obey the order were treated as rebel Bolshevists and many suffered death at the hands of Noske's troops.

In China there occurred in 1925 a general strike which began as an economic strike against certain employers in Shanghai; since, however, these employers were Japanese and Europeans, the strike and the boycott that accompanied and followed it took on a nationalist and antiforeign aspect. Under the leadership of labor federations affiliated with the Kuomintang the strike spread to Canton, Peking, Hongkong and other Chinese cities and lasted for over two months. Although China had often employed the boycott, this first instance of the use of the general strike was interrelated with the rise and development of the factory system, especially under imperialistic and foreign control.

The general strikes of 1919 in Winnipeg, Canada, and in Seattle, Washington, were sympathetic protests against the lowering of standards by employers once the pressure of war shortage was relieved. If the war had resulted in a strengthening of labor forces it had as well demonstrated to citizens' committees and "minutemen" their capacity for action. The six-day Seattle strike and the six-week Winnipeg strike were both hailed as Bolshevist outbursts; but although the American Federation of Labor was undoubtedly opposed to them, as it always had been opposed to the general strike, these strikes were genuine trade union protests and inspired as much by the membership as by the officials. In Winnipeg a citizens' committee of 1000 ran the fire, water and police services; the strike ended in rioting and the arrest and sentence of some of the leaders. Both strikes were remarkably well managed by the unions in the matter of providing commissaries and the like. Outside of movements for general strike demonstrations, however, there is little or no vitality left to the general strike notion in the United States and Canada, especially since the decline of the I. W. W.

The overwhelmingly significant economic general strike was that of May, 1926, in Great Britain. Many threats of a general strike had been made in the years from 1919 to 1921 by the "Triple Alliance" and by the "Council of Action." The final threat ended in the fiasco of "Black Friday." The general strike of May, 1926, was the inevitable outcome of the intentionally provocative strategy of the Conservative cabinet. The Trades Union Congress had threatened a general strike in sympathetic protest against the

national lockout of the coal miners on April 30, 1926, and to the surprise of the leaders of labor this challenge was accepted by the government. Although there was little or no preparation by labor, 3,000,000 workers, representing the vast majority in rail and road transport, in dock and harbor work, in the printing trades and the press and to a lesser degree in the building, iron and steel and heavy chemical industries, obeyed the strike call and for a while completely paralyzed economic life. The government, however, was well prepared for the strike and for emergency transport of foodstuffs by road and rail. The middle and upper classes had organized in the Order for the Maintenance of Supplies (O.M.S.). The navy was extensively used, although absence of press information kept this knowledge from the public. There was much talk by members of the Baldwin cabinet of civil war. The courts were invoked and the Astbury decision of May 11 declared that the strike was illegal.

These measures may have caused consternation but they were not as effective in the breaking of ranks as the conciliatory offices of the more moderate Sir Herbert Samuel, who had been chairman of the 1925 Royal Commission on the Coal Industry and who now came forward with somewhat unofficial offers of settlement of the miners' grievances. The General Council of the Trades Union Congress recommended their acceptance, but the miners refused; and on the following day, May 12, although there was little evidence that the ranks of the strikers were seriously weakened, the General Council called off the strike. The miners remained on strike for months afterward, ultimately yielding piecemeal to the pressure of starvation and complete defeat. The ranks of labor felt themselves badly descrted at the conclusion, and only the rail and transport workers' stubborn refusal to return to work until better terms had been granted prevented the affair from becoming a rout. Nevertheless, in the following year the delegates to a special convention of the Trades Union Congress approved the action of their leaders by a large majority.

The aftermath of the general strike was twofold: a reactionary Trades Disputes Act declaring general strikes illegal was made law in 1927; and an attempt was made by liberal capitalists and the General Council to achieve some practical degree of cooperation between capital and labor, known as the Turner-Mond scheme. Opposition from the more conservative employers' associations nullified their efforts. The actual

cost of the general strike to the government did not exceed \$2,000,000, but the strike and the coal dispute cost the nation \$400,000,000 in revenue and the nation's business over \$2,000,-000,000. Trades union funds were very seriously depleted and a vast army of men left on the labor market for months after the strike ended. Save for an amazing sense of labor unity and power during the actual days of the general strike, which perhaps had its reverberation in the Labour government's accession to power in 1929, it is doubtful if the dispute resulted in any gain. It cannot even be claimed that revolutionary fervor has been increased, for despite the rise of certain radical leaders to power the strike was marked by its lack of revolutionary spirit and its insistence on the economic and social ends.

From this partial account it is obvious that general strikes have been called in many countries by varied groups and under varying circumstances. Trade unionists, moderate socialists, syndicalists and communists have alike resorted to the instrument, either as a defensive or an aggressive measure. The strikes have ranged in length from the three-day strike in Italy in 1914 to the two-month Chinese strike. There has been a wide variety of opinion among leaders as to preparation and strategy. The advocates of economic and political strikes have stressed the necessity for careful planning on the part of the leadership; to revolutionists like Trotsky and Luxemburg, on the other hand, the only effective general strike was one which was not the product of long organization and the arbitrary fiat of leaders but one in which the revolutionary energy of the ranks of labor provided the real motive force. The original advocates of the general strike realized the oppressive powers of government but could not foresee the resourcefulness which capitalistic industrialism provides. As the use of road and air transport increases; as the radio provides a substitute for the telephone. telegraph and mail; as the professional and leisured classes are organized into citizens' committees not only of a generalized type but highly specialized, like the Technische Nothilfe of Germany, the inevitable revolutionary logic of the general strike will no doubt have to be frankly faced by its advocates. The success of the revolutionary strike in Europe has been shown to be partially dependent at least on the spirit of revolt in the military, naval and police forces; the existence of such a spirit in western nations is highly doubtful. Despite all these reasons and the record of failure in the past the

weapon is hardly likely to be disregarded when in moments of desperate protest the workers feel that other avenues of appeal have been deliberately blocked or destroyed.

WILFRID HARRIS CROOK

See: LABOR MOVEMENT; CLASS STRUGGLE; STRIKE; DIRECT ACTION; VIOLENCE; FORCE, POLITICAL; REVO-LUTION AND COUNTER-REVOLUTION; ANARCHISM; SYN-DICALISM; CONFÉDÉRATION GÉNÉRALE DU TRAVAIL; INDUSTRIAL WORKERS OF THE WORLD; FRATERNIZING. Consult: Crook, W. H., The General Strike, a Study of Labor's Tragic Weapon in Theory and Practice (Chapel Hill, N. C. 1931), with detailed bibliography; Georgi, Elsbeth, Theorie und Praxis des Generalstreiks in der modernen Arbeiterbewegung (Jena 1908); Vandervelde, Émile, La grève générale en Belgique (Paris 1914); Roland-Holst, H., Generalstreik und Sozialdemokratie (Dresden 1906); Lagardelle, Hubert, La grève générale (Paris 1905); Sombart, W., Der proletarische Sozialismus, 2 vols. (Jena 1924) vol. ii, ch. xi; Lorwin, L. L. (Levine, Louis), Labor and Internationalism (New York 1929); Ströbel, Heinrich, Die deutsche Revolution, ihr Unglück und ihre Rettung (4th ed. Berlin 1922); Clark, Marjorie R., A History of the French Labor Movement 1910-1928 (Berkeley 1930).

GENEVA CONVENTION. See RED CROSS.

GENIUS. Genius was the counterpart in the ancient Italian religions of the Greek daimon to which Socrates acknowledged indebtedness for help in difficulties. It was at first thought of as the godlike personification of the procreative power in man; every man had a genius and every woman a Juno. Later it came to be regarded as a guardian spirit intermediate in character between the gods and men, accompanying every man from birth until death and helping determine his destiny. There gradually developed the notion that whenever a person showed a marked deviation from the average in personality or ability some spirit was speaking or acting through him. Throughout the Middle Ages this belief colored all thinking upon the question of exceptional power of any kind. Among many primitive peoples there is essentially the same attitude. The Plains Indians' search for visions, for example, was largely concerned with obtaining the personal favor of a guardian spirit, which would thereafter protect and guide the individual. The able and successful person, whether warrior or medicine man, ascribed his success and power to the favor of the guardian spirit. In modern times the word genius refers to the manifestation of the highest and rarest form of creative ability. In popular thinking, however, it is by no means free from mythological and religious connotations, as is indicated by such phrases as "a divine spark," "divine fire" and "working as if possessed." Most people do not go quite so far as the Comtists in their deification of great men, but they are often reverent and almost religious in their attitude toward them and they erect monuments to them after their death.

Francis Galton applied the statistical technique of the probability curve to the study of genius and regarded the differences in human abilities from the idiot to the great man as deviations from the average ability. He regarded eminence as due to ability which differs in amount but not in kind from the ability of the average man. Léon Paschal, who also conceives genius to consist solely of superior ability, holds it to be the property of developing mentally in a constant fashion beyond adolescence, which he regards as the threshold of decline in average people. Others have devised the theory that genius is closely related to some form of insanity or mental degeneration. Moreau de Tours believed genius to be a development of certain types of idiocy. Lombroso concluded on the basis of rich but artificially selected material that genius was a degenerative psychosis of the epileptoid group. Much of the subsequent literature has concerned itself with disproving Lombroso's thesis. On the basis of his study of British genius Havelock Ellis has shown that since the association of genius with insanity occurs demonstrably in less than one out of twenty cases, all theories as to genius being a form of insanity must be discarded. Kretschmer points out, however, that psychopathic border line cases are definitely more common among men of genius than among ordinary men and holds that psychopathy tends toward creativeness because the psychopathic person, unadapted to his environment and hence uncomfortable in it, resists it and attempts to alter it by doing great things. He considers genius a rare and extreme variation of the human species biologically and as such possessing little stability. Lange-Eichbaum also emphasizes the psychopathic as opposed to the psychotic aspects of genius. He believes that the psychopathic constitution favors the development of genius because the intense and powerful affectivity with which it is accompanied results in experiences which others do not have; it causes suffering and pain and leads on to dream and phantasy which stimulate achievement. Related to the explanation of genius in terms of psychopathology is the judgment of Jeannette Marks and others who find in drugs and intoxicants the drive toward the creation of genius. The psychological concomitants of tuberculosis are also thought by Marks and A. C. Jacobson to play an important part in the making of genius.

Freudians have attempted to explain the creations of the artistic and even of the practical genius as the sublimation of unsatisfied wishes. They regard the artist as maladapted and dissatisfied, creating art as a "surrogate form of life." Otto Rank believes that the artist, occupying a position between the dreamer and the neurotic, is enabled to become an artist because he possesses will power which others lack. Case studies of genius by psychoanalysts illuminate the tenuous nature of their underlying hypothesis that the Oedipus complex furnishes the drive toward the creations of genius. According to Max Graf, Richard Wagner's Flying Dutchman fled back to the land in search of the one true motherly heart, and when he found her he entered at last into rest; similarly Wagner strove to find his rest in the refuge of motherly arms and boyish phantasy. Ludwig Jekels considered Napoleon's ambition to rule the whole world to have been an expression of his wish to be in full possession of his mother-Mother Earth. Alice Sperber interpreted Dante's failure to rebel against the authority of the church as due to the fact that his own mild and non-interfering father aroused no revolt in him; his interest in another world arose from his desire to find the lost objects of his affection-his mother and Beatrice. To explain the creations of philosophy Alexander Herzberg makes use of the concept of sublimation of non-sexual as well as of sexual impulses. He considers philosophizing to be the satisfaction of an impulse by means of an alternative to action and idealistic philosophy to be the result of an unconscious tendency to depreciate or even annihilate the external world. Diametrically opposed is Türck's view that genius, to create anything worth while, must keep in mind the laws of the real and the objective and must not lose itself in arbitrary phantasy creation.

The psychologists who accept the standpoint of Alfred Adler rather than that of Freud find the source of a great deal of significant achievement in the mechanism of compensation for a real or fancied inferiority. They suggest, for example, that Demosthenes became the greatest orator of his time by reason of his overcompensation for his speech defect; Beethoven a success as a musician because of his defects in hearing, which early focused his interest on auditory

experiences and provoked a process of intensive training. The Adlerians do not attribute artistic achievement only to compensation for a specific defect, but they appear to regard this as the most important single factor in genius.

Undoubtedly unconscious activity plays an important part in artistic creations, but it is difficult to use the concept of the unconscious with any accuracy. In Jung's concepts of a "racial unconscious" and differences between racial unconsciousnesses the concept takes on certain highly speculative and almost mystical connotations. The unconscious also forms the basis of Mary Austin's theory of genius, although she prefers a somewhat different terminology.

The quantity and the quality of men of genius have often been attributed to their race. Galton, for example, asserted that the average ability of the Athenians between 530 and 430 B.C. was, on the lowest possible estimate, very nearly two grades higher than that of the modern British, whose average ability is in turn two grades higher than that of the African Negro. Inasmuch, however, as the evaluation of genius or creative ability varies greatly with time, culture and the judgments and standards of the group, it is hardly scientific to utilize Galton's criteria of eminence in measuring African Negroes or Athenians. Gobineau, Chamberlain and more particularly Woltmann have expended considerable ingenuity in an unsuccessful effort to prove that one particular race, sometimes called Aryan, sometimes Nordic, was responsible for most if not all truly creative activity.

The relative part played by heredity and environmental opportunity in the creation of genius has been the subject of extensive controversy. Evidence that eminent men tend to have eminent children led Galton to contend that genius was inherited. He failed to take adequate cognizance of the fact that in the families studied the environment was also superior. Lester Ward was particularly active in stressing the role of the environment in determining achievement, arguing especially on the basis of Odin's evidence that economic status and the availability of cultural opportunities in the place of residence were decisive conditioning factors. Cattell's study of American men of science showed that the professional classes contributed fourteen times as many scientists as did other groups and that the agricultural class contributed only one half as many scientists as did the manufacturing and trading classes. R. H. Holmes found that cities in the United States have been more than twice

as productive of individuals of eminence as the rural districts and that the cities' ratio of productivity has declined with the improvement in the means of communication and of rural education. Place of residence and occupation of parents were also shown by S. S. Visher's statistical study of notables in the United States to be determining factors in achievement. On the other hand, there are undoubtedly differences in ability between individuals and families; but that heredity is never entirely predictable is shown by Jennings, who contends that, while biologically superior parents appear to have a better chance than others of having superior offspring, by a fortunate combination of genes biologically inferior parents may produce geniuses. Genius cannot be ascribed exclusively either to heredity or environment, to nature or to nurture; it is the complex product of the interaction of these forces. The absence of requisite factors in the economic and cultural environment, however, inhibits the development of native ability.

Recently attempts have been made by Terman and his collaborators and by Leta S. Hollingworth to understand the creative ability of the genius by applying the methods of modern genetic psychology, more particularly by studying gifted children who rank very high in intelligence tests. In the Terman study children with an intelligence quotient above 140 in the case of younger children and above 132 in the case of the older ones were included in the gifted group. These children came mostly from homes of high social status; a large proportion were of English, German, Scotch and Jewish parentage and there was a somewhat larger proportion of boys than of girls, although the three children who scored highest were girls. In general it was found that gifted children tended to be tall, heavy and well nourished, strong and swift, above the average in desirable character traits and nervous stability and rarely neurotic. This is in direct contrast with Havelock Ellis' statement that there is a tendency for children who become geniuses to be of feeble health and Kretschmer's view that if the psychopathic factor, "the ferment of demonic unrest and psychic tension," be taken away from the constitution of the genius nothing but an ordinary gifted man would remain. The fact that the groups studied are by no means comparable makes it difficult to determine the degree of contradiction between these judgments. Terman's group of superior children is not so highly selected as

the groups of adult geniuses studied by other investigators; and, as Terman acknowledges, the later success of the children studied will depend upon factors other than the intelligence quotients and may be determined by chance combinations of personal merits and environmental circumstances. The question further arises as to what relation exists between the kind of ability possessed by the genius and the kind of ability demonstrated by intelligence tests. While tests have practical value in educational psychology, what they actually test and the intercorrelation of the various abilities which enter into the performance are still uncertain. There is considerable evidence for the view that "general intelligence" is not so "general" as was formerly believed and that the scores on the intelligence tests are determined by whatever specific abilities are being tested. There is no reason to believe therefore that the kind of specific ability possessed by a Bismarck or a Michelangelo or a Beethoven would be correlated in any way with an intelligence quotient. Studies of the characteristics of gifted children might then have nothing to do with the often one-sided but remarkable development of the genius. In view of the difficulty of knowing what an intelligence quotient signifies even when it has been obtained under the best possible conditions attempts such as that of Terman's collaborator, Catherine M. Cox, to arrive at an estimate of the intelligence quotients of great men are misapplications of the quantitative method.

If one assumes that a high intelligence quotient and ability which manifests itself in later life are related, there is a discrepancy between Terman's results on the proportion of the sexes among the gifted children—111 boys to 100 girls—and the relatively rare incidence of women geniuses in history, as noted especially by Lombroso and Ellis. Differences in education, in training for a career, in family cares, in cultural values for men and for women, help to explain the variation in achievement of the sexes.

OTTO KLINEBERG

See: HEREDITY; RACE; ENVIRONMENTALISM; INTELLIGENCE; LEADFRSHIP.

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GENOVESI, ANTONIO (1712-69), Italian abbot, philosopher and economist. Genovesi taught metaphysics at the University of Naples but soon turned his attention to economics. When in 1754 the first chair of commerce in Europe was instituted at the University of Naples, through the generosity of the Tuscan Bartolomeo Intieri, Genovesi was called to occupy it. His economic ideas aroused wide interest but they were hardly original; a free trader at heart, he nevertheless inclined for political reasons to a moderate protectionism. The basis of all economy, according to Genovesi, is agriculture; minerals, fisheries and the like follow in importance. The best means of promoting agriculture is to remove every obstacle to the increase and welfare of the population, every fetter upon the internal circulation of its products, and to reduce as far as possible the number of those who do not produce and who interfere with those who do. Industry he would keep within strict bounds, as its disproportionate development would undermine agriculture, about which he was chiefly

solicitous. He distinguished between useful commerce which exported finished goods and caused the importation of raw material, and harmful commerce which exported raw material and imported finished products; the former should be left free, the latter should be subject to the strictest regulation. Genovesi viewed with disfavor the imposition of treaties of commerce upon "nations that have neither maritime trade nor navigation" and "wish to be open and accessible to all nations." Here as in all his economic thinking he had in view the peculiar conditions of the Kingdom of Naples, which distinguished his ideas from the generalizations of the physiocrats. In his conception of the state Genovesi followed Giannone. Starting from the principle that there can be no well ordered state where there are more than one authority and more than one law, Genovesi was impelled to deplore that schism between the civil and the religious conscience which the polity of the Roman church had introduced into the very lives of the people. Within the church he favored a limitation of the papal power over the bishops and a return of the church to its purely spiritual functions thus dispensing with legal authority and with coercive power.

Guido de Ruggiero

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GENS. See Social Organization.

GENTILI, ALBERICO (1552-1608), Italian jurist. Gentili, a Protestant, was forced by religious persecution to seek refuge in 1580 in England, where in 1587 he became regius professor

of civil law at Oxford. He also practised in London in the Admiralty Court. In 1584 he advised Elizabeth's government with reference to the plot of the Spanish ambassador, Mendoza, to depose the queen and as a result was led to write his De legationibus (London 1585), in which he insisted that the public character of ambassadors was limited within the states to which they were accredited; that rebels had no right to an ambassador unless their strength was equal to that of their government; that difference in religion between states did not involve any modification of general diplomatic practise; and that the contracts of diplomats and their entourage concluded during an embassy were proper subject matter for the local jurisdiction. This work gave Gentili a great reputation and influence and did much to formulate and establish the principles and practise of modern diplomacy. In his De jure belli libri tres (Hanau 1508; ed. by T. E. Holland, Oxford 1877) he asserted that war should be the subject of laws and that such laws were naturally, and must always be, founded on right reason and consent. Although this work was soon eclipsed by the De jure belli ac pacis of Grotius, the first and third books of which were based upon Gentili's earlier work, nevertheless Gentili is entitled to rank as a founder of modern international law. Grotius' Mare liberum also owes a great debt to Gentili's work. In 1613, as a defense of Spanish and English claims against those of the Mare liberum, Gentili's posthumous Hispanicae advocationis (Hanau 1613) appeared, the earliest published reports of judicial decisions on maritime law, consisting of pleadings and decisions in cases in the Admiralty Court in London, in which the legality of the capture of Spanish vessels by the Dutch was considered. Gentili was engaged in these cases as advocate of Spain, an office to which he had been appointed in 1605.

W. S. M. KNIGHT

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GENTLEMAN, THEORY OF THE. The term gentleman is English, so English that it is taken over unchanged into other languages to express the many vague concepts which it covers. Continentals distinguish these concepts specifically. The Italian signore must be rendered as gentleman, but it connotes wealth. Its abstract derivative, signorilità, denotes splendor, lavishness. The old Provençal senhoril connoted pride. The French gentilhomme denotes birth, as does the Italian gentiluomo-for them to denote breeding, an adjective must be added. The honnête homme of the old regime had birth and manners. In the United States not so long ago a gentleman in the language of vital statistics was a person living on income without practising a trade or profession—the rentier in French and German; in Italian possidente, meaning owner. The language of courtesy shows similar shadings and specifications.

The concepts that may be severally detected in the complex of notions embraced under the word gentleman belong to all historic times and peoples. The sentiments which they express vary in intensity and in their relative importance to one another. One fundamental characteristic nevertheless accompanies them in all times and places: they are sentiments of combat; they are concepts of social competition. In modern democratic times there is a tendency to think of the gentleman in terms increasingly ethical and for four centuries theorists of the genteel have done their best to confuse the gentleman with the ideal man. Montesquieu almost alone in his time was courageous enough to contrast the gentleman's morality with the plain man's morality and to locate the concept of gentility in the sphere of social struggle (Esprit des lois, bk. iv,

The gentleman must be well born. The Germans concede birth in a term of bourgeois courtesy: hochwohlgeboren. Gentle itself derives from the Latin gens and historically has been colored by patriarchal feudalism, particularly that of France. The old Provençal adjective gents, meaning pretty or nice, was derived from the Latin genitive gentis: of family, of breeding. The test of gentility in feudal Europe is the right to a coat of arms; therefore once a gentleman always a gentleman. The point is reluctantly conceded by Peacham (Compleat Gentleman, 1622), who laments that drinking, swearing and wenching were no bar to recognition at the English court. Factors conditioning the importance of birth are property, occupation and descent in time. Under feudalism privilege had a legal basis in property deed. The general principle was formulated in positive law under the Venetian Republic, which admitted to its "originary citizenship" only families which had lived for three generations on income. The sentiments corresponding to concepts of birth are more intense in more remote periods of history, especially with reference to primogeniture. In Graeco-Roman civilization the family, according to Fustel de Coulanges, had a mystical status and was fortified by tabus. An exaggeration of the same sentiments appears in Hindu concepts of caste and in European concepts of royalty. Castiglione, the most celebrated of the older theorists of the genteel, regarded "quality" as physically hereditary and cited analogies from horse breeding and plant culture. Goldoni's comedy exploits the notion that a noble waif reared by peasants will instinctively play at war; a peasant waif reared by nobles, at menial tasks. The prestige of birth is acquired in three generations by wealth or achievement leading to exemption from gainful labor; it is lost by returning to gainful labor. In modern democratic countries the distinction conferred by birth is less than that of achievement and good manners but it has held its own as compared with wealth.

Wealth is the eternal disillusionment of the parvenu. Historically a de facto attribute of gentility, it does not constitute or confer gentility. "Riches," says Peacham, "are an ornament, not the cause of Nobility." The relationship between wealth and gentility is one of interdependence: the characteristic life of the gentleman is impossible apart from wealth, which in its turn enables those whom Castiglione designated as ignoble to acquire the arts and in time the status of gentility. Gentility replenishes its ever depleting ranks from wealth at a price which has not varied greatly in the course of centuries. The old Venetian nobility could be bought for 100,000 ducats, the ducat being roughly worth a pound sterling; a very respectable patent can be had by a gentleman for that price today. Wealth is in general powerless to acquire gentility apart from breeding. Wealth conjoined with birth tends as an objective fact to produce power. But that power is not a requisite for gentility is shown by the French Revolution, where an aristocracy was swept from power only to gain in social prestige. Henry IV of France was slighted as an upstart by the gentlemen of his court. The present day gentleman's scorn for political power is not new. Bureaucracies have always been peopled from the bourgeoisie. It is again a relation of interdependence. The gentleman must have access to power, and to lose such access means in the long run loss of caste. Power apart from birth, wealth and breeding has readier access to gentility than has wealth, although the recognition may halt at externals: Marie Louise will marry Napoleon, but she will twit him in private.

Achievement, distinguished ability, notable public service, have ever been roads to the acquisition of gentility. With singular obtuseness Castiglione in his Cortegiano (1528) regards gentility as the cause of achievement. Theorists of the genteel as a rule are only too willing to see the real point. Achievement, however, has always been subject to good manners, and it must lead to wealth; otherwise the genteel status is ephemeral. The feudal system provided for such permanency by gifts of land and title. The English baronetcy, without inheritance of title, shows the precarious status of achievement alone.

No gentleman works—and one must add—for a living. The theory has been elaborated by Veblen in his Theory of the Leisure Class from the point of view of economic determinism—a basis far too narrow. The sentiments attaching to occupation are very violent and increase in intensity in earlier historical periods. The tabus arrange themselves in a symmetrical scale. All through historic times menial labor has been a bar to gentility, and with few and transitory exceptions manual labor also. Zimmern in his Greek Commonwealth outlines a primitive Greek community where artisanship was held in high esteem. There was a moment in Florentine history when membership in the trade guilds was forced on the Ghibelline nobility. For such cases the acute remark of Peacham on the mercantile nobility of Venice serves: if such people were gentlemen at home, they were not so regarded abroad. In modern democracies the political equality accorded manual labor only intensifies sentiments of social inequality. In Venice and Rome disqualifications of artisanship were explicit in positive law. In Grecian Thebes there was a law denying citizenship to anyone who had practised a trade within ten years. The tabu on manual labor has at times a superstitious intensity. The comte de Saint-Simon relates that the nobles of Louis xiv in camp before Lille preferred to go hungry rather than lift bags of rice from their wagons. The taint of labor descends from grandfather to grandson. The sentiments work from below upward as well as from above down, as is illustrated by Princess Wolkowski's account of losing caste with her peasants in Russia in 1916 by personally cultivating her roses.

Peacham is puzzled by the fact that advocates and physicians are barred from gentility although those callings are "not servile but honorable, noble and free." The mystery yields to Veblen's principle of gainful employment. No profession is genteel when it is practised for a living. Salaried clientage for historical reasons is more genteel than free professional practise. Employees of institutions are more genteel than free lances. The same principle explains the case of the actor and actress; the argument of presumptive sexual immorality usually brought against the actor's profession is an afterthought-immorality has never been a bar to gentility. The line drawn by Peacham between the physician and the surgeon might seem explainable in the fact that the surgeon of his day was a barber, were it not that a similar line today separates the physician from the dentist. The surgeon and the dentist work with their hands. The surgeon, however, has recently been redeemed. The tabu on undertakers and executioners involves this elementregarded rationally, as de Maistre points out of "Monsieur de Paris," both would seem to be solemn, half sacred functionaries—although the sentiments regarding gainful employment are complicated in their cases by powerful tabus connected with corpses, death and bad luck.

The tabu on gainful employment is exemplified in almost pure form in discriminations against the merchant. Merchants were completely barred from feudal and ancient gentility; according to Fustel de Coulanges the Roman reaction could be violent. The mercantile taint could, however, be removed in two generations instead of three and was attenuated by good manners. In modern democracies there is a tendency to regard wealth resulting from business activity as achievement.

Castiglione in particular, but older theorists of the genteel in general, stress the exercise of arms and expertness in dueling as the characteristic pursuit of the gentleman. The situation has been analyzed anthropologically by Veblen. Even in modern democracies a military commission, down to the grade of lieutenant, is regarded as of itself conferring distinction. In monarchical countries tradition, if not law, requires that army and naval officers be of gentle birth for at least two generations.

In the West the gentlemanly professions have been the military, diplomacy and the church

down to the grade of vicar. The priest is not a gentleman-in Europe the class struggle within the clergy often rages violently. As for the "intellectual," so-called-literature has noble genres, such as epic, tragedy and oratory; and "ignoble" genres, such as the tale, the farce and the novel. The novel has become genteel under English influence since the eighteenth century. Cultivation of the noble genres has consistently been held genteel, although in the days of feudalism a knight regarded it as effeminate, as "clerical," to know how to read and write. Literature has been associated with money making only in very recent times-Voltaire was one of the first to organize and financially exploit circulation. The gentleman of olden days shrank from publication as a form of bad manners and got into print only through the "treason" of some friend or "theft" by some printer. The painter, the sculptor and the architect were redeemed by the Italian Renaissance and largely through the admiration accorded them by men of letters. Leonardo was still regarded as a boss draftsman, and Castiglione alluded to him contemptuously as a dilettante. Michelangelo was one of the first painters and architects to win social recognition. In contemporary Europe literature and the arts are roads to gentility on a basis of achievement, but unaccompanied by birth they remain in a status of clientage. The teacher has never been a gentleman—he works for money and in times past he was usually a priest. Since the teaching profession, like the priesthood, is exempt from manual labor, it can contribute to the prestige of birth—the priest may make a gentleman of his nephew, the teacher of his son.

For four hundred years the western world has assiduously cultivated the theory and the art of manners. Today manners are an essential attribute of the gentleman. Absence of them will invalidate wealth and achievement and mitigate sentiments attaching to birth and power. The theory of manners has been consistently confused by the introduction of an altruistic element, as, for example, in the definition of manners as consideration for others. Manners are exquisitely practical and combative, a fact which tends to be more explicit with the older theorists. In France in 1640 Faret formulated the rules for politely slighting inferiors. Castiglione frankly recognized self-assertion as the right, nay duty, of the gentleman and elaborated a technique of Machiavellian modesty. The considerateness of the gentleman is a chivalric compromise based on the principle of reprisals: one accords recognition in exchange for recognition. Manners are often erroneously regarded as deliberate devices for asserting quality. Undoubtedly manners have been purified and perfected by study and criticism in a process somewhat similar to the purifying and perfecting of grammar and language. The material data, however, are supplied not by invention but, as Pareto has shown, by historic forces not directly comprehended by the gentleman, who cats with his fork because gentlemen eat with forks: he does not know why.

A fundamental distinction between ancient and oriental manners and modern western manners lies, as is demonstrated by Crane, in the presence of women in modern western society and their absence from pagan and oriental societies. From the twelfth century to the present the role of women in society proper in the West has steadily increased in importance and since the seventeenth century has been virtually dominant -the "indirect" influence of woman on affairs so dear to modern antifeminists. The promiscuous contact of men and women in society has presupposed an increasingly strict regulation of sex impulses and on the theoretical side has produced recurrent chivalries and Platonisms. Overt manifestations of sex disappeared from Italian society early in the sixteenth century and from French and English society in the seventeenth century. The gentleman is, however, by definition sovereign and above restraints, and aristocracies have in historic times been consistently licentious. Moralities are unredeemably bourgeois; and there are peasantries which enforce the single standard set for the women also upon men, as in Sicily, Jugoslavia and Albania. In general the plain man distinguishes morality from immorality; the gentleman distinguishes between immorality and scandal.

Castiglione distinguished neatly between the bon compagnon and the gentleman. Boisterousness and noisy gaiety have been progressively eliminated from the genteel since the days of the Hôtel de Rambouillet in France and the process reached its climax in English Victorian sedateness and dullness.

The definition of the genteel as the art of pleasing attained its maximum application in the French seventeenth century; but it is a universal trend. Taine in his Ancien régime correlates with this definition the tendency in the language of elegance to eschew the physical and the concrete in favor of the euphemistic and the abstract. Rejuctance to mention certain parts of the body, such as the belly and legs, dates only from the

seventeenth century. The transition in time is abrupt: there is a gulf between Rabelais and the French précieux in this respect. Reticence on physical matters was unknown to the Middle Ages and the ancients. Hygiene is a very modern preoccupation of the gentleman; the obligation of bodily cleanliness does not antedate the nineteenth century, although it was characteristic of the gentleman in the heyday of Graeco-Roman civilization. Language is one of the manifestations of group uniformities-hence the various non-rational purisms which genteel grammarians are always ethicalizing with numberless rationalizations. A fact recurrent in history is the growth of a polite or literary language paralleling an ordinary speech. The question as to why familiar language displeases in a printed book has puzzled theorists of the genteel. Castiglione suggested that it is due to the permanence of the printed word. More probably it depends on the fact that a book establishes a formal, not an intimate, relation between author and reader. The observance of fashion in dress is likewise determined by the pressure of group uniformity, but it is also associated with powerful sentiments of competition. So cogent are sentiments attaching to display in dress that aristocracies have often been obliged to resort to sumptuary laws as measures of self-preservation. Sentiments attaching to abode are almost as violent. Housing regulations are enforced with special ruthlessness in the Soviet Union as a direct and immediate way of abolishing distinctions of class. Moralists have contended that "the clothes do not make the man." They do, however, make the gentleman; and although those same moralists praise the toiler's cot they wisely adorn Heaven with gold and jasper.

The ethics of the gentleman are ethics of combat, of competition in a struggle for eminence and distinction and are therefore antithetical to humility, self-effacement, altruism and abnegation. Simplicity and inconspicuousness are practised in plutocratic democracies but as measures of aloofness and exclusiveness—publicity being for "climbers" only. The gentleman's ideal is not virtue but honor, as Montesquieu remarked; whatever is honorific will in the end be held virtuous in the gentleman. In general the test of the gentleman is his superiority to external controls, especially the physical, moral and sentimental limitations that determine mediocrity. The ethic of the gentleman in all times and places is Nietzschean, not Christian. Noteworthy among genteel superiorities is the superiority to

sentiment—a tendency that according to Taine reached a maximum intensity in the impersonality of French manners under Louis xiv. Honor being the supreme virtue of the gentleman, ridicule, in the French sense, quite as much as dishonor is the unpardonable sin. The gentleman may be a hero, but not a martyr. "In Things indifferent," said George Washington in his Rules of Civility, "be of the Major Side." Gentlemen may espouse minorities as a matter of conscience, but the minority must never be small enough to count as queer or eccentric. The Earl of Pembroke joined the Quakers of John Fox-but, says a contemporary, "he soon withdrew." The ethic of the gentleman is a technique of prestige and prestige means good standing with majorities.

ARTHUR LIVINGSTON

See: Aristocracy; Class; Plutocracy; Professions; Leisure; Honor; Etiquette; Dueling; Royal Court; Chivalry; Woman, Position in Society.

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GENTZ, FRIEDRICH VON (1764–1832), German publicist and statesman. As a disciple of Kant, Gentz was at first enthusiastic about the French Revolution, but he later came to oppose both Jacobin radicalism and Napoleonic imperialism. He was the most effective continental advocate of the English system of balances in

both domestic and foreign affairs. It was at Gentz's suggestion that Christian Garve in 1704 made the first adequate German translation of Adam Smith's Wealth of Nations, and Gentz's own translation and commentary on Edmund Burke's Reflections on the French Revolution (1793) became the principal crystallization point for conservative and historical thought in Germany. In 1795 he founded the Neue deutsche Monatsschrift in Berlin and in 1799 the Historische Journal, which demanded that Prussia enter the coalition against France. In 1802 Austria obtained the services of this most talented of German publicists, since his position as an official in Berlin had become impossible politically. In very close personal contact with London, acting from conviction and unshaken by all vicissitudes, Gentz remained the center of agitation for resistance against the French until Napoleon's downfall. Among his numerous writings on politics the Fragmente aus der neuesten Geschichte des politischen Gleichgewichtes in Europa (1806) is of the greatest importance.

Gentz early recognized Metternich's brilliant diplomatic abilities and from 1812 until his death cooperated with him in the pacification of Germany and Europe. He acted as secretary of all the European congresses from Vienna to Verona and every document of the Vienna chancellery passed through his hands. He gave the diplomacy of the congress period its classic style. He differs from Metternich in his dynamic conception of the idea of balance of power. The quintessence of his thinking is a methodology based on Kant which kept him from the reactionary political romanticism of his disciple Adam Müller as well as from the liberal romanticism of his friend Wilhelm von Humboldt. Although his character has been disputed violently by Bonapartists, Prussian-German nationalists and radicals, a profounder understanding of Gentz from the standpoint of Europe as a whole has been growing since the publication of Heinrich von Srbik's Metternich (2 vols., Munich 1925).

Kurt Groba

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GEOGRAPHY

Cultural	
Human	
ECONOMIC	Karl Sapper

CULTURAL. In the past century the geographers have been dislodged from their earlier care free encyclopaedic state, in which they discriminated only in terms of personal interest and made camp wherever the prospect pleased. The scientific tendencies of the time have brought external criticisms and internal compulsions and a large methodologic literature which marks the process of intrenchment within a recognizable realm. The earlier volumes of the Geographische Jahrbücher (Gotha 1866-), especially the articles by H. Wagner, are much concerned with question of objective and method. The most comprehensive epistemology is Alfred Hettner's Die Geographie: ihre Geschichte, ihr Wesen und ihre Methoden (Breslau 1927). In these discussions essential unity has not been attained, and to this day there are irreconcilable camps. Therefore the question as to what geography is must continue to be asked, because the answer determines the premises under which the data have been assembled.

Geography is approached in various ways and to various ends. On the one hand, there is an attempt to find the limitation of study in a particular causal relationship between man and nature; on the other, the effort is to define the material of observation. This cleavage has attained increasing dimensions year by year and threatens perhaps to form a gulf across which no community of interests may be maintained. The situation dates from the beginning of modern geography but has grown acute only in the present century. The one group asserts directly its major interests in man; that is, in the relationship of man to his environment, usually in the sense of adaptation of man to physical environment. The other group, if geographers may be divided into two simple classifications, directs its attention to those elements of material culture that give character to area. For purposes of convenience the first position may be called that of human geography, the second that of cultural geography. The terms are in use in this manner, although not exclusively so.

Karl Ritter, holder of the first academic chair in geography, especially emphasized human

activity as physically conditioned. The thesis of the environment that molds civilization is of course very old but received especial attention from the rationalism of the eighteenth century and found able spokesmen in Herder, Montesquieu and later in Buckle. Ritter's position was vigorously attacked by Froebel and Peschel as impressionistic and unscientific. Even around the middle of the last century there existed a polemic literature concerning the physical environment as the field of geographic study.

Friedrich Ratzel in his Anthropogeographie (2 vols., Stuttgart 1882-91; 2nd ed. 1899-1912) outlined the framework in which human geography in the narrower sense has moved since that time, a set of categories of the environment -ranging from abstract concepts of position and space to climate and seacoasts-and their influence on man. By this one work he became the great apostle of environmentalism, and his followers have largely overlooked his later cultural studies, in which he concerned himself with movements of population, conditions of human settlement and the diffusion of culture by major routes of communication. The effect of Ratzel's environmental categories was not great in his own country; in France it was tempered by Vidal de la Blache's acute substitution of possibilisme for the original determinism; but in England and the United States the study of the physical environment as the goal of geography became well nigh the mark of recognition of the geographer. Apparently Ratzel did not regard his Anthropogeographie as anything more than a stimulus and an introduction to a human geography that was to be based on a study of culture. Whereas anthropologists have made large use of his analysis of the diffusion of culture, western geographers think of him only as an environmentalist. In the United States the Annals of the Association of American Geographers (published in Albany since 1911) show the rapid spread of human geography. So far the high point of this invasion has been marked by H. H. Barrows' "Geography as Human Ecology" (in Annals, vol. xiii, 1923, p. 1-14), the presidential address before that body in 1923, a frank plea to constitute the subject solely on the basis of environmental adjustment. So prevalent has this view become in English speaking lands and so different is the objective of the continental body of geographers that the work done by the one group is largely ignored by the other.

The rejection of the environmentalist position in geography is based not on any denial of the importance of studies in environment but simply on the following methodological grounds: (1) no field of science is expressed by a particular causal relation; (2) the environmentalist inquiry lacks a class of data as field of study, there being no selection of phenomena but only one of relations, and a science that has no category of objects for study can lead, in Hettner's words, only a "parasitic existence"; (3) nor is it saved by a method that it can claim as its own; (4) special pleading is most difficult to avoid by reason of the fact that success lies most apparently or at least most easily in the demonstration of an environmental adjustment. Theoretically the last objection is least serious; practically it has been most so, as is illustrated by a flood of easy rationalizations that certain institutions are the result of certain environmental conditions. In this regard those students who have least troubled themselves with knowledge have reaped the greatest apparent successes. The polemic against the position of geography as the study of environmental relations has received its sharpest definition by Schlüter, Michotte and Febvre.

The other school continues the major tradition of the subject. It therefore does not claim that it represents a new science but rather that it attempts the cultivation of an old field in terms acceptable to its age. It is not anthropocentric; rather has it shown at times excessive tendencies in the other direction. Cultural geography is only a chapter in the larger geography and always the last chapter. The line of succession passes from Alexander von Humboldt through Oskar Peschel and Ferdinand von Richthofen to the present continental geographers. It proceeds from a description of the features of the earth's surface by an analysis of their genesis to a comparative classification of regions. Since the day of Richthofen it has been customary also to use the term "chorology," the science of regions. During the latter half of the past century the work carried on was overwhelmingly physical, or geomorphologic, not because most geographers thought that the study of the genesis of physical land forms exhausted the field but because it was necessary to develop first a

discipline to which the physical differentiation of the earth's surface would yield. Geographers are now in possession of a method by which the origin and the grouping of physical areas can be determined and in which successive steps in their development are identified. Processes have been identified, measures of the intensity and duration of their activity have been determined, and the grouping of land forms into assemblages which constitute unit areas that can be genetically compared is well advanced.

The latest agent to modify the earth's surface is man. Man must be regarded directly as a geomorphologic agent, for he has increasingly altered the conditions of denudation and aggradation of the earth's surface; and many an error has crept into physical geography because it was not sufficiently recognized that the major processes of physical sculpturing of the earth cannot be safely inferred from the processes that one sees at work today under human occupation. Indeed, a class of facts which Brunhes labeled "facts of destructive occupation," such as soil erosion, are most literally expressions of human geomorphosis. The entire question of narrowing subsistence limits which confronts man in many parts of the world, apart from the question of the greater number of humans among whom the subsistence may need to be divided, is directly one of man as an agent of surficial modification. Even the most physically minded geographer is driven therefore to this extent into the examination of human activity.

There has, however, never been a serious attempt to eliminate the works of man from geographic study. The Germans have long had a phrase, "the transformation of the natural landscape into the cultural landscape"; this provides a satisfactory working program, by which the assemblage of cultural forms in the area comes in for the same attention as that of the physical forms. In the proper sense all geography is physical geography under this view, not because of an environmental conditioning of the works of man, but because man, himself not directly the object of geographic investigation, has given physical expression to the area by habitations, workshops, markets, fields, lines of communication. Cultural geography is therefore concerned with those works of man that are inscribed into the earth's surface and give to it characteristic expression. The culture area is then an assemblage of such forms as have interdependence and is functionally differentiated from other areas. Camille Vallaux in Les sciences géographiques

(Paris 1925) finds the object of inquiry to be the transformation of natural regions and substitution therefor of entirely new or profoundly modified regions. He considers the new landscapes which human labor creates as deforming more or less the natural landscapes and regards the degree of their deformation as the veritable measure of the power of human societies. In this sense then he finds the physical area expressed through two sorts of modalities, those that limit and those that aid the efforts of the group. A persistent curiosity as to the significance of the environment is unaffected here by any compulsion to dress up the importance of the environment. The facts of the culture area are to be explained by whatever causes have contributed thereto. and no form of causation has preference over any other.

Such a method of approach is entirely congenial to the geographer. He has been accustomed to regard the genesis of the physical area and he extends similar observations to the culture area, which has a somewhat simpler and more exact form than the culture area of the anthropologist. The geographic culture area is taken to consist only of the expressions of man's tenure of the land, the culture assemblage which records the full measure of man's utilization of the surface - or, one may agree with Schlüter, the visible, areally extensive and expressive features of man's presence. These the geographer maps as to distribution, groups as to genetic association, traces as to origin and synthesizes into a comparative system of culture areas. The experience in geomorphologic study provides the necessary technique of observation and a basis for evaluating the modalities stated by Vallaux. A geography such as this is still an observational science utilizing skill in field observation and cartographic representation, and geographic therefore in methods as well as objective.

The development of cultural geography has of necessity proceeded from the reconstruction of successive cultures in an area, beginning with the earliest and proceeding to the present. The most serious work to date has concerned itself not with present culture areas but with earlier cultures, since these are the foundation of the present and provide in combination the only basis for a dynamic view of the culture area. If culture geography, sired by geomorphology, has one fixed attribute it is the developmental orientation of the subject. Such a slogan as "geography is the history of the present" has no

meaning. An additional method is therefore of necessity introduced, the specifically historical method, by which available historical data are used, often directly in the field, in the reconstruction of former conditions of settlement, land utilization and communication, whether these records be written, archaeologic or philologic. The name Siedlungskunde has been given by the Germans to such historical studies and they have been furthered especially by Robert Gradmann, editor of Forschungen zur deutschen Landes- und Volkskunde, and Otto Schlüter. A compact view of attainments and problems is given by the former in "Arbeitsweise der Siedlungsgeographie" in Zeitschrift für bayerische Landesgeschichte (1928, p. 316-57). August Meitzen gave great impetus to field studies by asserting the extraordinary persistence of field forms (Flurformen) and village plans as culture relics (Siedelung und Agrarwesen der Westgermanen und Ostgermanen, 3 vols., Berlin 1895). Although many of his conclusions have fallen, the inertia of property lines has proved a most valuable aid in determining inherited conditions. Whereas much has been attained in the reconstruction of rural culture areas, the anatomy and phylogeny of the town as a geographic structure are less well advanced to date. They are at present being pioneered by numerous studies, most particularly in France and Sweden. Important generalizations have not yet appeared, but a technique of analysis is emerging.

A logically integrated development is also under way in economic geography as participating in the culture geography program (Pfeifer, Gottfried, "Über raumwirtschaftliche Begriffe und Vorstellungen und ihre bisherige Anwendung in der Geographie und Wirtschaftswissenschaft" in Geographische Zeitschrift, vol. xxxiv, 1928, p. 321-40, 411-25). Localization of production and industry is no longer the major aim as in the familiar economic geography which taught distributions of commercial products and analyzed them. This now becomes a device in synthesis, not an objective in itself. The economic geography that is in the making is nothing else than culture geography carried down to date, for the culture area is essentially economic and its structure is determined by historic growth as well as by the resources of the physical area. The title of pioneer belongs to Eduard Hahn, who broke with the purely speculative culture stages of gathering, nomadism, agriculture and industry and formulated a set of economic form associations, of which the system of hoe culture has become best known. Also he disproved a general succession in culture stages and demonstrated the lateness of nomadism as a culture form, first as "Die Wirtschaftsformen der Erde" (in Petermanns Mitteilungen aus Justus Perthes' geographischer Anstalt, vol. xxxviii, Gotha 1892, p. 8–12), Die Entstehung der Pflugkultur (Heidelberg 1909) and Von der Hacke zum Pflug (Leipsic 1914, 2nd ed. 1919).

Cultural geography then implies a program which is unified with the general objective of geography; that is, an understanding of the areal differentiation of the earth. It rests largely on direct field observations based on the technique of morphologic analysis first developed in physical geography. Its method is developmental, specifically historical in so far as the material permits, and it therefore seeks to determine the successions of culture that have taken place in an area. Hence it welds historical geography and economic geography into one subject, the latter concerned with the present day culture area that proceeds out of earlier ones. It asserts no social philosophy such as environmentalist geography does but finds its principal methodic problems in the structure of area. Its immediate objectives are given in the explanatory description of the data of areal occupation which it accumulates. The major problems of cultural geography will lie in discovering the composition and meaning of the geographic aggregate that we as yet recognize somewhat vaguely as the culture area, in finding out more about what are normal stages of succession in its development, in concerning itself with climactic and decadent phases and thereby in gaining more precise knowledge of the relation of culture and of the resources that are at the disposal of culture.

CARL SAUER

Human. However human geography may be defined, it cannot be called a new science. Yet the designation is barely fifty years old, dating from Friedrich Ratzel's Anthropogeographie, and was not readily accepted. Vidal de la Blache, who as late as 1910 expressed his opposition to the term and preferred to speak simply of geography, changed his attitude and in his last years wrote his Principes de géographie humaine, which was published after his death. The term emphasizes the division of the geographical sciences into two groups, by which physical geography, the synthetic study of the surface of the earth, is distinguished from human geography, the

synthetic study of the relationship between human societies and that surface. As long as geography meant simply a description of the surface of the earth and of man's work on that surface there could be one science of geography. During this long descriptive period, when the investigation into causes, although never completely absent, was rare and fragmentary, the two geographies were blended. One could not conceive of physical geography separate from human geography, a fact noted by Strabo, the first of the great geographers who limited the province of the science of geography to the inhabited world. Physical and human geography still have in common the fact that both are sciences dealing with the substance of the surface of the earth. and not with man. Physical geography belongs among the natural sciences. Human geography is a natural as well as a social science, but treats of man only as far as the substance of the surface of the earth is affected by him or to the extent that physical forces affect his individual or collective life. On the other hand, since human activity is sufficiently powerful to modify the balance of the physical forces of a certain region, physical geography has been forced to take into account human activity and to become in its turn an extension of human geography.

The connection between man and the physical environment which first presents itself is the theory of the determinant influence of environment, the idea that the development of human societies is influenced in one way or another by the natural conditions under which they live. Among these conditions climate seems the most important, for on it depend directly the flora and less directly the fauna, which because of man's elementary requirements, food and clothing, form the essential basis of human life. The theory of the determinant influence of the climate dates from as far back as Hippocrates, but was expressed most clearly in the eighteenth century by Vico, Montesquieu and Herder. Considered in this way human geography is but an extension of physical geography. But one of the first discoveries made by the social and political sciences consisted in the realization that by no means all the factors which control human societies are physical—that physical determinism exercises only a certain limited influence upon the life of societies. Human geography may thus be defined as the science which deals with the adaptation, in the widest sense, of human groups to their natural environment: passive adaptation when they subject themselves with no or with

little resistance to the action of physical forces, as occurs in the failure of men to settle certain regions; active adaptation when man to a greater or lesser extent modifies the surface of the earth, as is everywhere the case in regions in which man is present. These definitions must not be taken in their strictest sense. In the inhabitable part of the earth there are few regions which reveal no mark of man's activity; still rarer are those regions where every trace of the original landscape, as it existed before the coming of man, has disappeared. All over the globe instances of active and passive adaptation occur side by side.

While an adverse environment may mean a limitation or restriction of human existence and may go to the extent of making it impossible, a favorable environment can present only possibilities which, however favorable, may frequently not be taken advantage of. Physical determinism applies almost exclusively to the most adverse conditions of environment. For the exploitation of favorable conditions of environment physical determinism must combine itself with social determinism or, in other words, with a number of collective incentives and forces, among which the share originally due to the natural environment is frequently imperceptible or completely lacking. Geography can determine the limits of the human habitat—the limits of the Okumene and the Anökumene, to use Ratzel's expression -by fixing the limits of latitude beyond which all normal human life is impossible and likewise the limits of altitude on terrestrial elevations, themselves variable according to the latitude. It can also mark out similar limits around the uninhabitable portions of certain deserts, sections devoid of all life and all means of life, like the Tanesruft in the Sahara. It is of little significance that men can exist in these regions, as do polar explorers, alpinists and desert explorers; they cannot live there in settled groups. In these instances physical determinism imposes itself with severity. On the other hand, regions with a climate in which moderate fluctuations of temperature, sufficient sunshine, and rainfall distributed over all the seasons assure the best conditions for the development of plants, especially the plants utilized by man, do not necessarily witness the steady development and prosperity of human societies. Even a perfunctory knowledge of history and a glance at a map of the world reveal quite the opposite. There are regions with an excellent climate in which human life at first flourished and later lost

its strength or vice versa, without any natural causes to explain these fluctuations, so that such writers as Hegel could go to the extent of denying the existence of any scientific relationship between natural conditions of this kind and the life of human societies. Since frequently unfavorable natural conditions themselves do not result in the complete prevention of human life, one can see the limited role of physical determinism in human geography. The real interest and the real object of the science lie elsewhere. They lie in the phenomena of active adaptation which human societies display when they transform a landscape, civilizing it by cultivation, utilization and communications of all sorts, and when they transform natural regions comprising a group of areas into human regions. The latter do not necessarily correspond with the natural regions, and the aspect of the civilized landscape greatly differs from that of the natural landscape which it displaces or transforms. Thus the essential facts studied by human geography become distinct in proportion to the extent of the transformation of the original landscape. One can classify them in a regular series—from the least complex, when the original landscape remains almost intact, to the most complicated, when it is almost completely hidden or transformed—a method which is not invariably successful.

The natural landscape underwent few changes and the human landscape barely existed during the primitive stage of fruit gathering, hunting, fishing, foliage huts or rock shelters, when people were scattered and went about naked or covered with animal skins, possessing few implements and no political organization, as, for example, the Tierra del Fuegians as described by Darwin. In the agricultural-pastoral stage the natural landscape begins to become a human landscape and becomes increasingly so as rural civilization flourishes. These transformations never efface the essential characteristics of the former landscape, for rural civilization strives to adapt itself to the landscape without destroying it. Doubtless great differences exist between the clearing in the jungle of equatorial Africa with its huts and a few fields, the Moroccan village with its earth colored houses sunk into the ground and the cultivated fields of Picardy with their groups of towns and farms, but these various stages of civilization are comparable in that in each case a gradual adaptation to the landscape took place simultaneously with the domestication of animals and of useful plants. The geographical configuration of the agriculturalpastoral landscape is completed by the market town, which is the center of a settlement with a definite radius of influence. The commercial city, larger than the market town and often connected with a state organization, unites the commercial interests of a much greater radius than that of the market town and maintains direct communications with similar settlements elsewhere. Urban settlements of moderate size form a part of that agricultural-pastoral civilization and frequently reveal the influence of the natural conditions prevailing in the part of the world where such a civilization exists. The influence is usually apparent not in the general characteristics of the settlements, but in a number of habits and customs-housing, agricultural implements, food and rural economic and agronomic techniques. Hence the notion of the genres de vie popularized in France by Vidal de la Blache, which applies more or less to all types of human activity studied by human geography.

The transformation of the landscape increases with the industrial stage, with the advent of the machine in industry and in the transportation of men and goods. Generally speaking, the agricultural-pastoral civilization respects the landscape and strives to adapt itself to it while the industrial civilization demolishes it and transforms it completely. It remodels the appearance of the earth almost entirely, breaking up and removing the surface of the soil with quarries and mines or burying it under slag; leveling it by means of enormous industrial plants, ports, railway stations, tracks and viaducts; covering it with large cities. even attempting artificially to revive the original landscape through parks and gardens. Large cities spread and unite, forming urban regions, and no connection with the natural region any longer exists.

This descriptive method applied by human geography not only permits a search for causes but also forms an important aspect of geography because of the analysis and the interpretation of the general conclusions which it involves, even though these activities belong to a field in which geography merges with sociology, especially with that branch of sociology which in France is called morphologie sociale. The establishment of rapid and convenient lines of communication over land and sea amounts to a reduction in the size of the earth and brings about a more and more direct contact between large human groups, with all the social, economic and political repercussions which this fact involves. Easy communication makes possible the increasing concen-

tration of people and the gigantic growth of large urban areas in proportions which would be unimaginable if food could not be supplied by rapid transportation. The enormous increase in the means of subsistence and of labor involved in large scale industry and the mass exchange of goods is the principal cause of the rapid increase of the population of the earth. It is also the cause of the important phenomenon that densely populated, newly stocked regions tend to increase their population still further, while long settled regions with a sparse population constantly lose inhabitants; hence the increasing inequality of the distribution of man over the inhabited part of the earth which goes hand in hand with the overpopulation of the large cities. The intensive exploitation of natural resources by agriculture and industry raises the question whether some may not possibly become exhausted, a question which except in certain definitely limited instances geography answers in the negative chiefly on the ground that human labor is able to adapt itself with great flexibility.

CAMILLE VALLAUX

ECONOMIC. Economic geography, although young as a scientific discipline, is ancient as an applied branch of knowledge. The Indian peddlers of Central America and the Hausa traders of Central Africa are acquainted with the production and consumption, the physical conditions, natural resources and trade routes of considerable areas. Doubtless the same held true for the traders of the period of the prehistoric lake dwellers in Europe, who frequently traveled long distances. Large scale traders or manufacturers of civilized countries in conformity with the demands of the new era need an international outlook and a knowledge of economic geography in order to work profitably. Many commercial reports made for large business houses are excellent dissertations on economic geography, which will be fully developed as a scientific discipline only when merchants and farmers dealing in the international market avail themselves of the findings of scientific geography and economics. This may be anticipated in the light of the admirable monographs which some practical agriculturists such as von Thünen and Engelbrecht have produced. Unfortunately, men who have distinguished themselves in practical fields have rarely recorded their experiences in the form of writings on economic geography. The geographer usually lacks sufficient insight into complicated economic mechanisms—which

the most detailed statistics cannot remedy. Nor can theoretical knowledge of economics fully compensate for the lack of personal practical experience.

Historical and geographical works from the time of Herodotus and Strabo have given merited attention to the importance of economic activities. Sebastian Münster in the sixteenth century gave systematic accounts of the economic life of countries and cities. In the latter half of the eighteenth century Büsching did this more thoroughly, Turgot planned a system of economic geography and von Humboldt undertook his highly important voyage to the Spanish-American colonial empire, which, due especially to his study of the economic and geographical peculiarities and divisions of the tropics, was exceedingly fruitful not only for physical but also for economic geography. Ritter, the first to lay the foundations of a human geography, approached the subject historically and sought to explain the transmission of cultivated plants and domestic animals. Hahn continued such inquiries, List contrasted the economics of warm and cold countries, and Kohl founded the geography of settlement and commerce. In 1882 Ratzel published his important work, Anthropogeographie. Ratzel's general work was continued by French scientists, especially Vidal de la Blache and Brunhes, while German geographers continued to concentrate mainly on the economic aspects of geography. Götz, a pupil of Ratzel, published in 1882 a program for the organization of the field of economic geography, a name which he was the first to employ. He assigned to economic geography, in contrast to commercial geography, which had chiefly served practical ends, the scientific task of dealing with the nature of world areas in their direct influence upon the production of commodities and the movement of goods. Economic geography and physical geography thus parted ways. Götz neverthcless continued to place the main stress upon the geographical foundations of economics, as did many others after him, as, for example, Jones and Whittlesey, while von Richthofen, Eckert and Friedrich strongly emphasized the role of man as an economic being. Chishom, Lütgens, Sapper and Braun considered these two fields as equally important and investigated man's influence upon his environment. According to Hettner economic geography is concerned with the economic potentialities and the relationships of the various countries and localities, while Rühl following Robinson considers its subject

matter to be the geographical distribution of labor and the differences in the quality and quantity of the production, the commerce and the consumption of various districts. Methodological discussions of the aims, the limits and the methods of economic geography, which play an important part in the works of the German geographers, especially Sieger, Friedrich, Dove Hassert, Hettner and Rühl, are less conspicuous in the French literature. Sieger excludes the field of colonization, which according to Brunhes is to be included in the discipline. In the Soviet Union economic geographers under the leadership of Bernstein-Kogan and Baransky are no longer interested in the bare descriptive statistical inquiries that characterized prerevolutionary Russian economic geography, but are specializing in intensive studies of the present regional distribution of types of economic activity and of natural resources and in devising principles and practical programs for a coordinated development of these resources in terms of regional integration.

Economic geographers and economists frequently use the same source materials, but their ways of exploiting them are essentially different. Economic geography considers primarily the relationship between human economic activity and an area with its material resources. It thus confines itself to the investigation of such objects as possess a certain duration, while neglecting many a transitory phenomenon which the economist considers significant. Accordingly, Rühl prefers to speak of economic geography as a border discipline between geography and economics, while Hettner regards it as being a division of geography, a division which maintains a close relationship with cultural geography and concerns itself with the geographical distribution of the sources of material and to some extent with non-material subsistence. In any case economic geography belongs to the border regions of geography and is not far removed from economics, into which field it often overlaps. Economic geography is also closely connected with political geography, since commerce and economic life are today often much more decisively separated by political frontiers than by physiographical barriers, which can frequently be surmounted with relative ease by modern technique. Because of the customs barriers connected with them political borders often divide a natural region in such a manner that the divisions are obliged to develop their economic systems along completely different lines.

Economic geography may be divided into the geography of production, the geography of commerce and the geography of consumption. The last mentioned field was clearly defined only by Schmidt as late as 1929. As commerce presupposes traffic, the economic geographer also includes the geography of transportation in his field.

Before theoretical discussion of economic geography began, an enormous mass of economic observations gathered from all areas and countries of the earth had been accumulating ever since official and private explorers of foreign regions had first focused their attention on economic facts and potentialities. The desires of commerce and industry to acquire raw materials and to find new markets for their products led economic councils, chambers of commerce, associations for the advancement of commercial geography and other organizations to investigate economic prospects at home and abroad. When the great powers increased their colonial possessions or acquired them for the first time, especially in the second half of the nineteenth century, many publications appeared which greatly increased man's knowledge of economic conditions in foreign regions. In order to provide for surplus populations emigration societies and governments have also conducted detailed investigations of regions under consideration for settlement. The results of numerous investigations undertaken on behalf of private business have been treated as business secrets and have become known to wider circles only through their effects on trade or on productive economic enterprises. There is no doubt, for example, that there are some oil companies which are far better informed about the geology of certain districts than are the geological institutions of their governments.

Regional economic geography has either occupied itself with the spatial aspects of political units or dealt with natural units in terms of economic districts and provinces in an attempt to acquire data to determine the location of industrial sites. The solution of these problems has required the consideration not only of physical geographic factors but also of the many other social, cultural and political factors which exercise an effect on economy. General economic geography, on the other hand, has not advanced beyond beginnings, and even in agricultural geography the available material has not been sufficiently exploited. The objective of the economic geographer is, however, not only to de-

scribe the degree to which man has exploited the possibilities of the physical environment but also to anticipate the future by pointing out possible or desirable future developments and by preventing the wasteful depletion of natural resources.

In works on economic geography the textual presentation is frequently supplemented by charts. Cultivation, mining and industrial charts date from the seventeenth century, while more complicated economic charts have come into use only in more recent times. Since the cost of production of these charts, especially if they are colored, is quite high, there is a tendency to compress as much as possible into a single sheet. Therefore colored spaces, color gradations, colored lines and dots or shaded drawings are used. Unless overcrowding is skilfully avoided this system, however, often produces an almost confusing picture; the economic atlases published by Bartholomew in 1907 and that prepared by Philip and Sheldrake for the chambers of commerce in 1925 are representative of a superior type. In opposition to the method of representing numerous individual products on a single sheet, some economic geographers, as, for example, Passarge, Schmidt and Heise, have recently portrayed separately the regions of production and the routes to the countries of consumption of each individual product. A new and significant method, used for the first time in 1917 by Finch and Baker, has found wide acceptance. The principle of this relative method, which permits of a very clear distinction between central and peripheral regions, consists in indicating each unit quantity of a product by placing a dot at the place of its occurrence. This method cannot be applied to countries for which no relevant statistics are available—a considerable disadvantage.

The number of research institutions in economic geography has recently been increased by the establishment of new chairs; at the same time economic geography is rapidly becoming a distinctive part of the curriculum of higher schools of business. The establishment of magazines serving the interest of economic geography, such as *Economic Geography* (published quarterly by Clark University since 1925) and *Erde und Wirtschaft* (published quarterly in Brunswick since 1927), is also encouraging more intensive study of the subject.

KARL SAPPER

See: Culture; Anthropology; History; Demography; Environmentalism; Determinism; Man;

POPULATION; MIGRATION; CLIMATE; AGRICULTURE; REGIONALISM; CULTURE AREA; COMMERCE; COMMERCIAL ROUTES.

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GEORGE III (1738-1820), king of England (1760-1820). George III, who at the age of twenty-two succeeded his grandfather, George II, reflected in his private life the high if limited ideals of the English Puritan tradition, but his public principles and conduct were in closer accord with the ideas of a German court than with the English political temper. True to his mother's injunction to "be a king," he determined to recover at least the personal power exercised by William III. In the course of ten

years he succeeded, by fostering the sectional jealousies of the Whigs, in freeing himself from the group which had dominated his two predecessors. Instead of a Whig administration directed by a party leader he introduced a government of Tory ministers chosen by himself and individually responsible to him for the execution of his will. From 1770 to 1782 he was virtually prime minister, not only directing general policy but deciding detailed questions of administration, especially in military affairs. Unlike the Stuarts he did not attempt to over-ride Parliament but obtained a majority for his government in the Commons by winning over the Tories and creating a small party of his own, the "King's Friends," as well as by a judicious use of influence, patronage and bribery. This system of personal rule might have lasted longer had it not been discredited by the American fiasco. George III cannot, of course, be held responsible for the revolution. In repudiating the colonial claims and resorting to coercion he was supported at the outset by the bulk of English opinion. The protraction of the war, however, was due mainly to his obstinate refusal to compromise. Yorktown deflated his majority in the Commons and forced him to accept a change of ministers. After 1784 policy and administration were no longer controlled by him, except on one or two historic occasions, but by the younger Pitt acting as a real prime minister with a cabinet of his own choosing. This transference of power was confirmed by the recurrent mental disorder which together with blindness and domestic trouble clouded the later years of his long reign.

R. COUPLAND

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GEORGE, HENRY (1839-97), American economist. His father was a publisher in a small way in Philadelphia and his limited income had to be divided among a large family. George's schooling was scant, whether from ineptitude at study or financial necessity the record does not clearly show. In his teens he went to sea and after a brief return to the restricted atmosphere of his intensely religious home he settled on the Pacific

coast. Drifting finally into reporting, he became an editor and something of a newspaper entrepreneur but with uniform lack of success. He married when young, and family responsibilities together with the intermittent nature of his jobs caused him to lead a rather poverty stricken existence, in which actual hunger sometimes figured.

As he grew older he developed a sense of serious philosophic need, for which he found no ready answer. He possessed neither talent nor training for patient inquiry; he questioned the world rather than its thinkers. The problem of poverty, which had so often posed itself and which he saw all about him in the backwash of Civil War times, seemed to him the center of humanity's woes. The discovery of a solution was probably assisted by the peculiarities of the situation in California, where, through a telescoping of historical processes, the rich new country with all its potentialities had within a few decades fallen into the hands of a small group of greedy speculators. At length in 1869 he had a flash of insight, which he compared to the "ecstatic vision" of mystics and poets. It was the selfish monopolization of nature's gift, land, that kept man poor.

After eight years of groping elaboration of this theme, first in the pamphlet Our Land and Land *Policy* (San Francisco 1871), later in the columns of numerous newspapers, George began to write Progress and Poverty (San Francisco 1879). Then for the first time he turned to the writings of the economists -mostly English-Ricardo, Malthus, Mill and others. Like Marx before him he accepted much that he found there; in particular the Ricardian law of rent appealed to him as axiomatic, but he gave to it and to its corollaries a new orientation and meaning. His theory concentrated upon the field of distributive economics rather than of production or of consumption. He rejected the current doctrines of wages and interest and sought for an explanation to support his conviction that all distributive shares were interdependent. This explanation he discovered by expanding the law of diminishing returns and of a margin of production. In contrast to J. B. Clark, who applied the marginal principle to each separate factor, George, regarding labor and capital as "but different forms of the same thing-human exertion-" and as tending to an equivalence of reward, made their shares a residual from the marginal productivity of land. But while labor and capital were productive only by the permission and assistance of natural agents they alone were truly productive. Rent was an unearned increment and it reduced wages and interest by its total amount. With progress, which led to greater land scarcity, the grip of the landlords tightened. The problem was to free the real producers of wealth by dispossessing the holders of the unearned increment.

Armed with this doctrine and fired with the apostolic zeal of a man who had found truth not in books but by slow assimilation of experience, George left San Francisco for New York in 1880. Shortly after his arrival Progress and *Poverty*, which had at first attracted little attention, began to catch the popular imagination and to sell enormously wherever books were read. With its passionate eloquence and inspired style it filled the need of the time not only for an exposition of the direful effects of landlordism but for a new social philosophy offering a simple program of reform to a harassed world. For George's program possessed perfect simplicity. Neither the confiscation of land nor the communization of its use seemed to him necessary; he merely proposed to "appropriate all rent by taxation . . . to abolish all taxation save that upon land values." He became something of a prophet and lectured widely at home and abroad. In England his book and his agitations had a resounding influence on the young intellectuals of the incipient Fabian Society. Of the numerous disciples who gathered about him in America many were men of wealth and influence, attracted perhaps by the fact that his scheme seemed to offer no threat to the business system. In the early years he also received an enthusiastic welcome from the trade unions, to whom he appeared less as the bearer of a specific doctrine than as a vague symbol of protest against corruption and injustice. In 1886 the Central Labor Union together with a group of socialists importuned him to enter the race for mayor of New York. He was defeated by only a narrow margin and might perhaps on an honest count have been elected. But the chief result of the famous campaign was to clarify his position and to consolidate his supporters into a homogeneous group freed from the entangling influence of divergent and more radical doctrines such as socialism. During the succeeding years the movement crystallized into its permanent form, working through numerous organizations and devoting itself to sporadic political and persistent propagandizing efforts. From 1887 on, the term single tax, misleading in that it was a direct translation of the *impôt unique* of the physiocrats, whose works George admired at second hand but from whose theories his own doctrine differed widely, became its distinguishing slogan. George died in 1897 in the midst of his second New York mayoralty campaign, leaving the *Science of Political Economy* (New York 1897), a more formal exposition of his ideas, for posthumous publication. The agitation continued to grow after his death, but on the whole it has spent itself with very little practical result beyond a few attempts to transfer the burden of taxation from the value of improvements to the value of land.

R. G. Tugwell

Important works: The Irish Land Question (New York 1881); Social Problems (New York 1883); Protection Free Trade (New York 1886); The Condition of Labe. (New York 1891), A Perplexed Philosopher, Being & Examination of Mr. Herbert Spencer's Various Utterances on the Land Question (New York 1892). He complete works have been published in ten volumes (New York 1906—11), the last two of which are the standard biography of Henry George by his son.

Consult: Post, L. F., The Prophet of San Francisco (New York 1930); Young, A. N., History of the Single Tax Movement in the United States (Princeton 1916); Commons, J. R., and others, History of Labour in the United States, 2 vols. (New York 1918) p. 446-61; Teilhac, Ernest, Historic de la pensée économique aux États-Unis (Paris 1928) p. 112-68; Beer, Max, History of British Socialism, 2 vols. (London 1919-20) vol. ii

GERBER, KARL FRIEDRICH WILHELM VON (1823-91), German jurist. Gerber played a preeminent part in the development of both private and public law in Germany. In his youth he was greatly influenced by the historical school and later by his friendship for Jhering. With the latter he became the founder of a new historical school, and both changed gradually from a subservience to the folk spirit to a more austere dogmatism of rational concepts. Gerber's scientific development is very typical of the juridical trend of his period, which turned from common law to codification. In Das wissenschaftliche Princip des gemeinen deutschen Privatrechts (Jena 1846) he conceived the German common law to be hardly more than a repository of German juridical consciousness. If a historical jurisprudence was necessary to crystallize it, a dogmatic jurisprudence was necessary to adapt it to contemporary needs. The repudiation of the romantic was even more clearly evident in his System des deutschen Privatrechts (2 pts., Jena 1848-49; 17th ed. by K. Cosack, 1895), which at the same time shows a transition from the particularism

of Germanic legal institutions to a conceptual Romanistic art of systematization.

This trend toward positivism is completed in his Grundzüge eines Systems des deutschen Staatsrechts (Leipsic 1865, 3rd ed. 1880), which owed much to Albrecht and in turn became the foundation upon which Laband built his system of public law for the German Empire. Gerber's conception of the personality of the state and of the state as a sovereign person reflected the new political situation of Germany, which was no longer the patrimonial state of the Middle Ages nor yet the sovereign state of the period of absolutism.

Gerber had too keen a sense of political realities to lose himself in the barren wastes of fine abstractions and mere formalism to which his theory led others. He was able to accommodate it to the imperial period which followed and devoted the latter part of his life to practical politics as Saxon minister of public worship and education.

ERNST VON HIPPEL

Consult: Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880–1910) vol. iii, pt. ii, p. 778-88, 825-33.

GERHOH OF REICHERSBERG (1093 or 1094-1169), German theologian and political theorist. Gerhoh was born in Bavaria and in 1132 became provost of the Collegiate Church of Reichersberg. His temperament and principles are singularly interesting as revealing an attitude toward church reform which was probably not uncommon but which is only slightly represented in the literature of the time. His starting point was a strict adherence to the dualistic nature of authority and division of function. Profoundly devoted to the Holy Sec, he yet severely reprehended whatever political tendencies in the church seemed to vitiat its spiritual work. He was at the same time a loyal subject of the empire and resolutely criticized what he conceived to be papal aggressions upon its rights. In his earlier treatises, De aedificio Dei (written between 1126 and 1132), De ordine donorum Sancti Spiritus (1142-43) and De novitatibus huius temporis (1155-56), he shows himself perplexed about the problem of the regalia, those quasi-political rights and dignities which Pope Paschal II had proposed to surrender if the emperor would concede the claim to investiture. While Gerhoh hesitated to advise the surrender of the regalia he was one of the very few ecclesiastical writers who lamented

their effect upon the spiritual office, his principal objections being that they absorbed time and entailed duties unbecoming to churchmen. In the later treatises, beginning with De investigatione Antichristi (1161-62), Gerhoh concerned himself with the violent conflict between Frederick Barbarossa and the papacy which had broken out at the papal election of 1159, when the majority of cardinals had chosen Alexander III and the minority had set up Frederick's candidate as a rival pope. After some hesitation Gerhoh gave Alexander his unflinching support; but his profound distress over the charge that Alexander's election had resulted from a conspiracy entered into by certain members of the Curia, the Normans of Sicily and the Milanese against the emperor illustrates his dismay at the pollution of the sacred power by political considerations. Even after his expulsion from Reichersberg in his old age for fidelity to Alexander the fine sanity and balance of Gerhoh's mediating attitude remained undisturbed. In De quarta vigilia noctis, written the year before his death, he unsparingly censured the worldliness of the church, pointing to avarice as its chief vice and capping his reiterated plea for the strict separation of powers by an expression of doubt as to the justice and wisdom of the existence of papal states.

A. J. CARLYLE

Important works: De acdificio Dei in J. P. Migne's Patrologia latina, vol. exciv (Paris 1855) cols. 1187-1336; selections from it appeared in Monumenta Germaniae Historica, Libelli de lite imperatorum et pontificum, 3 vols. (Hanover 1891-97) vol. iii, which contains also selections from De ordine donorum Sancti Spiritus, De norutatibus huius temporis, and the first book of De investigatione Antichristi, all ed. by E. Sackur; selections from De investigatione Antichristi ed. by J. Stültz appear in Archiv fur österreichische Geschichte, vol. xx (1858) 127-88.

Consult: Carlyle, R. W. and A. J., A History of Mediaeval Political Theory in the West, vols. i-v (Edinburgh 1903-28) vol. iv, pt. iv, ch. iii; Nobbe, H. F. A., Gerhoh von Reichersberg (Leipsic 1881).

GERLACH, ERNST LUDWIG VON (1795-1877), German publicist and statesman. Gerlach was one of the founders of the Conservative party in Prussia and a leading exponent of conservative principles both in parliament and in the press. He belonged to that class of conservative government officials who being descended from the knightly nobility carried on occasion their independence in politics to the point of turning their conservatism against the government. Like his father, who had resigned a high administrative

post because of antipathy to Stein's reforms, Gerlach was always something of a frondeur. With no agrarian connections and no zest for soldiering he was not a typical Prussian but rather an objective and internationally minded critic of Prussianism. In his political philosophy he was influenced first by Savigny's faith in unhampered organic growth as opposed to rationalistic reform and later by Haller's theory that the historically evolved "natural order" was divinely ordained; but he came to recognize that the capstone of a conservative system must be the belief in a supernatural absolute order at the basis of all reality. He regarded political life from the point of view of a jurist and moralist rather than a statesman; accepting Haller's interpretation of political relationships in terms of private law he strengthened it further by harmonizing it with a religiously sanctioned ethical imperative. The need that Gerlach felt to establish upon a fixed and authoritative basis the immutable moral principles which govern law and politics led him to ground his political philosophy in theology. He inclined toward the Roman Catholic church based as it was on authoritarian principles with a creed which is not subject to varying interpretations and with a clearly defined interest in politics. But absolutism as a political principle or a form of government represented to Gerlach "revolution from above"; this conservative who abhorred revolution in any form thus often approached liberalism in theory, tended to align himself with the constitutionalists rather than the nationalists and ultimately felt drawn into the ranks of the Center. The reign of Frederick William IV with its departure from a narrow Prussian policy marked the height of Gerlach's political prestige and the year 1848 the climax of his practical influence. As long as problems of internal statecraft had precedence over foreign policy and long time considerations over the exigencies of the moment, as happened during the half century of peace following 1815, Gerlach with an essentially static philosophy and so inflexible a personality was in his element. But with the ascendancy of Bismarck, particularly after the wars of 1866 and 1870-71, Gerlach's career came to an end. He refused to follow his party into Bismarck's camp and subjected Bismarck's policies to thoroughgoing criticism. He was disciplined and eventually dismissed, and the party press was closed to him. Although he turned to pamphleteering he gradually lost virtually all of his followers. Yet the almost fanatic loyalty to his convictions and the fearless de-

fense of his ideas while respecting no govern ment or party were always impressive.

Alfred von Martin

Consult: Martin, A. von, "Autoritat und Freiheit in der Gedankenwelt Ludwig von Gerlachs" in Archie für Kulturgeschichte, vol. ax (1030) 155-82

GERLACH, OTTO ADOLPH JOSEPH (1862-1923), German economist. Gerlach studied mathematics and physics and later social science and agronomy as a student of Roscher, Schmoller, Wagner and Stammler. In 1903 he was appointed professor of political science at the University of Königsberg His most important works are in the fields of value, finance and agrarian problems. In his inaugural dissertation, *Uber die Be*dingungen wirtschaftlicher Thätigkeit (Jena 1800), he subjected the value theories of Mary, Knies, Schaffle and Wieser to a critical examination. In contrast to the views of these authors Gerlach attempted to prove that a uniform relation of man to goods is neither possible nor necessary in explaining economic phenomena. Man's relation to goods is of a twofold nature. The relation to consumption goods is in the realm of the affective, of the sensations of pleasure and pain; it is therefore necessarily subjective and incapable of objective measurement. Man evaluates producers' goods, which are a means to an end, through cognition; the relation is therefore objective and susceptible to quantitative treatment.

In the field of finance Gerlach applied himself to problems of taxation policy and the history of fiscal literature. His other works are of a descriptive and statistical character and deal with problems of agricultural labor, land settlement, the significance of landed property and preservation of the peasant class.

Karl Bräuer

Works: Die preussische Steuerreform in Staat und Gemeinde (Jena 1893); Zur Reichsfinanzreform (Berlin 1906); Die Reichsfinanzreform von 1909 (Berlin 1911); "Geschichte dei Finanzwissenschaft" in Die Entwicklung der deutschen Volkswirtschaftslehre in neunzehnten Jahrhundert, 2 vols. (Leipsic 1908) vol. ii, ch. xxxviii. Gerlach revised and enlarged the 5th ed. of Roscher's System dei Finanzwissenschaft (2 vols., Stuttgart 1901).

GERLAND, GEORG (1833–1919), German ethnologist and geographer. Gerland, at first a philologist, in 1875 became professor of geography in Strasbourg. His contributions to Theodore Waitz' *Anthropologie der Naturvölker* (of which he wrote vol. v, pt. ii, and vol. vi, Leipset 1865–72) are still useful as collections of ethno-

graphic material. In his Über das Aussterben der Naturvölker (Leipsic 1868) Gerland discussed the nature of child mortality, infanticide and infectious diseases among primitive people, who, he contended, are dying out not because they lack vitality but because they are being forcibly destroyed by European civilization. He also emphasized, however, the importance of psychological factors and of spiritual and cultural disintegration. In his Authropologische Beiträge (Halle 1875) Gerland attempted to introduce into psychology the atomistic-mechanical conception of nature based on the theory of evolution. He believed that universal culture traits developed in one center were carried by man in his migrations from continent to continent and that ethnic differentiations took place by means of different innate talents, isolation and the sum total of the influences of the natural environment. Gerland originally held that a people consists of the sum of single individuals and that the true picture of a people could be constructed only on the basis of complete knowledge of all individuals, a task which he considered capable of solution to a certain degree in the study of primitive groups because of the great similarity of their members. Nevertheless, in his Immanuel Kant, seine geographischen und anthropologischen Arbeiten: Zwölf Vorlesungen (Berlin 1906), in which he was the first to point out the significance of Kant's anthropological writings, he recognized Kant's view that the development of human society is a function of the species.

W. E. MUHLMANN

Consult: Sapper, Karl, in Geographische Zeitschrift, vol. xxv (1919) 329-40; Neumann, Ludwig, in Petermanns Mitteilungen, vol. lxv (1919) 22-23.

GERMAN CIVIL CODE (Deutsches bürgerliches Gesetzbuch, usually abbreviated as BGB). The political history of Germany had been characterized for many centuries by not only political but legal disunity. Each of the German states possessed its own law, which often differed greatly from that of its neighbors. Moreover, the Roman law which had penetrated Germany with the passing of the Middle Ages and had been taught at all the German universities as a "common law" improved the situation very little. The legal maxim was: Landrecht bricht gemeines Recht. Thus if a state had its own law, this territorial law had to be preferred to the Romanic common law. It was toward the end of the eighteenth century and in the first part of the nineteenth that this antagonism was accentuated. Several of the more important states during this period adopted codes, for example the Prussian Allgemeines Landrecht of 1794 and the Saxon Bürgerliches Gesetzbuch of 1863. Other states, as for example Baden, had introduced the French Code civil (Code Napoléon) as their own territorial law.

The growing demand for German legal unity had two roots, one idealistic and the other economic. The idealistic went hand in hand with German political hopes. The German people were weary of particularism and strove for a unified German Empire that would have a stronger position in the world than a conglomeration of individual states. Such a tendency was first evident after the War of Liberation against Napoleon but it had always been joined with a longing for a unified law for the whole of Germany, more particularly for the creation of a German civil code. But the time was not yet ripe. It was the growth of the spirit of nationalism all over Europe in the second half of the nineteenth century that gave the idealistic movement in Germany the impetus necessary for the creation of such a code. In the meantime the economic forces had also gained strength. Since without unity the growing German economy was hindered at every step, the merchant and the industrialist became its champions. It is indeed noteworthy that success had been achieved even before the founding of the German Empire in completing three general German codes of commercial law: the Wechselordnung (law of bills of exchange) of 1849, the Handelsgesetzbuch (commercial code) of 1861 and the Gewerbeordnung (industrial law) of 1869; these are the historical forerunners of the German civil code. It is also worth noting that Austria participated in the work on the first two codes but had separated from Germany before the drafting of the BGB. Austria lives today under its civil code of 1811; however, it is not beyond the realm of possibility that the German and Austrian civil codes will be amalgamated at some future time.

The drafting of the German civil code occupied more than twenty-two years, from 1874 to 1896. It would be easy to see in this an instance of the proverbial German thoroughness, but it should not be forgotten that codification in other countries has also taken long periods of time. The twenty-two years of the creation of the BGB are divided into five periods of greatly varying lengths: the work of the so-called preparatory commission, 1874; of the first commission, 1874 to 1887; of the second commission,

1890 to 1895; consideration in the Bundesrat, 1895; and in the Reichstag, 1896.

The preparatory commission was charged with drafting a general plan. The principle question was whether something fundamentally new should be created or whether the existing territorial laws should be epitomized after the reconciliation of differences. The layman is likely to imagine that a new code is actually new in content; experience, however, teaches the contrary. Almost always the great codes have embodied only preexisting law; they are only landmarks; they truly only "codify." The members of the preparatory commission recognizing this rejected the principle of innovation and accepted that of codification.

The first commission consisted of eleven jurists. They were very learned but unmistakably oriented toward Roman law, and they laid more emphasis upon logical construction than upon conformity with national characteristics. Their industry and non-partisanship, however, deserve the highest recognition. They worked behind closed doors for thirteen years and made public the so-called *I. Entwurf* in 1888.

The second commission differed from the first in having as members not only jurists but men of affairs, for instance agriculturists and a banker. It is noteworthy that at that time it was not deemed necessary to add a representative of the workers or the trade unions, and the voice of the workers was first heard later in the Reichstag. The second commission introduced a number of important changes in the law, for instance the principle that a habitual drunkard may be declared incapable of managing his own affairs (sect. b, subd. 3), the provision for the protection of the rights of personality in a name (sect. 12), the right of a marrying daughter to demand a dowry from her father (sect. 1620), further important changes in the law of associations (sect. 21 ff.) and above all certain far reaching measures of social protection in the law of master and servant which deserve recognition as early signs of the reaction against uncompromising nineteenth century individualism. The product of the labors of the second commission was the so-called *II. Entwurf* of 1895.

The participation of the Bundesrat which then followed is to be explained by the character of the constitution of the German Empire at that time. Whereas today under the constitution of 1919 the Reichstag is the sole legislative organ, under the earlier constitution the consent of two legislative organs was necessary, the

Reichstag and the Bundesrat, the latter composed of the representatives of the twenty-five separate states. Although the historical role of the Bundesrat was to guard the interests of the old particularism, it did not act as its conservator in the drafting of the BGB. Except in a few instances it too was inspired by the thought that Germany needed a unified law that would be superior to the forces of particularism. On the other hand, political considerations did impel the Bundesrat to one important alteration. It had been intended to integrate the fundamental principles of the conflict of laws, or private international law, in the codification of the domestic German law. The Bundesrat, however, fearing that international complications would follow, has eliminated the provisions which it regarded as dangerous. The result is contained in the introductory part of the BGB (articles 7

It was first possible to learn the trend of popular opinion when the draft of the code was considered in the Reichstag. To be sure, there had been opportunity for this even earlier. When the first draft had been published, it had been accompanied by an invitation for public criticism and public opinion had been aroused upon a few questions, for instance whether upon the sale of leased property the tenant's rights should be terminated (now sect. 571 ff.). But on the whole popular participation was slight until the deliberations in the Reichstag. In that body a forceful opposition with a definite philosophical basis made itself felt. With regard to some matters a struggle arose against the acceptance of the "alien" Roman law in preference to the indigenous Germanic law. A passionate controversy arose over civil marriage: the Center, the Catholic church party, wished to withdraw the control of marriage from state authority and restore it to the church. Partly arising from this controversy was the struggle over insanity as a ground for divorce. It was finally accepted by a vote of 161 to 133 (sect. 1569). As an example of the way passions can be aroused over relatively minor problems the question of the hares may be cited. The BGB recognizes a liability for damage caused by game; that is, the hunter is liable to a landowner for any damage caused to his fields in the pursuit of game (sect. 835). In the draft hares were included with other game. The Conservative party representing the interests of the great landholders demanded that hares be made an exception, but the other parties opposed it. The BGB representing the longing

of almost a century and the labors of more than twenty years almost foundered in this controversy. In the end the conservatives won: the hares are not to be found in the law.

After the deliberations in the Reichstag had been concluded the code was proclaimed by the emperor Wilhelm II on August 18, 1896, but in order to allow enough time for its contents to become familiar it was not to go into effect until January 1, 1900. At the same time a whole number of accompanying laws went into effect, for instance a law relating to the registry of land and a law relating to non-contentious jurisdiction. To bring them into agreement with the BGB other important laws, for instance the commercial code and the code of civil procedure, were radically amended. In all it was a very important code that was finally achieved in 1900.

The German civil code contains 2385 paragraphs and is divided into five parts; the first is an introductory general part and the other four relate respectively to the law of obligations, the law of things, family law and the law of inheritance. This represented the division of the Pandects, which was thus retained. Particularly great care was devoted to the general part. It is unique in the legislation of the world. In it many fundamental legal concepts are finely distinguished and raised to the rank of general principles, for example the concepts of manifestation of will, of contract, of representation. It is noteworthy that commercial law, for instance the law of partnership and joint stock associations, was not introduced in BGB but remained in separate laws.

A creation of the late nineteenth century, the German civil code bears unmistakable traces of its liberalism and individualism, although to be sure these trends were not allowed full expression. After its first draft and through the whole course of its parliamentary consideration the code remained a work of non-partisan scholarship; in this it differs from the much more "popular" Swiss civil code. It may be said, however, that the German civil code came into being at an unfavorable time. It stands not at the beginning but the end of a historical period and therein differs from the French civil code, which derived from the profound changes of the French Revolution and could give expression to the new points of view which had then been born. On the other hand, the BGB was fashioned in a period of social quiescence. As a consequence it escaped the problems of giant industry, cartels, trusts, trade unions, collectivism and socialization which were just beginning to emerge.

Nevertheless, the German civil code has as a whole endured. Except for a few relatively unimportant changes it is still in full force and effect. Above all, certain celebrated elastic provisions have made it possible to adjust it to a large extent to new developments of cultural and social life. Thus, section 242 subjects the whole law of contracts to the requirement of "good faith" and section 826 makes it possible in the law of delicts to inquire beyond narrow technicalities into "good morals." What the highest court in Germany, the Reichsgericht, has been able to accomplish by virtue of these provisions and how the BGB has been adjusted to new economic needs are described in a work by J. Wilhelm Hedemann, Reichsgericht und Wirtschaftsrecht (Jena 1929). It is a particularly impressive fact that even the experiences of war and revolution have left the BGB almost untouched. Many voices have been heard loudly demanding its radical alteration---particularly those voices that demanded "socialization" of the whole of the German economy—but they have had little success. The three great guiding principles of the BGB, freedom of contract, private property and the integrity of family life, are still accepted. However, some reforms are contemplated. It is intended to better the position of illegitimate children; the wife is to be freed from the superior powers of her husband over her property; a reform of the law of landlord and tenant is planned in connection with the general reform of the land law. Above all, the law of contracts between master and servant has been almost relegated to desuetude as a result of the development of a modern labor law alongside the BGB. A general revision or a total abandonment of the BGB is quite beyond the realm of possibility.

The German civil code has also had a strong influence in foreign countries. Although it has nowhere been received in toto, wherever since 1900 attempts have been made to fashion civil codes the BGB has proved highly valuable in supplementing the ideas of codifiers despite difficulties in language and in modes of thought. The Swiss civil code of 1907 particularly is inconceivable without the influence of the German codification.

J. WILHELM HEDEMANN

See: Civil Law; Codification; Code Civil; Reception; Unification.

Consult: For materials of the drafting period: Motive

zu dem Entwurfe, 5 vols. (Berlin 1888, 2nd ed. 1897); Protokolle zum 11. Entwurf, 7 vols. (Berlin 1897-98); Denkschrift zum Entwurf (Berlin 1896). Of the enormously rich literature on the code itself the great systematic textbook of Enneccerus-Kipp-Wolfl, Lehrbuch des bürgerlichen Rechts, 3 vols. (6th-12th ed. Marburg 1928 30) is the chief example. The following are representative handbooks; Lehmann, Heinrich, Allgemeiner Teil (3rd ed. Berlin 1928); Hedumann, J. W., Schuldrecht (2nd ed. Berlin 1931), and Sachenrecht (Berlin 1924); Lehmann, Heinrich, Familienrecht (Berlin 1926); Endemann, Friedrich, Erbrecht (Berlin 1923). The great commentaries are: Staudinger, I. von, 7 vols. (9th ed. Munich 1925-31); Planck, J. W. von, 5 vols. (4th ed. Berlin 1913-30); Busch, L., and others, Das burgerliche Gesetzbuch mit besonderer Berucksichtigung der Rechtsprechung des Reichsgerichts, 5 vols. (6th ed. Berlin 1928). For general views: Hedemann, J. W., Das burgerliche Recht und die neue Zeit (Jena 1919); Thur, A. von, Grundlagen und Ausbau des burgerlichen Gesetzbuches (Strasbourg 1918). For historical background: Hedemann,]. W., Die Fortschritte des Zwelrechts im AtA. Jahrhundert, 2 vols. (Berlin 1910-30). Borchard, E. M., Guide to the Law and Legal Literature of Germany (Washington 1912) p. 56 97, contains a bibliography of literature in English on the BGB. English translations of the BGB are by Walter Loewy (The Civil Code of the German Empire, Boston 1909) and by Chung Hui Wang (The German Civil Code, London 1907).

GERONTOCRACY. Old men and women still possessed of their faculties have been dominant in social control and direction in all human societies. In civilized societies ancient and modern the dominance of the aged appears to be the consequence essentially of their greater experience and balance in judgment as compared with that of younger persons, chiefly as a result of their more extensive experience with facts, human nature and social techniques, their control of the family and the family wealth and therefore the aggregate social wealth, and the fact that they have established themselves in power to the consequent exclusion of the younger groups. In preliterate societies these same causes operate, but in addition the older groups are the repositories of the unwritten common law, of the magical group ceremonials and of the equipment of these ceremonials. The share of power or influence accorded aged women varies but is usually confined to domestic life and economic activities such as primitive agriculture and home manufactures which may be carried on by women. Women's share of influence does not appear to be correlated with matrilineal descent or matriarchy. In primitive gerontocracies women are universally excluded from the dominating councils of elders.

The term gerontocracy may be used to refer to the generalized dominance of the aged, but in historical descriptions of culture it should be confined to the designation of a formal pattern of social organization in which the aged are organized into councils of elders. It may be defined as the dominance through social control of the upper age class among peoples who have no form of the state, no political organization or political control. This formal patterning of society is limited in distribution and appears to be linked with secret societies, with warrior gradings and with other age grade or age class organizations. Formal age classifications exist more widely than gerontocracy. They are found among peoples who are highly organized politically, such as the Incas and some North American tribes.

Gerontocracy appears to be confined to the primitive culture strata of Negro Africa-surviving in west Africa on the margins of the development of the state or political control, dominant among the more primitive cultures of the Bantu of Kenya colony in east Africa and to the Negroid and Australoid and mixed Negro-Australoid peoples of Melanesia and Australia. In these cultures an age classification of communities is found with the oldest age groups functioning as a council of elders. The elders do not exercise the functions of chiefs or rulers; they do not possess legislative, judicial or executive powers. They act in a quasi-judicial capacity as arbitrators of a sort when there is a dispute about damages in the community, and after hearing the facts they give their opinion on the common law and on what damages should be paid. They have no power to enforce the payment of the damages. Such gerontocratic political control may be sharply contrasted with complete anarchy-an absence of both political and age class social control-as represented, for example, by the Yurok Indians of northwest California and their cultural kin northward to the Columbia River.

Considerations of gerontocracy by historians of culture have been deficient inasmuch as they have been confined to the institution in its Melanesian and Australian varieties. Rivers writing in 1911 was apparently ignorant of the existence of gerontocracy in east Africa and his theories regarding the cultural linkages of the institution cannot be considered as valid until thoroughly reappraised in the light of the African data. Rivers, for example, makes much of the linkage of the dual social organization and

gerontocracy in Melanesia and considers these as intimately interrelated in development. But in Negro Africa there is no definite evidence of the present or past existence of the dual social organization. Loeb's comparative study of secret societies also indicates that the subject requires reanalysis in the light of the history of secret societies.

Judging chiefly from the distribution data, gerontocracy appears to be correlated in distribution with the Negroid race. Where dominantly Australoid peoples, such as the Australians, exhibit the institution it may be due to Negro influence and admixture. Negroid and Australoid races were once continuous in geographical range from the Pacific around the littoral of the Indian Ocean to west Africa; and with this racial continuum, according to Frobenius and others, there was an archaic culture continuum. This culture continuum may have included the institution of gerontocracy.

Whether gerontocracy is a form of social control more archaic than the state or political government is very problematical and must remain so until the institution is more carefully investigated.

W. C. MacLeod

See: Social Organization; Secret Societies; Age Societies; Government; Primitive Law.

Consult: Frazer, J. G., The Golden Bough, 12 vols. (3rd ed. London 1907–15) vol. i, p. 334–35; Loeb, E. M., "Tribal Initiations and Secret Societics" in University of California, Publications in American Archaeology and Ethnology, vol. xxv (1929) 249–88; Lowie, R. H., Primitive Society (New York 1920) p. 359–61; MacLeod, W. C., The Origin and History of Politics (New York 1931) chs. ii, vi; Powdermaker, Hortense, "Leadership in Central and Southern Australia" in Economica, vol. viii (1928) 168–90; Rivers, W. H. R., The History of Melanesian Society, 2 vols. (Cambridge, Eng. 1914) vol. ii, ch. xvii.

GERRYMANDER is a term used to describe the abuse of power whereby the political party dominant at the time in a legislature arranges constituencies unequally so that its voting strength may count for as much as possible at elections and that of the other party or parties for as little as possible. To accomplish this design it masses the voters of the opposing parties in a small number of districts and so distributes its own voters that they can carry a large number of districts by small majorities.

The word gerrymander was derived in 1812 trom the name of Governor Elbridge Gerry, who allowed a bill apportioning Massachusetts into districts of fantastic shapes to become a law. By 1840 gerrymandering was the common practise in American legislation for the apportionment of seats in the national House of Representatives as well as in the state legislatures. As a result of gerrymanders the maps of congressional and legislative districts in some American states presented very striking irregularities in boundaries and in the shape of the different districts. For example, there was the famous "shoe string" district in Mississippi, about three hundred miles long and about twenty miles broad; a district in Pennsylvania resembling a dumb-bell; and in Illinois the "saddlebag" and the "belt line" districts.

Various attempts have been made to check the practise in the United States by means of legislation or other agencies. The reapportionment act passed by Congress in 1842 required the election of members of the House of Representatives from single member districts which should be composed of compact and contiguous territory. But while the districting remains in the hands of state legislatures great variations in construing the terms of the act must be expected. Proposals have been made to abolish the system of districts and choose all representatives at large, but this would result in the complete denial of representation to the minority party. Legal action against the gerrymander is often possible, but judges hesitate to interfere with legislative discretion in such political matters. Moreover, legal rejection of a redistricting statute may merely revive an earlier gerrymandered apportionment which is likely to be even more grossly unfair because of the shifts of population since its enactment. The referendum may sometimes be used to veto a flagrant gerrymander, as was done in Ohio following a Republican redistricting act of 1915. A campaign of education carried on while apportionment acts are pending in state legislatures would considerably check the manipulation of districts. The most effective remedy, however, and the one which has probably been the most important factor in the relative absence of gerrymandering in Europe is the substitution of proportional representation for the single member district.

Continental Europe has not been free from gerrymandering. Criticisms of Wahlkreisgeometrie in Switzerland were heard as early as the 1870's. When France changed from scrutin de liste to scrutin uninominal in 1927, the new single member districts were flagrantly gerrymandered by the commission in charge of districting. But

the possibility of gerrymandering has been largely destroyed by the widespread adoption in Europe of the list system of voting with proportional representation. Especially is this true of the German electoral system, which prevents the wasting of any votes by cumulating the surplus votes from the smaller electoral districts for use in connection with a list of candidates for the Reich as a whole.

Tradition has no doubt been a factor of some importance in Europe. In many countries election districts largely follow traditional political or racial units. While the representation of certain groups has often been restricted, it has rarely been through the fantastic rearrangement of preexisting districts. The rotten boroughs of England, while somewhat similar to gerrymandering in their consequences, were a result not of any statute passed by Parliament but of the failure of Parliament to rearrange constituencies to meet changing social and economic conditions. The general redistricting of parliamentary seats in 1918 was effected by commissions composed of persons in whose integrity and independence the House of Commons had confidence. The principles they were to follow were laid down in advance by the House. There was no gerrymandering, since the practise is not in accord with English political traditions. Australian politics, on the other hand, have witnessed considerable apportionment manipulation, especially on the part of the Labour governments of Queensland and the anti-Labour governments of Victoria.

WILLIAM SEAL CARPENTER

Sec: Apportionment; Constituency; Rotten Boroughs; Representation; Proportional Representation; Minority Representation; Elections; Parties, Political.

Consult: Griffith, E. C., Rise and Development of the Gerrymander (Chicago 1907); Brooks, R. C., Political Parties and Electoral Problems (New York 1923) p. 434 43; Hamm, W. C., "The Art of Gerrymandering" in Forum, vol. ix (1890) 538-51; Sauer, C. O., "Geography and the Gerrymander" in American Political Science Review, vol. xii (1918) 403-26; "The Slaying of the Gerrymander" in Atlantic Monthly, vol. lxix (1892) 678 82; Commons, J. R., Proportional Representation (2nd ed. New York 1907) ch. iii; Short, L. M., "Recent Redistricting Legislation in Missouri in American Political Science Review, vol. xxv (1931) 634-49; Sharp, W. R., "The New French Electoral Law and the Elections of 1928" in American Political Science Review, vol. xxii (1928) 684-98.

GERSHUNI, GRIGORY ANDREYEVICH (1870–1908), Russian revolutionist. He was originally interested in purely educational work

among the workers, but interference by the authorities and attempts by the political police to divert his legal activities to the service of their own ends caused him about 1900 to join the revolutionary movement. He was one of the founders of the Socialist-Revolutionary party, took a part in the drafting of its program and directed until his arrest in May, 1903, its terrorist activities, as head of its Fighting Organization. In 1904 he was tried and received a death sentence, which was commuted to life imprisonment. After escaping from Siberia in the fall of 1906 he participated in February, 1907, in the convention of the Socialist-Revolutionary party held in Finland and influenced its resolutions on the complex issues which faced the party in connection with its participation in the Second Duma. He remained politically active until he succumbed to disease.

Gershuni, an almost legendary figure to the Russian masses, was a man of uncommon will power, exceptional ability as leader and organizer and a rare sense of political realities. Unlike the terrorists of the earlier generation he did **not** regard terrorism as the principal means of overthrowing the government or even of forcing concessions from it. He maintained that with the spread of revolutionary sentiments political assassinations in retaliation for governmental repression were increasingly inevitable. They were a sheer waste of lives and energy when left to unorganized individual initiative; but if carried out under centralized control by a revolutionary party they could, through adequate preparation, proper timing of the attack and careful choice of object, he made very effective both in impressing public opinion and in disorganizing the repressive machinery of the state. Terrorism should be merely one of the manifold activities of the party, but for technical reasons it should be strictly isolated from the others, which although clandestine nevertheless involved comparatively wide contacts; it should be delegated to a special group, the Fighting Organization. He insisted that as soon as civil liberties were achieved the terror as a form of socialist action would have to be discarded.

ALEXANDER GOURVITCH

GERSON, JOHN (Jean Charlier de) (1363–1429), French church reformer. In 1395 Gerson became chancellor of the University of Paris and began to play an important role in French politics and in the ecclesiastical struggles over the schism. In 1415 he was sent to the Council of

Constance, where he took a prominent part in the most significant discussions. His opposition to the doctrine of tyrannicide, by which John Petit had justified the murder of the duke of Orléans by the duke of Burgundy, aroused the latter's enmity and forced Gerson to flee from Constance in 1418. In the next year he settled in Lyons, where he was active as a preacher, educator and writer.

Gerson tried to establish peace in church and state and was one of the leaders of the conciliar movement. His policy was always one of compromise. Just as he endeavored to reconcile scholasticism and mysticism into a reformed mystical theology he strove in his plan for the reform of the church to maintain and support the old system of church organization, eliminating its disadvantages by establishing the new doctrine of the superiority of the councils. As early as 1400 he attempted to prove in De auferibilitate papae, a treatise written for the Council of Pisa, the possibility of dethroning the schismatic popes, maintaining firmly, however, in opposition to Marsilius of Padua and William of Ockham, the doctrine of the divine basis of the papacy and the immutability of the ecclesiastical hierarchy and monarchy. A similar opportunism marks his speeches at Constance and his other works, especially De potestate ecclesiastica et origine juris (Paris 1417?). By making a distinction between the authority of an office derived from God and the frequently erring incumbent of the office he established the divine character of the papacy and of papal authority, at the same time emphasizing the superiority of the church and its councils over the papacy. Nevertheless, self-government should be the exception rather than the rule in church administration, for papal government has been ordained by God. Whenever it becomes necessary, however, the church may by its councils limit papal power. Upon this doctrine Gerson rested the possibility of the reform of the papacy.

Gerson's political theories also show a somewhat weak policy of compromise. In several great political speeches delivered before the French court he recognized as the ideal state a strong monarchy regulated by religion and reason and requiring the cooperation of the three estates, especially of the nobility. He believed in the independence of the temporal power in so far as it was not antagonistic to faith and the church. Because of his doctrine of the supremacy of the councils Gerson came to be regarded as an ardent proponent of Gallicanism. It is doubt-

ful, however, whether he would ever have subscribed to its principles.

RICHARD SCHOLZ

Works: The best edition of Gerson's works is by L. E. Dupin, 5 vols. (Antwerp 1706).

Consult: Schwab, J. B., Johannes Gerson (Würzburg 1858); Connolly, J. L., John Gerson (Louvain 1928).

GERTZENSTEIN, MIKHAIL YAKOVLE-VICH. See Hertzenstein, Mikhail Yakov-Levich.

GERVINUS, GEORG GOTTFRIED (1805–71), German historian. After abandoning a commercial career Gervinus became a student of F. C. Schlosser at Heidelberg. In 1835 he was appointed professor of history at Heidelberg and in 1836 at Göttingen. As one of the group of seven Göttingen professors who protested against King Ernst August's breach of the constitution he was deprived of his post and returned to Heidelberg. In 1848 he became a member of the Frankfort Assembly but soon resigned because of political disagreements.

Gervinus' work as a historian is characterized by a greater appeal to the political feeling of his nation than to the moral feeling of the individual. In the concluding volume of his Geschichte der poetischen National-Literatur der Deutschen (5 vols., Leipsic 1835-42, later enlarged under the title of Geschichte der deutschen Dichtung, 5th ed., 5 vols., 1871-74), which represents the first great attempt to combine the history of literature with a study of the political and social currents of the time, he expressed the wish that the nation, having reached the culmination of literary greatness with Schiller and Goethe, might turn to practical political deeds. A typical representative of constitutional liberalism, Gervinus was likewise one of the most ardent champions of federalism, considering the preservation of the particularism of the local German states within a strong federation (Bundesstaat) a solution of the national problem. This particularism, he believed, was inherent in the Germanic spirit and was largely responsible for the cultural development of Germany. The Deutsche Zeitung, which he founded in 1847, propagated these ideas and his Geschichte des neunzehnten Jahrhunderts seit den Wiener Verträgen (8 vols., Leipsic 1855-66) is based largely on the view that history is a development toward freedom and democracy. The appearance of the introduction to this work in 1853, in which these general principles were indicated, brought upon

him a charge of high treason and a withdrawal of his professorship. Gervinus disapproved passionately of the methods of Bismarck. He was full of indignation at the war of 1866 and he died not reconciled by the events of 1870-71.

Alfred Stern

Consult: G. G. Gervinus Leben von ihm selbst—1800 (Leipsic 1893); Dörfel, Johannes, Gervinus als historischer Denker, Geschichtliche Untersuchungen, vol. ii, pt. 2 (Gotha 1904); Lehmann, Emil, Georg Gottfried Gervinus (Hamburg 1871), tr. by Edith Dixon (London 1872); Rychner, Max, G. G. Gervinus (Berne 1922).

GESELL, SILVIO (1862-1930), German money reformer. Gesell lived for many years in Buenos Aires, where he became a wealthy merchant, and later spent some time in Switzerland, engaging in farming and writing. In April, 1919, he joined the Soviet cabinet of Bavaria as minister of finance. During the Argentine money deflation of the late eighties he developed the doctrine of "free money," the later version of which together with his plan of land reform inspired the movement for a "free economy." The movement, particularly vigorous in the early postwar years, included the Swiss and German Freiland-Freigeld Bund and similar organizations, which met at their first international convention in Basel in 1923.

Gesell's scheme of social reform is intended to eliminate non-labor incomes, such as interest and rent, the existence of which in the present system he attributes to the inequality inherent in the relationship between the buyer and the seller of commodities in the market. While commodities because of their perishability exercise a demand for money which cannot be delayed for long, money which is not spent for consumption purposes -- funds which are saved and spent only when a surplus is realized thereby, or mercantile capital-can be withdrawn from the market without a loss in value. Because of this advantage the holders of money are able to command a premium which is not related to mercantile profit, a differential between the price paid to the producer and the true value of the commodity. When the prices at which merchants can sell fall and this differential disappears, mercantile capital withdraws from the market, a temporary breakdown of circulatory processes ensues and stocks deteriorate. The possibility of exacting such a differential, called by Gesell primary interest or exchange interest, imparts to money the characteristic of capital. Capital goods function as capital because they can be purchased

only for money; their production is restricted, so that their yield would not fall below the level of primary interest. In order to abolish primary interest Gesell proposed to eliminate the superiority of money over commodities by introducing "shrinking" money (Schwundgeld) which would weekly lose 0.1 percent of its face value, a rise in its purchasing power being prevented by a properly directed currency policy. Such money could not be withheld from the market; it would cease to earn primary interest and become free.

Gesell's land reform scheme is not so original. He proposed the nationalization of land and its leasing to the highest bidder. The rent received by the state would allow the payment of interest to the original owners and the gradual amortization of their capital. After this the rent revenue would be used to reduce taxes, to provide for mothers' pensions, old age pensions and the like.

Franz Haber

Important works: Die Reformation in, Munzwesen als Brucke zum sozialen Staat (Buenos Aires 1801); Die miturliche Writschaftsordnung durch Fredand und Freigeld (Les Hauts Genevers 1916, 6th ed. Berne 1924). Consult: Langelutke, H., Tauschbank und Schwundgeld als Wege zur zinslosen Wirtschaft (Jena 1925); Wegelin, W., Tauschsoridismus und Freigeld (Munich 1921); Haber, F., Untersuchungen über Irrtuner moderner Geldwerbesserer (Jena 1926).

GESHOV, IVAN EVSTRATTEV (1840–1924), Bulgarian statesman. Geshov attended Owens College in England and became one of the very few among the Bulgarian youth in Turkish times to possess a good education and a knowledge of world affairs. In 1872 he returned to Bulgaria to take an active part in the early struggles of his people against Turkish domination. He became prominent politically and was chief of the People's party (Narodna) for many years.

Geshov was appointed financial director of Eastern Rumelia in 1882 and a little later head of the National Bank in Sofia, which he helped to reorganize on the model of the best national banks in western Europe. In 1885 he introduced the postal savings banks. From 1804 to 1807 he served as minister of finance and gave most of his attention to the development of the cooperative movement and to encouraging the handicrafts, which for many years had been suffering from the industrial competition of the west. Under his direction the agricultural banks were reorganized in 1894. Geshov also reorganized the system of taxation in order to make it more equitable; direct taxes were reduced and the number of indirect taxes increased.

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As a diplomat he stressed the pan-Slav point of view, insisting upon the maintenance of good relations with Russia, which he considered the protector of Bulgaria. He also tried to preserve the friendship of Great Britain. In the newspaper Maritsa he agitated for a Rumelia freed of the Turkish yoke; when Eastern Rumelia broke away from Turkey and declared itself united to Bulgaria in 1885 he made a fruitless visit to Copenhagen to persuade the Russian czar to give his approval to this move, which provoked a Balkan war. He also helped negotiate the ensuing peace of 1886. In 1911 he became prime minister and played a significant part in the formulation of the Balkan alliance. Although chief of Bulgaria's bourgeois party, he put through many measures that were beneficial to the masses. Despite his strong nationalist sentiment he was an outstanding pacifist, preferring on almost all occasions conciliation and compromise to drastic action.

R. H. MARKHAM

Important works: L'alliance balkanique (Paris 1915); La genèse de la guerre mondiale—la débâcle de l'alliance balkanique (Berne 1919).

Gonsult: Bulgarska Akademiya na Naukite, Ivan Evstratiev Geshov, vzhledy i dieynost (1. E. Geshov, views and activities) (Sofia 1926).

GESNER, JOHANN MATTHIAS (1691–1761), German educator. As principal of the Leipsic Thomasschule Gesner reformed the study of ancient languages in a neohumanistic direction. While professor at Göttingen he founded a training school for teachers and a German society after the pattern of Gottsched's society in Leipsic. He put an end to rote learning of grammar and construing of texts, substituting "cursory" reading to quicken the growth of natural aptitudes, understanding, taste and ability of expression in one's mother tongue. He was an early advocate of the conversational method of learning languages.

Gesner organized the new German classical school (Gelehrtenschule) and introduced classic authors in place of Christian Latin writers. He rejected the traditional humanistic formal discipline in favor of the new ideal of ethico-humanist culture and defended his ideas successfully against mechanical traditional humanism, Pietistic fears of classical learning and utilitarian fanaticism. He advocated the state school and a somewhat one-sided neohumanistic uniform elementary course of six years, designed for the needs of the merchant and laboring classes, an

intermediate course for the acquirement of polite culture and a higher course to prepare for the university.

ROBERT REIGBERT

Consult: Paulsen, Friedrich, Geschichte des gelehrten Unterrichts, 2 vols. (3rd ed. Berlin 1921) vol. ii, p. 17-30; Michaelis, D., Memoria Johann Matthias Gesner (Gottingen 1761); Ernesti, I. A., Narratio de J. M. Gesnero (Leipsic 1762); Saupe, H., Über Johann Matthnas Gesner (Weimar 1856), and Göttinger Professoren (Gotha 1872); Eckstein, F. A., Programm der Thomasschule (Leipsic 1869).

GESTALT. The term Gestalt is a short name for a category of thought comparable to other general categories like substance, causality, function. But Gestalt may be considered more than simply an addition to preexisting conceptual principles; its generality is so great that one is forced to ask whether causality itself or substance does not fall legitimately under it; or expressed differently, whether the conception of causality as it has developed since Hume must not from the point of view of Gestalt be radically altered. The aspect of the universe to which the Gestalt category applies has occupied human thought since ancient times. Its essence is found in two main problems: first, the problem of the relation between a whole and its parts; and, second, the problem of the harmony, adaptedness or teleological perfection of certain morphological structures and types of behavior. In modern times the attempted solution of these problems has played a leading role both in biology and in certain philosophical disciplines like aesthetics, epistemology, logic and ethics.

The development of the new Gestalt concept occurred, however, in neither of these fields but in psychology. The reason is not difficult to discover. In philosophy, where consideration of the relevant problems had led to teleological as opposed to causal solutions, emphasis had come to be placed on a realm of being different from nature, at least from nature as treated by physics and chemistry. In biology, on the other hand, the same problems have been obscured and distorted by the Darwinistic concept of biological survival value, i.e. by the category of utility. The relation of the organism to its organs, the unity of structure possessed by each organ itself, the coordination of different organs in behavior and finally the adaptedness of behavior to the environment of the organism-all these facts were regarded through the spectacles of a category which may be described as teleology reduced to mechanism through utility.

Psychology late in the last century had not come under the strong influences operative in philosophy and biology. The decisive step in the new direction was taken by Charles von Ehrenfels ("Uber Gestaltqualitäten" in Vierteljahrschrift für wissenschaftliche Philosophie, vol. xiv, 1890, no. 3, p. 249-92), who pointed out facts of the utmost importance for psychology which had been more or less overlooked by the traditional schools. He asked, for example: When one hears a melody, what does one hear? The usual answer, tones, is insufficient for two reasons: first, if a melody consisting of six tones is presented to one person, he will hear more than the sum of what six persons would hear if each had been presented with one of the tones only; and, second, it is possible to change every tone of the melody by transposing it either into a different octave or into a different key, and yet the melody will remain the same. Therefore another answer to the question must be found, and this new answer must recognize the fact that in the individual's experience of the melody something else is real besides the tones. Since the chief element in the dominant psychological system of the time was the sensation and since the bulk of the sensation was considered to be its quality, Ehrenfels gave the name of quality to this new existential datum which was not a sensation. He called it a Gestaltqualität, which may be adequately translated as form-quality if one keeps in mind that the second part of this term emphasizes the existential aspect of the first and puts it thereby on the same level of reality with sensory qualities like blue, red, sweet.

At first no other claim was made for the concept of Gestaltqualität than that of its being a necessary psychological concept which must be treated on equal terms with the older ones but which could well be harmonized with them through treating the Gestaltqualität as something added to the original sum of sensory data. Unsatisfactory as this solution was, the great achievement of Ehrenfels in pointing out this new field bore ample fruit in the many experimental investigations carried on after 1895 by a small but vigorous group of psychologists at the University of Graz. They investigated properties of such wholes as possessed Gestaltqualität and developed the theory that they were of pure mental extrasensory origin created by a mental function which in opposition to current empiristic or reproductive theories they called the process of production. Seen in a larger frame this theory is vitalistic. It presupposes the whole mechanism of sensations, each depending on its particular stimulus, the totality presenting no more than a mosaic of different sense impressions whose geometrical order is determined by the geometrical pattern of the retinal image. But unit formations and the shape of the units so formed are referred to a new factor which operates upon the sensory material. Thus two principles were believed to be operative in the perception of Gestalt phenomena: a mechanistic, machinelike sensory process and an extrasensory creative mental function.

Parallel to this development another, which was also to contribute to the modern Gestalt concept, was taking place in the study of behavior. Driesch, the biologist-philosopher, tried to explain action by two similar principles. The one, corresponding to the sensory mechanism, is the reflex mechanism; the other, corresponding to the production process, is what Driesch called the psychoid. The first supplied on a strictly mechanistic basis the material of behavior; the second regulated these reflexes and transformed them into coordinated and meaningful behavior. For Driesch the significance of behavior was one of the main conclusive arguments in favor of vitalism.

Such association with vitalism was, however, unfavorable to the development of the Gestalt idea. With a sound scientific instinct most psychologists and biologists shunned the introduction of vitalistic principles, with the result that the Gestalt idea, since it seemed to rest on a vitalistic foundation and certainly was not compatible with the traditional mechanism, was more or less neglected.

It was not until a full twenty years after the publication of Ehrenfels' original paper that the concept was further developed. The bearing of this new development is most easily understood when the relation between mechanism and vitalism is reconsidered. Both views involve the acceptance of the laws of physics which emphasize the machinelike nature of events, incapable of explaining the order of life or mind. To mechanistic eyes this order in events is nothing but the result of the blind reactions of "organismic machines" which have developed by trial and error and elimination of the unfit. Vitalism did recognize the reality of order but to explain it found it necessary to assume a new entity whose sole function was to create that order which was inexplicable on purely mechanistic principles. Thus logically vitalism needed mechanism. A solution of the vitalistic-mechanistic dilemma had to be very radical. It involved the acceptance of the reality of form and order, but in order that these should be kept within a strictly scientific system the vitalistic force which was held to create them had to be rejected. Further, since the existence of such a force followed logically from the acceptance of form and order and of mechanism, it was the latter that had to be rejected.

The solution of the problem was indicated by Max Wertheimer and W. Köhler. The first statement of the new point of view came in Wertheimer's paper "Experimentelle Studien über das Sehen von Bewegung" (Zeitschrift für Psychologie, vol. lxi, 1912, p. 161-265). Both Wertheimer and Köhler pointed out that the idea that form and order can be produced only by preexisting machines which are as unconcerned about their products as is a lathe about the screws it turns out is a view totally alien to the developing science of physics. On the contrary, the world of physics reveals on every hand order arising from the specific properties of substances and processes in relation. In physics it is as unnecessary to introduce rigid constraints and preexisting devices to explain orderly distribution in equilibrium or the transition from one state to another as it is to assume a supernatural force for this purpose. Spontaneous self-distribution of process, producing functional wholes, is a concept employed, if not expressly enunciated, by every modern physicist. Once this is recognized, the physics of organic processes need no longer be made in terms of machine controlled events. If brain processes show functional wholes produced by self-distribution of process, then the Gestaltqualitäten find a natural explanation. They appear as properties of spatially or temporally extended wholes. If these wholes are conceived as the mental correlates of physiological functional wholes aroused by the total stimulus constellation within a system with its own specific properties, it is possible to abandon at one stroke the sensory mosaic which nobody has ever observed and the process of production which is equally fictitious, at the same time retaining the reality of form. The scope of the Gestalt category is also enlarged far beyond the pale of the Gestaltqualität, since both the wholes themselves which have these qualities and the organization of the field into these wholes become aspects of one and the same problem (see Consciousness for further discussion of this psychophysical isomorphism).

From the same principles is derived an explanation of behavior, or action, with its characteristic of adaptedness. Only the most general

outline of the explanation can be drawn here. Briefly, the physical environment by affecting the sense organs sets up on the surface of the organism the conditions for a dynamic organization of process within the organism, the physiological counterpart of the world of direct experience. As a rule these distributions are not quiet or static but are under stress and contain energy which can be consumed in transforming them and relieving pressure. Millions of such organizations are, geometrically, equally as possible as the one actually in existence at any time; but according to a very general law of Gestalt theory, called the law of Prägnanz, the best possible equilibrium will be achieved, the actual organization will be as "good" as the conditions allow, with regard to closedness, articulation, consistency of the particular wholes on the one hand and of the total field on the other. The distribution of the stimulation on the sense surface, however, limits the "goodness" which the development of perceptual organization can achieve. Stresses always remain within the perceptual field and therefore the most frequent way of transforming this organization is through action. If one sees an "attractive" object one is actually attracted by it and tends to approach it, i.e. the organization of the psychophysical field contains a pull which is relieved by the movement of the body. Thus action is directly adapted to direct experience because it is regulated by it in a perfectly natural way. Thus according to the Gestalt concept meaningful behavior remains meaningful in theory, in contrast with the modern doctrine which tries to reduce behavior to a sequence of original and conditioned reflexes and to make it thereby devoid of any meaning or significance. Because of this new emphasis the Gestalt point of view will be of great and increasing value as it is applied to the whole field of social studies.

At this point the question may be raised: in what sense is the Gestalt idea a new category? Scientists had come to believe that they would know the whole universe if they knew the properties at each particular point at each particular moment. Now it is recognized that there are many things, such as the Gestaltqualitäten of Ehrenfels, which do not belong to space and time points but to larger space-time volumes. In other words, analysis if it wants to reveal the universe in its completeness has to stop at the wholes, whatever their size, which possess functional reality. Neither substance nor energy nor events prove to be divisible ad libitum. There-

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fore, instead of starting with the elements and deriving the properties of the wholes from them a reverse process is necessary, i.e. to try to understand the properties of parts from the properties of wholes. The chief content of Gestalt as a category is this view of the relation of parts and wholes involving the recognition of intrinsic real dynamic whole-properties.

From this point of view causality falls under the Gestalt category. Hume attempted to reduce causality to mere factual sequences of point events. When it is said that A causes B, in reality no more is meant, according to Hume, than that A is followed by B. But here the example of the melody is in point: with equal right Hume might have said that there are the six tones, one after the other, and nothing between them. And yet a melody is not only something very different from the sum of the tones, it not only provides the tones with properties they do not possess outside the melody, but it also carries within itself its own law. The sequence of tones produced by a dog running over the keyboard of a piano is certainly no less causally determined than the sequence of tones in a melody, but its determination is of a different kind. These random tones are the incidental result of an activity which in itself may be coherent and unitary but which is not concerned with the production of tones; no tone therefore depends on any other tone, each resulting entirely from the dog's movements. In the melody, on the other hand, each and every tone gains its significance by its place in the whole, so that all are interdependent and come into existence at their proper moment because of that interdependence. Or, from another angle, even if chanticleer crowed every morning just before sunrise, this regular sequence would be no more a causal one than any other sequence. More generally speaking, two causal sequences, divisible into $A B C \dots$ and $A_1 B_1 C_1 \dots$ respectively, may occur in such a way that A is always followed by A_1 , B by B_1 and so forth and yet may remain absolutely independent. According to the only significant law, ABC... form one series, $A_1 B_1 C_1 \dots$ another. Then law can no longer mean the mere statement of sequences but must refer to real functional wholes akin to melodies; scientific law must state, under the Gestalt category, the intrinsic properties of such spatial and temporal wholes. These wholes may legitimately be called meaningful, whereas the random sequence of tones is certainly perfectly meaningless, and thus again meaning pervades the applications of the Gestalt category.

To summarize: the Gestalt category wherever it is applied in science signifies the attempt to find within the mass of phenomena coherent functional wholes, to treat them as full primary realities and to understand the behavior of these wholes as well as of their parts, from whole rather than from part laws. To apply the category of cause and effect means to find out which parts of nature stand in the cause-effect relation. Similarly, to apply the Gestalt category means to find out which parts of nature belong as parts to functional wholes, to discover their position in these wholes, their degree of relative independence and the articulation of larger wholes into subwholes. Since most wholes are organized into more or less independent subwholes, each larger whole may ultimately be proved to be a subwhole of a still larger one; and only the progress of science can show where each whole has its final boundaries or whether this final boundary does not coincide with the boundaries of the universe.

The significance of this new approach is indicated by the tendency among modern students in other fields to attack the same problem of the whole-part relationship and to reach similar although less far reaching solutions. In biology C. M. Child has tried to derive morphological development as well as behavior from physiological gradients, i.e. from relevant, non-atomistic properties of the systems. In German psychology several schools have developed Gestalt concepts, all differing from the Gestalt theory by an ultimate dualism. A good account of these and of the older attempts may be found in a paper by Egon Brunswik ("Prinzipienfragen der Gestalttheorie" in Beiträge zur Problemgeschichte der Psychologie, Jena 1929, p. 78-149). The basic tendencies in physics have been referred to. In philosophy particular interest attaches to the theories of Jan C. Smuts, whose principle of holism has many points of contact with Gestalt, although it is not quite clear how far he conceives of holism as in nature and how far as a principle above nature; and to the philosophy of Whitehead, whose searching analysis of physics and metaphysics results in conclusions very similar to those of the Gestalt theory although his ultimate metaphysical solution seems to be different.

K. Koffka

See: PSYCHOLOGY; MECHANISM AND VITALISM.

Consult: Köhler, W., Gestalt Psychology (New York 1929); Wertheimer, Max, Über Gestalttheorie, Symposion, Sonderdrucke. vol. i (Erlangen 1925), and

"Untersuchungen zur Lehre von der Gestalt" in Psychologische Forschung, vol. iv (1923) 301-50; Koffka, K., "Psychologie der Wahrnehmung" in International Congress of Psychology, v111 (Gröningen 1927) p. 159-65; Helson, Harry, "The Psychology of Gestalt" in American Journal of Psychology, vol. xxxvi (1925) 342-70, 494-526, and vol. xxxvii (1926) 25-62, 189-223; Scheerer, M., Die Lehre von der Gestalt (Berlin 1931).

GHAZZĀLĪ, ABŪ-HĀMID MUHAMMAD IBN MUHAMMAD AL-TUSI AL-SHĀF!'I AL- (1058-1111), Persian philosopher and religious reformer. Al-Ghazzālī studied law at an early age and became the leading disciple of the Imam-el Haramayn. After the latter's death he taught canon law at the Academy of Nizām-al Mulk in Bagdad. At that time he tended toward skepticism, but after a study of the various schools of Muslim thought experienced a religious conversion and accepted the mystic doctrines of Sufism. In 1107 after a number of years passed in travel and retreat he was recalled to teach at Naysābūr. Finally he returned to his native town, 'I'us, where he founded a school for jurists.

Al-Ghazzālī has related in his vivid autobiography, the Mungidh (French translation by Barbier de Meynard in Journal asiatique, 7th ser., vol. ix, 1877, p. 5-93), how he was struck by the waning of faith and religious sentiment in Islam and consecrated himself to the task of reviving the dying religion. This decadence he considered due primarily not to the political confusion of the period but rather to the wrongful use of reason in the problems of metaphysics and religion. He therefore attacked the neo-Platonic tendencies of the Hellenizing scholastics, such as Fārābi and Avicenna, in his celebrated work the Tahâfut (The overthrow of philosophers, Cairo 1303). In it he pointed out the vanity and futility of pure reason and claimed to prove that all scholastic argument was fraught with error and incapable of proving the most fundamental truths, such as the existence of a creator. In various writings al-Ghazzālī also protested against the school of the rationalist theologians, called Mutakallims, partisans of scholastic argumentation, or Kalâm. He declared that reason as the basis of proof was adapted only to the highest intellects and not to the mass of the people and that religion and law must therefore be founded upon education, imitation and custom. He himself wrote for popular use a voluminous treatise entitled the Ihyā (The resurrection of the religious sciences, 4 vols., Cairo 1312), the clearest and most adequate expression of orthodox Is-

lamic theology. In it he expounded the principles of religion, morality and mysticism, depending only upon the traditional proofs and upon sayings or anecdotes relating to the most respected characters in the theology of Islam. The section on morality explains what ethical habits and customs should be followed in various social situations and analyzes the evil passions with much acumen. The section on commercial law discusses the various types of contract and gives an excellent analysis of the theory of sales. The mystic element, while very subtle, is comparatively restrained. The $Ihy\bar{a}$ established Mussulman orthodoxy at a time when there was a definite need for clearly stated beliefs; it has been an important factor in the permanence and stability of Islam.

B. CARRA DE VAUX

Gonsult: Carra de Vaux, B., Gazali (Paris 1902); Asín Palacios, Miguel, Algazel (Saragossa 1901); MacDonald, D. B., "The Life of al-Ghazzāli" in American Oriental Society, Journal, vol. xx (1899) 71-132, and Development of Muslim Theology, Jurisprudence and Constitutional Theory (New York 1903) pt. iii, ch. iv

GHETTO. The origin of this term is a matter of dispute. The most popular theory is that it derives from the Italian ghetta, meaning cannon or casting factory. It was presumably first used to describe a quarter of Venice which was situated near such a factory and which in 1516 was enclosed by walls and gates and declared to be the sole part of the city open to Jewish settlement. Other theories are that the word derives from the Italian borghetto (a small, negligible section of a town) or from the vulgar Italian guetto, or guitto (a filthy creature), or from the German Gitter (bars). The assumption that it derives from the Hebrew get (indicating separation, segregation) is unwarranted, since except in some documents at Rome that term is not one of the many synonyms used in the Hebrew records to express such meaning. In any case, the institution antedates the word and the latter is used currently in several ways. It indicates not only the legally established, compulsory ghetto (a section of a city in which all Jews must reside, other quarters being closed to them, at certain hours even for transit) but also the voluntary congregation of urban Jews in a separate quarter, a phenomenon known in every land of the Diaspora centuries before compulsion was exercised and still common. By analogy the word is currently used to describe similar quarters of non-Jewish groups. This usage is justified by the

fact that the rise of the Jewish ghetto is basically similar to the rise of quarters of other groups differing in language, religion, race or general culture from the surrounding majority population, such as immigrant quarters, Negro quarters in American cities, European quarters in Asiatic cities, native quarters in South African cities; or even quarters of occupation groups, such as those of guild members in mediaeval towns.

When Christianity first spread to western Europe, not only Jews but also Christians had separate quarters, such as the catacombs. With the Christianization of the Roman Empire the position of the Jews as an alien group became more marked than before and they tended to segregate as much because of centripetal tendencies as because of external pressure. The establishment of a separate Jewish quarter facilitated their religious functions, for example, the observance of dietary laws and frequent prayer in the synagogue, as well as social intercourse within the group and simplified not only inner communal administration but also the satisfaction of administrative requirements of municipal authorities. In every country, even where the legal ghetto was non-existent, there arose separate Jewish quarters. In mediaeval Germany such a quarter was called Vicus judaeorum, Judengasse, Judenviertel, Judendorf, Judenstadt and, much later, ghetto; in England, Jewry; in France, juiverie; in Spain, juderia; in Portugal, judiaria; in Provence, carriera; in Poland, zydowskie miasto, dzielnica zydowska, ulica zydowska; in North Africa, mellah. The only surviving legal and compulsory Jewish ghetto in the world is the mellah in Morocco.

The earliest known appearance in law of this tendency toward segregation is the grant of Rudiger, bishop of Speyer, who in 1084, in order to attract Jews to the city and thus "add to its honor," gave them the right to have a separate residential quarter where "they might not be readily disturbed by the insolence of the populace." Similarly the Jewish quarters in Toledo, Seville and Valencia from about 1200 to about 1400 were conceded to afford protection against attack and to facilitate the organization of communal life. It is clear that the ghetto was valued by its inhabitants. One community for many years commemorated by a special ritual the anniversary of the establishment of its ghetto; several communities which lost their ghettos repurchased them; when the dawn of the modern era in western Europe threatened the existence

of legal ghettos conservative Jewish elements lamented and resisted the dissipation of the atmosphere in which they were comfortable and best able to perpetuate group solidarity and their domination of the solidary group. In brief, while compulsory ghettos were known in a few places in Germany and Sicily before the fourteenth century, the institution was first substantially developed by the autonomous action of the Jews without the desire of the general population or the authorities and only later did it become a form of discrimination and persecution.

The transforming of the ghetto into a compulsory institution caused no great change in the geographical distribution of the Jews, since the majority the world over had of their own accord settled closely together. Nor was the creation of a geographical boundary the prime purpose of making the ghetto compulsory. The goal was to establish by means of a geographical ghetto a social ghetto; to crowd the Jews out of central business locations; to push them into small side streets and thus to limit their opportunities in commerce, handicrafts and competitive activity in general. The compulsory ghetto spread from southern Italy to central and eastern Europe. All ghettos -beginning with those of Rome, Venice, Turin, Florence, Pisa, Ferrara, Genoa, Mantua, Benevento and Naples and including those of Avignon, Carpentras, Vienna, Prague, Frankfort, Cracow, Posen, Vilna and Sandomierz as well as such Russian cities as Kiev and Moscow, where no Jews might dwell under any circumstances and where those categories of Jewish merchants allowed to visit at stated periods were forced to stop at designated hotels the doors of which were locked at night-despite differences due to geographical isolation, variation in moral codes, religious persecution and juridical restrictions, served one general purpose: all eliminated or limited the participation of Jews in commerce and handicrafts and weakened their competition.

The compulsory residential restrictions laid down by the Venetian senate in 1516 did not prevent Jews from playing an important role on the Bourse (then perhaps the largest in the world) or from participating in commerce, especially with the Orient, or from organizing trading firms in partnership with Christians. But merchants and traders formed a negligible percentage of the ghetto population, the great proportion of which became impoverished because of its isolation. In 1388 the Council of Valencia decreed that Christians dwelling in the Jewish quarter should move out and in 1480 the Cortes, on the

grounds that Christians were debased by living beside Jews, decreed that the latter must live in a segregated section. In Portugal a special compulsory Jewish quarter was designated in every section which counted more than ten Jews among its population; the gates were locked every evening at vespers and Jews who returned after closing were fined and often subjected to corporal punishment.

The signal for general segregation of the Jews in a locked ghetto was given by Pope Paul IV in 1555 in the bull Cum nimis absurdum, and the compulsory ghetto was in general a product of the sixteenth century. The thesis of the bull was that it is an impossible absurdity for accursed Iews to live openly among Christians, to purchase real estate or to employ Christian servants. It ordered the establishment of ghettos in all cities of the Papal States. Even in the ghettos jews were prohibited from owning houses and had to wear a mark of identification. The Roman ghetto, down to its abolition in 1870, was the filthiest example of the institution. It was situated on the low bank of the annually flooded Tiber, an unhealthy section where impoverished Jews had long lived. The entire Jewish population was confined within brick walls; the gates were kept locked the entire night and late comers were penalized with lashes and a fine. Conditions might vary somewhat with changes on the papal throne, but they were seldom ameliorated by any action of the College of Cardinals or of the inquisitors. A mountain of laws was reared to regulate every movement of Jews within and without the ghetto, to decide in which trades or handicrafts they might engage and the like. As a result of this restriction of activities the community became so impoverished as to be unable to pay taxes, and by 1647 its indebtedness had mounted to 167,000 scudi (approximately \$100,-000). This picture is in a general way characteristic of the situation in all ghettos.

The religious argument, widely and effectively employed in the campaign to segregate the Jews, was but a rationalization of a more basic conflict. In the sixteenth century the growing Christian bourgeoisie, organized in merchant and craft guilds, embarked upon a systematic struggle against feudal barons, bishops, kings and emperors to obtain wider municipal autonomy and commercial freedom. The Jews, thanks to the protection of feudal lords, had in the preceding period of flourishing trade recovered from their sufferings of the eleventh to the fifteenth centuries and were prospering through what was

virtually a monopoly on the trade of central and southern Europe. The creation of the compulsory ghettos, like the exclusion of Jews from many occupations, such as money lending, trade in specified merchandise and handicrafts, was part of the organized effort of the maturing Christian bourgeoisie to eliminate the Jews as competitors. Moreover, since the Jews paid over the best portion of their profits to their feudal and royal patrons either as taxes, loans or forced "gifts," the battle against Jewish merchants and traders was also a part of the effort of the Christian bourgeoisie to free themselves from feudal overlords and to gain control of the municipalities.

The struggle against the Jews in Frankfort was typical. In accordance with an agreement, renewed quarterly, between the municipal council and that of the Jewish community the Jews had the right of domicile only in specified sections of the city. The size of the Jewish populace was limited; Jews were forbidden to compete with Christian merchants or members of craft guilds; they were prohibited from purchasing real estate; they were excluded from membership in merchant and craft guilds or from doing business in the open market and were forced to peddle from house to house or to sell in the ghetto. When they sold at rates lower than those prevailing in the open market, the populace preferred to buy from them rather than from the faithful, a fact which aroused hostility often culminating in pogroms. The Jews appealed for protection to the king, whose serfs (servi camerae) they were in legal theory. The opposition party, led by a lawyer, Nicholaus Weitz, and an artisan, Vincent Fettmilch, in a memorandum to the king in 1602 challenged the royal prerogative over the Jews. The memorandum asserted that, while it was true that the Jews had previously been the property of the king, Charles IV had turned them over to the municipality and they were now the serfs of the city burghers, who proposed that they be expelled as criminals and their possessions be turned over to the municipality. In a countermemorandum the Jews sought to prove that the municipal council and the merchant and craft guilds had built a fence around them from which they had no egress and that they were forced to pay much higher taxes than others. In 1613 the burghers forbade all Jews who possessed less than 15,000 guldens to remain in Frankfort. They confiscated 10 percent of the possessions of sixty Jews, whom they drove from the city, and were on the verge of

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driving out the remainder of the community when royal commissioners commanded that the persecution of the "royal serfs" cease, granted permission to the expelled to return and provided for implementing the agreement between the municipal and the Jewish councils. In 1614 the burghers, led by Fettmilch, perpetuated a pogrom in which many on both sides were wounded, the ghetto was ruined and 1380 Jews were driven from the town. Only then did the royal commissioners receive a command to arrest Weitz and Fettmilch. Two years later the commissioners led the Jews back to Frankfort in a formal procession, granted them special military protection and settled them anew in the ghetto.

Within the ghetto poor Jews were practically prisoners, but the rich received special privileges or bought a modicum of freedom with money. Some streets were reserved for wealthy Jews, others for the poor. The ghetto of Venice contained large Jewish merchants and manufacturers, and according to Luzatto approximately 4000 Christians were employed in the Jewish factories there in 1638. In Vienna in 1753 there were seventeen families of rich Jewish liveried merchants, traders and bankers and some 350 Jewish cashiers, bookkeepers, agents, servants, teachers, rabbis and other retainers. At the end of the eighteenth century of the 3000 Jews in the Frankfort ghetto fifty-four paid taxes on sums exceeding 10,000 guldens, thirty-two on sums between 5000 and 10,000, and forty-nine on sums between 3000 and 5000.

The fact that ghettos were for the most part in the larger and more important commercial and industrial cities must have had a decided influence on Jewish occupational distribution. Statistics as to the occupational distribution of the Frankfort Jews, while meager, show that in 1694 there were 267 persons, or 70 percent of the total, in trade (textiles, clothes or money); nineteen, or 4.9 percent, were butchers or bankers; thirty-three, or 8.6 percent, were in the free professions; forty-eight, or 12.5 percent, were landowning and professionless; nine, or 2.1 percent, were unskilled laborers; and seven, or 1.9 percent, were beggars. In 1703 the figures show a slight decline in the first two categories and an increase in the third. The Rothschilds, Schiffs, Speyers, Wertheims, Gomperzes, Oppenheimers and Orensteins, all of whom played important roles in nineteenth century finance, arose from the ghettos of Frankfort and Vienna. They amassed their wealth during the wars of the seventeenth and eighteenth centuries and by the

beginning of the nineteenth century, although they remained in the ghetto without political rights, they had begun to play a significant role in the general economic and cultural world. They formed, however, but a small proportion of the ghetto population.

Since the ghettos were concentrated in the large industrial centers they experienced frequent increases in population through successive influxes. Despite its unfavorable living conditions the ghetto often offered better economic opportunities than did many provincial towns where unrestricted quarters were available. Population growth was not steady, however, being periodically interrupted by harsh persecutions. The Jewish population tables of Frankfort offer a rare insight into Jewish political history. They show between 1463 and 1569 an increase of only 790 over an original 110, between 1590 and 1690 an increase of only 1000 over an original 1000 and between 1700 and 1808 an increase of only 85 over an original 3019. The mortality rate per 1000 between 1675 and 1699 seems to have been about 41 percent and between 1750 and 1799 about 42 percent, indicating decisively that the population growth was due not to natural increase but to the influx of newcomers. While at the end of the sixteenth century approximately 2000 Jews were settled in Venice, in the middle of the seventeenth century there were, because of a large influx and despite persecutions, 6000.

In recent centuries the concentration of Jews in the largest cities of all countries has exceeded that of the general population. A third of the entire Jewish population of the world is concentrated in the fifteen cities of Europe and America having a population of 1,000,000; 6 percent of the entire population of these cities is Jewish. Here the Jews themselves have created voluntary ghettos, quarters of the city, where Jews constitute often as much as 80 or even 90 percent of the total population; in these districts the great majority of the city's Jewish population is to be found. In one district of Warsaw, for example, Jews comprise 94.4 percent of the population; in another the percentage is 78.7, in a third 63.1, in a fourth 59.4. In Vienna and Warsaw, each of which has twenty wards, about two thirds of the entire Jewish population is settled in four wards. In 1892, 75 percent of the Jewish population of New York lived on the East Side. Although the improved status of some immigrants has resulted in a certain amount of scattering, in some districts of the Bronx and Brooklyn the Jewish population totals between 80 and 90 percent of the whole. The Jews in the Bronx number 45.28 percent of the total population of that borough, and in Brooklyn 35.02 percent. In London in 1929 two-thirds of the 75,000 Jews in the city were concentrated in the East End and Stepney.

Although with the sharpening of class differences in the modern ghetto a certain proportion of the more prosperous Jews moves to a non-Jewish section, only a small group belonging to the upper class definitely breaks with Jewish surroundings and lives aloof from a lewish environment. In some countries, for example, Italy and France, where the proportion of Jews to the total population is extremely small, members of the proletariat show a similar trend. On the other hand, when the Jews of the middle class attempt to make such a break, there occurs a mass exodus and a reconcentration of the same Jews in a new section of the city. This phenomenon of voluntary concentration is due to a complex of religious, national, social and economic reasons. Perhaps the most significant fact behind it is that wherever the wandering Jewish masses go they concentrate in special fields of artisanship and small manufacturing, i.e. in the occupations to which they have been historically bound, which do not require large capital investment and involve no great physical exertion. The occupational concentration of the mass of Jews, both employers and laborers, increases the tendency to residential concentration. In the wake of this phenomenon comes the concentration of Jewish middlemen, intelligentsia and all the other elements of a functioning community. Within such a community there arises a network of institutions (charitable, social, cultural, political) which, in turn, tend to stabilize and perpetuate the ghetto.

It has already been pointed out that conservative and dominant elements in the de jure ghetto communities resisted the break up of the ghetto threatened by the rise of the modern state. Similarly, conservative elements in the de facto ghettos of today resist the drift away from the ghetto and cultivate an atmosphere of animosity toward Jews who reside outside. On the other hand, Jewish liberalism, seeking to realize the theories of the French Revolution with regard to their position in the state, has not only worked to destroy the old but has disapproved the new type of ghetto. Historians of the liberal school tended to paint the mediaeval ghetto as an institution of unmitigated evil. The rise of modern Jewish nationalism was attended by a reaction

against this point of view. While some Ziomsis on the whole share liberal sentiments with regard to the ghetto, the so-called Diaspora nationalists have adopted a different attitude. Simon Dubnow's historical work in particular has served to document their view that the mediaeval ghetto had positive values for the Jewish community and that within its walls there grew up a communal organization, national solidarity and a cultural life which, while colored by the effects of walled isolation from the outside world, produced characteristic values of its own. These Diaspora nationalists demand an opportunity for autonomous life such as the ghetto partially provided and look to the new theory of minority rights as a basis for the development they seek.

JAKOB LESTSCHINSKY

See: Diaspora; Antisemitism; Judaism; Jewish Autonomy; Jewish Emancipation; Zionism; Ethnic Communities; Assimilation, Social.

Consult: Dubnow, Simon, Weltgeschichte des judischen Volkes, 10 vols. (Berlin 1925-29) vols. vi-x; Caro, Georg M., Sozial- und Wirtschaftsgeschichte der Juden im Mittelalter und der Neuzett, 2 vols. (Frankfort 1908- 20; vol. i, 2nd ed. 1924); Baron, Salo, "Ghetto and Emancipation" in Menorah Journal, vol. xiv (1928) 515-26; Wirth, Louis, The Ghetto (Chicago 1928); Abrahams, Israel, Jewish Life in the Middle Ages (London 1896); Philipson, David, Old European Jewnes (Philadelphia 1804); Vogelstein, H., and Rieger, P., Geschichte der Juden im Rom, 2 vols. (Berlin 1895–96); Berliner, Abraham, Aus den letzten Tagen des römischen Ghetto (Berlin 1886); Pribram, A. F., Urkunden und Akten zur Geschichte der Juden in Wien, 2 vols. (Vienna 1918); Schwarz, Ignaz, Das Wiener Ghetto, seine Häuser und seine Bewohner (Vienna 1909); Kracauer, Isidor, Geschichte der Juden in Frankfurt am Main (1150-1824), 2 vols. (Frankfort 1925-27); Roth, Cecil, Vemce (Philadelphia 1931); Unna, Josef, Statistik der Frankfurter Juden bis zum Jahre 1860 (Frankfort 1931); Ruppin, Arthur, Soziologie der Juden, 2 vols. (Berlin 1930-31); Cohen, Israel, Jewish Life in Modern Times (2nd ed. London 1929); Lestschinsky, Jakob, "Die Umsiedlung und Umschichtung des judischen Volkes im Laufe des letzten Jahrhunderts" in Weltwirtschaftliches Archiv, vol. xxx (1929) 123*-56*, and vol. xxxii (1930) 563-99; Linfield, Harry S., "Statistics of Jews-1929" in American Jewish Yearbook, vol. xxxii (1930-31) 251-81; Hapgood, Hutchins, The Spirit of the Ghetto (New York 1909).

GIANNI, FRANCESCO MARIA (1728-1821), Italian statesman and economist. Gianni was born in Florence. He was director of the customs in Pisa and was later promoted to the rank of senator in Florence and made superintendent of the silk industry. Gianni rose to eminence in 1766 when a grain scarcity menaced the country. Conversant with the works of Bandini, be

proposed the extension first to Siena, then to all Tuscany of free trade in grain originally granted to Maremma in 1738. On September 18, 1767, was promulgated the famous act by which Tuscany became the pioneer in the cause of commercial liberty. The grand duke Leopold placed great confidence in Gianni, gave him the rank of minister and followed his advice when he, elaborating a view first put forward by Hutcheson and commented upon by Hume, strongly argued that public debt was not truly a state debt but a sum of private debts from taxpayers to public creditors, in which the state acted only as an intermediate agency. Pursuant to this theory an edict of 1788 distributed the public debt among payers of land taxes. Gianni lived to see his work overturned after the ascension of Leopold to the Austrian throne. The Debt Redemption Act was recalled and in 1790, a year of food scarcity, he, as the author of free trade in grain, was branded as an arch enemy of the people; his house was sacked and he was obliged to escape to Bologna. For a brief period he was minister of finance under the French regime and he retired in 1801.

Luigi Einaudi

Works: Scritti di pubblica economia, storico-economici e storico-politici, 2 vols. (Florence 1848-49), with biography by G. Ponsi, vol. 1, p. 1-7; Governo della Toscana sotto il regno di S. M. il Re Leopoldo 11 (Florence 1790), the celebrated budget report for the period 1765-89 said to have been written by Gianni. Consult: Ricca-Salerno, Giuseppe, Storia delle dottrine finanziarie in Italia (2nd ed. Palermo 1896) p. 290-93

GIANNONE, PIETRO (1676-1748), Neapolitan jurist and historian. In 1723 Giannone, then an influential jurist at Naples, published the voluminous Dell' istoria civile del regno di Napoli (4 vols., Naples 1723; ed. by Achille Mauri, 2 vols., Milan 1853; tr. by James Ogilvie, 2 vols., London 1729-31) with which he had been occupied for twenty years. The word civile, as his introduction states, was meant to designate a new conception of history finding its content entirely in "political matters . . . laws and customs." Considering Giannone's training and temperament, it was natural that in the actual working out of his problem he should devote his attention not to a narrative of political events but to the evolution of the legal, administrative and constitutional structure of Naples. As a record of the life of the nation Dell' istoria civile inevitably shows the limitations of the juristic point of view, but by introducing into the province of the

national historian a mass of material hitherto neglected it marked an innovation in historiography. In spite of Giannone's more or less extensive plagiarisms in particular passages the originality of his conception remains undiscredited. The laws and institutions of Naples had emerged during the kingdom's long struggles to free itself from the hegemony of the church, which claimed feudal suzerainty over it; and the problem of the relations between church and state—in Giannone's day still the gravest concern of the Neapolitan government-was uppermost in his mind. Upon the framework of the historical manifestations of this problem Giannone pinned his history. The spirit pervading Dell' istoria civile was plainly anticurialistic. Reducing the basis of ecclesiastical temporal power from divine right to merely "human titles" he vigorously championed the principle that the church should be subordinate in all except purely spiritual matters to the civil and lay elements in the state. Thus he heralded and helped prepare such great movements in defense of the rights of the state as Febronianism in Germany, Josephism in Austria, Leopoldism in Tuscany and the ecclesiastical legislation of Charles III's minister, Bernardo Tanucci, in Naples. In response to Dell' istoria civile the Neapolitan church excommunicated Giannone and forced him into exile. Finding refuge at the Viennese court of Charles VI, he remained in Austria until 1734, when he was lured back to Italy by the hope that the Bourbon Charles III, recently ascended to the Neapolitan throne, would protect him. His hopes proved vain; after many wanderings he was treacherously arrested by the king of Sardinia and kept a prisoner in the fortress of Turin for the remaining twelve years of his life. Shortly before his imprisonment he had completed the Il triregno (1736; first published 3 vols., Rome 1895), a doctrinal formulation of his religious views, which in the years since the publication of Dell' istoria civile had progressed from anticurialism to radical anticlericalism.

GUIDO DE RUGGIERO

Consult: Vita scritta da lui medesimo, ed. by Fausto Nicolini (Naples 1905); Mauguin, G., Etude sur l'évolution intellectuelle de l'Italie de 1657 à 1750 environ (Paris 1909) p. 131-32, 176-81; Croce, Benedetto, Storia del regno di Napoli, Scritti di Storia Letteraria e Politica, vol. xix (Bari 1925); Ruggiero, Guido de, Il pensiero politico meridionale nei secolo xVIII e XIX (Bari 1922) p. 28-41; Fueter, Eduard, Geschichte der neueren Historiographie, Handbuch der mittelalterlichen und neueren Geschichte, vol. i (2nd ed. Munich 1925) p. 276-78.

GIANNOTTI, DONATO (1492–1573), Italian political theorist. Giannotti was active in the republican government of Florence which was established after the political changes of 1527, when the city revolted against the domination of the Medici. He was chosen secretary of the Dieci di libertà e pace, the supreme council, and maintained to a certain extent the tradition that the Florentine secretaries were political theorists as well. After the fall of the republic he went into exile, living many years in Venice.

In 1527 he wrote Discorso sopra il fermare il governo di Firenze, which he dedicated to the gonfalonier of justice, the chief magistrate of Florence. In it he named the principal aspirations of various groups in society; the mass desires liberty, a smaller group aspires to honor, while absolute power is the ambition of certain individuals. From this he concluded that it was necessary for the Florentine Republic to have three organs of government to satisfy these aspirations: a grand council recruited from the masses for the first; a senate chosen from the aristocracy for the second; and for the third a gonfalonier appointed for life. He thus showed himself an advocate of a mixed constitution, in which were to be fused the principles of democracy, aristocracy and monarchy, a fusion which the Greek political philosophers had ardently desired and which Renaissance thought had taken up and adapted to the conditions of the reestablished contemporary city states. Giannotti developed this same theme on a larger scale in a more comprehensive work written during exile, Della repubblica fiorentina, in which, using Machiavelli's *Discorsi* as a model, he intermingled theoretical observations with historical examples and criticism of existing governments. He reaffirmed the need of mixed government on the grounds that since there are different social classes and since therefore the desires of the classes forming the body politic are different "it is necessary to bear in mind these desires so that each part may be satisfied," because it is only thus that a stable social order can be established. On this basis he gave his judgment of the Florentine republican experiment of 1527 and disclosed the weaknesses which in his opinion had caused its fall. It is interesting to note that like Machiavelli he was an advocate of a citizen militia, recruited by districts, which would elect its leaders from among its members and in which he had much greater faith than in the mercenary forces. Another work of Giannotti, Della repubblica de Veneziani

(1540), written in dialogue form, in which he held that the aristocratic government of the Venetian Republic was the embodiment of the "mixed" regime, is more an exposition than a critical study. Giannotti was also the author of several literary works.

GUIDO DE RUGGIERO

Chief works: Opere politiche e letterarie, ed. by F. L. Polidori, 2 vols. (Florence 1850), which contains the works mentioned in the text.

Consult: Sanesi, G., La vita e le opere di Donato Giannotti (Pistoia 1899); Ridolfi, Roberto, "Nuovi contributi alla biografia di Donato Giannotti" in Rivista storica degli archivi Toscani, vol. i (1929, 213-47.

GIBBINS, HENRY DE BELTGENS (1865-1907), English economic historian. Gibbins was born at Port Elizabeth, Cape Colony, and educated at Bradford Grammar School and Wadham College, Oxford. While still an undergraduate he became interested in social and economic questions, and at the age of twenty-five he published his best known work, The Industrial History of England (London 1890). He was ordained deacon in the Church of England in 1891 but adopted the profession of schoolmaster, serving as vice principal of Liverpool College between 1895 and 1899 and subsequently as headmaster of King Charles 1 School, Kidderminster. Gibbins' later works, The History of Commerce in Europe (London 1891), English Social Reformers (London 1892, 2nd ed. 1902), British Commerce and Colonies (London 1893, 3rd ed. 1800) and The English People in the Nineteenth Century (London 1898) added little to his reputation. His Industry in England (London 1896, 7th ed. 1912) was substantially an expansion of the Industrial History.

None of Gibbins' work can be said in any strict sense to have been based on research; he was essentially a popularizer in the best meaning of the term. Written at a time when little attention had been paid to the subject, his Industrial History passed through twenty-seven editions within thirty years. It was widely used in the schools, but it appealed especially to the working men's classes which were then springing up, and in which industrial history was probably the subject most generally studied. Of the two different interpretations which had been recently propounded by William Cunningham and J. Thorold Rogers, Gibbins adhered to that of Rogers, with whom he had come into personal contact and from whom he had received much encouragement. While Rogers' teaching can be

traced throughout the Industrial History, it becomes particularly evident in Gibbins' accounts of the decay of the guilds and of the relation between the Black Death and the Peasants' Revolt and in his presentation of the golden age which had been destroyed by the greed of landlords or the unscrupulousness of industrialists. He asserts that the change from domestic to factory production was "sudden and violent" and draws a highly colored picture of the evil caused by the industrial revolution. On the whole Gibbins did not change his grounds in the successive editions of the book, although he did attempt to rebut the charge that he wrote with animus against landlords. The current edition (28th ed. London 1926) has been pretty thoroughly revised by J. F. Rees, who offers a quite different interpretation of some periods, particularly of the fourteenth and sixteenth centuries.

J. F. REES

GIBBON, EDWARD (1737-94), English historian. Gibbon's intellectual development may be summed up in four principal phases or turning points, each of which materially influenced the conception, plan and execution of his life work, the History of the Decline and Fall of the Roman Empire (6 vols., London 1776-88; new ed. by J. B. Bury, 7 vols., 1909-14). These turning points are: his precocious acquisition at about the age of fifteen of a great store of historical information which although unsystematic and unsupported by other studies furnished the inspiration of his subsequent career; his conversion to Roman Catholicism while a student at Oxford in June, 1753, and his reconversion to Protestantism at Lausanne, Christmas, 1754-a premature intellectual crisis that inflicted a permanent lesion on his mind, destroyed his interest in dogmatic religion, drove him for moral support to deism and infused all his later utterances on the Christian religion and the Christian church with a chronic bitterness; his sojourn from 1753 to 1758 at Lausanne, where under the care of a Swiss pastor, M. Pavillard, he laid the basis of a sound Latinity and thereby provided himself with a key to unlock the history of Rome and a passport to serious historical research; his visit to Rome in October, 1764, during which came the moment of illumination in the light of which he discerned the true scope and drift of his studies and formulated the plan of his magnum opus.

Historiographically Gibbon belongs to the

eighteenth century rationalist school of historians that arose with Bolingbroke, Voltaire and David Hume. The aim of this school was to liberate history from the incubus of supernatural interpretations and to supersede the old chronicle method of writing by a reasoned philosophical narrative based upon a critical examination of the authorities and the cultural value of the evidence. Utility was the objective, scholarship merely the means to the end. But although Gibbon was undoubtedly affiliated with this movement in his contempt for the compilateur grossier who did not write en philosophe, he held no brief for its leading doctrine that history is "philosophy teaching by examples." His scholarly instincts and training led him to a better understanding of the historian's function and technique. Laying great stress on accuracy, design, justness of perception and, above all, the correct appreciation of the causal connection between events he links himself with the rigorous historians of modern times.

The motif of the Decline and Fall is decay. In Gibbon's eyes European history from the age of the Antonines to the downfall of the empire in the west is a record of immense and steady retrogression. His analysis of the causes of the phenomenon is inadequate, his account being mainly descriptive and panoramic; but he is inclined to attribute the disaster, partially at least, to the triumph of Christianity and describes the rise and progress of the church with a thinly veiled hostility. At the same time he is fairly cognizant of other operative causes-military, social, economic-and in the last resort suggests that possibly the principle of decay was inherent in the organism from the start. Probably the weakest part of the work is that which deals with Byzantine history from Leo the Isaurian to Basil II, a period falsely represented by Gibbon as one of uniform corruption and decline. It should also be noted that many of the authorities on whom he relied have now been discarded as untrustworthy. But as a narrative history of the greatest event in the world the Decline and Fall of the Roman Empire is, and probably will remain, unsurpassed.

J. B. Black

Consult: The Memoirs of the Life of Edward Gibbon, by G. B. N. Hill (London 1900); Morison, J. C., Gibbon (London 1878); Black, J. B., The Art of History (London 1926) p. 143-83; Ritter, Moriz, Die Entwicklung der Geschichtswissenschaft an den führenden Werken betrachtet (Munich 1919) p. 296-309 Sainte-Beuve, C. A., Causeries du lundi, 15 vols. (3rd ed. Paris 1857-72) vol. viii, p. 431-72.

GIBSON, JOHN BANNISTER (1780-1853), American judge. A justice from 1816 to his death and for twenty-five years of that period chief justice of the Supreme Court of Pennsylvania, Gibson performed an important task, to quote his own words, "in building up a new system, in part on the model of an old one." He combined a deep seated respect for the essential features of the common law of England and of English equity, as developed by the great English chancellors Hardwicke and Eldon, with a sense of the needs of a pioneer society and the advancing claims of democratic theory. Although his influence upon American law was exercised through his judicial work exclusively, he is entitled to rank as a leader in the American reception of the common law and equity system of England. Yet he escaped something of the blind reverence of Story and Kent for special doctrines of the English chancery based on the peculiar structure of eighteenth century society. The difficult problem of enforcing equitable principles through legal forms without the full equipment of equitable remedies, which was for more than a hundred years a peculiar feature of Pennsylvania jurisprudence, may have caused some aberrations in Gibson's judicial thinking upon the nature of equity and equitable relief. But upon such a crucial issue as the relations of the forms of remedies to substantive rights Gibson recognized that "the drapery of the action" was not a matter of prime importance and that in many respects the writs and pleadings of the common law were "worn out machinery." In the field of constitutional law he is remembered by the reasoning of a dissenting opinion in which he held the judiciary to be without power to declare void an act of the legislature, because of conflict with the state constitution—a position later abandoned with characteristic honesty and practical common sense. Perhaps some of his phrases have caused later judges to stray; for instance, his characterization of a negotiable instrument as "a courier without luggage." But his benevolent personality and amiable temper, combined with an unusual gift for clear, vigorous and epigrammatic expression, served with his learning and broad culture to make him the most conspicuous of the chief justices of his commonwealth. He merited the praise that he founded there "a liberal, progressive jurisprudence."

ORRIN K. McMurray

Consult: Roberts, T. P., Memoirs of John Bannister Gibson (Pittsburgh 1890); Porter, W. A., An Essay on the Life, Character and Writings of Johr B. Gibson (Philadelphia 1855); Matlock, S. D., "John Bannister Gibson" in Great American Lawyers, ed. by W. D. Lewis, 8 vols. (Philadelphia 1907-09) vol. iii, p. 351-404; Appel, J. W., "Gibson and Progressive Jurisprudence" in Pennsylvania Bar Association, Reports, vol. xv (1909) 356-70; Wister, Owen, "The Supreme Court of Pennsylvania" in Green Bag, vol. iii (1891) 72-87.

GIDDINGS, FRANKLIN HENRY (1855-1931), American sociologist. Through the influence of his teaching of sociology and the history of civilization at Columbia University, Giddings was one of the founders of sociology in the United States. Many of his works are polemical essays written in the journalistic tradition which he acquired as editorial writer on the Springfield Republican and the Springfield Union before entering upon his teaching career. These writings reflect Giddings' social philosophy better than do his more academic works, in which he formulated a system of sociology composed of detailed logical categories. He was an insistent proponent of a rigidly scientific sociology, statistical in method and bordering on psychology and history in content; he was inclined to base his own judgments, however, on immediate impressionistic reflections.

The keystone of Giddings' sociological system was his doctrine of "consciousness of kind," which he derived from Adam Smith's theory of moral sentiments and from Herbert Spencer's doctrine of evolution and which he reformulated in his later works as the doctrine of "pluralistic behavior." The essence of the doctrine is that individuals, by responding to common stimulation, by communicating and associating, by acting upon one another through suggestion, example and imitation, generate similar feelings and develop likemindedness. From an awareness of these likenesses and of contrasting behavior consciousness of kind or type arises which converts gregariousness into discriminative association and herd habit into norms and elements of custom through which society by using social pressure maintains social cohesion and perpetuates the adequate.

Giddings' idealization of the social stability arising from likemindedness led him to oppose mass immigration, to regard large cities with their heterogeneity of population with distrust and to condemn radicalism as disruptive. He was an active opponent of socialism, regarding as its cardinal fallacy its principle that industrial derangements and their consequent tragedies can be prevented by planning under a socialist

state. Although he vaguely urged "social engineering" he held with the social Darwinians that in social as in natural selection the struggle for existence leads to the survival of the fittest and that the process is inexorable and beneficent. He defended what he designated a creed of socialized individualism, advocating that the successful, who were to him synonymous with the superior, should refrain from abusing their power to exploit the unsuccessful.

During and subsequent to the Spanish American War Giddings advocated an American imperialistic policy patterned after that of imperial Britain, which he conceived of as an ideal democratic empire. His intense chauvinism during the World War was expressed in part by an attack upon German political philosophy.

BERNHARD J. STERN

Important works: The Principles of Sociology (New York 1896, 31d ed. 1896); Democracy and Empire (New York 1900); Studies in the Theory of Human Society (New York 1922); The Scientific Study of Human Society (Chapel Hill, N. C. 1924). For a complete bibliography see A Bibliography of the Faculty of Political Science of Columbia University, 1880–1930 (New York 1931).

Consult: Gillin, J. L., "Franklin Henry Giddings" in American Masters of Social Science, ed. by H. W. Odum (New York 1927) ch. vii; Lichtenberger, J. P., "Franklin Henry Giddings, an Appreciation" in Journal of Applied Sociology, vol. ix (1925) 326–32; Northcott, C. H., "The Sociological Theories of Franklin II. Giddings" in American Journal of Sociology, vol. vxiv (1918–19) 1-23; Abel, Theodore, "The Significance of the Concept of Consciousness of Kind" in Social Forces, vol. ix (1930) 1–10; Ward, E., "Principles of Sociology" in American Academy of Political and Social Science, Amals, vol. viii (1896) 1–31; Tenney, Alvan A., in Columbia University Quarterly, vol. xxiii (1931) 319–24.

GIERKE, O'TTO VON (1844-1921), German jurist. Gierke was one of the great exponents of the Germanistic point of view in the interpretation of German legal history—a point of view which as a pupil of Georg Beseler he embraced with passionate enthusiasm. He worked with tireless energy through most of his life upon two monumental works, Das deutsche Genossenschaftsrecht (4 vols., Berlin 1868, 1873, 1881 and 1913; vol. iv unfinished) and Deutsches Privatrecht (3 vols., Leipsic 1895, 1905 and Munich 1917; published as part of Binding's Systematisches Handbuch der deutschen Rechtswissenschaft). To these must be added his famous monograph, Johannes Althusius und die Entwicklung der naturrechtlichen Staatstheorien (Breslau 1880, 4th ed. 1929), in which he undertook to outline

Althusius' ideas within the whole context of European political theory. In Das deutsche Genossenschaftsrecht Gierke is more purely the scholar and theorist than in Deutsches Privatrecht, which partly grew out of his participation in controversies over the adoption of the German civil code, the first draft of which appeared in 1888. Gierke attacked the draft, which seemed to him unimaginative, because it gave little or no attention to codifying the developing Germanic elements of contemporary German law. Although he was not wholly successful he without doubt succeeded in strengthening certain fundamental Germanic trends.

Gierke's concept of Genossenschaft (cooperative association) influenced all his work. He did not give it a rigid definition but traced its evolution in contrast with its antithesis, Herrschaft. Genossenschaft is found where several human beings realize the ends of the group through some form of cooperation of their several wills, while Herrschaft is found where group ends are realized through subordination of the wills of the group members under one or several commanding wills. Gierke attributed to the Germanic peoples a particular aptitude for Genossenschaft and the freedom which it helps to maintain.

Apart from its theoretical implications the greatness of Gierke's work lies in the firmness with which it is rooted in the past of German legal history. In his undertaking to analyze the legal forms of association and cooperation among the Germanic peoples he profoundly influenced branches of law which are of particular importance at present, such as the law of joint stock companies, the law of cooperative associations and industrial law. Whoever wishes to do either theoretical or practical work in these fields must go back to Gierke. Upon public law his influence has been indirect but equally great, for his pupil, Hugo Preuss, was the drafter of the German constitution of 1919. With Gneist and Laband, Gierke is one of the important founders of contemporary German constitutional law. In general he has greatly stimulated the sociological approach to law.

CARL JOACHIM FRIEDRICH

Consult: Stutz, Ulrich, "Zur Erinnerung an Otto von Gierke" in Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung, vol. xliii (1922) vii-lxiii, to which is appended a complete bibliography of Gierke's works; Schultze, Alfred, "Otto von Gierke als Dogmatiker des burgerlichen Rechts" in Jhering's Jahrbücher für die Dogmatik des burgerlichen Rechts, vol. lxxiii (1923) i-xlvi; Gurwitsch, Georg, "Otto von Gierke als Rechtsphilosoph" in Logos,

vol. xi (1922-23) 86-132; Planitz, Hans, "Otto von Gierke" in Deutsches biographisches Jahrbuch, vol. iii (Berlin 1927) p. 110-18; Coker, F. W., Organismic Theories of the State (New York 1910) p. 76-80; Emerson, Rupert, State and Sovereignty in Modern Germany (New Haven 1928) ch. iv.

GIESELER, JOHANN KARL LUDWIG (1792-1854), German Protestant church historian. Gieseler was the son of a Westphalian pastor and studied theology at Halle. He taught at the universities of Bonn and Göttingen. Besides his wide scientific study, which covered the entire field of ecclesiastical and dogmatic history, he interested himself in practical social questions. He superintended the orphan asylum in Göttingen and founded a society to aid exconvicts. In his numerous writings and particularly his chief work, Lehrbuch der Kirchengeschichte, he takes especial interest in the influence of the church upon the organization of society in the course of its development. As an important part of internal church history he treats the history of the internal constitution of society with special reference to the influence of Christianity upon the ethical conceptions of the people. Just before his death he was occupied with the question as to how far the church had transformed the social relationships existing in the Roman Empire. His realistic attitude is also seen in his avoidance of ideological constructions of history and his eagerness to let the sources speak for themselves. In his theological work he united critical discernment of the deficiencies of the records with a fine appreciation of the abiding worth of a living Christianity.

KARL VOLKER

Important works: Lehrbuch der Kirchengeschichte, 6 vols. (Bonn 1824-57; pts. i-v, 4th ed. 1844-48, pt. v, 2nd ed. 1849), tr. by S. Davidson, J. W. Hull and H. B. Smith, 5 vols. (New York 1857-80).

Consult: Redepenning, E. R., "Gieselers Leben und Wirken" in Lehrbuch der Kirchengeschichte, vol. v, p. xliii-xlvi, English translation in vol. i, p. v-xiv; Baur, F. C., Die Epochen der kirchlichen Geschichtsschreibung (Tübingen 1852) p. 232-36.

GIESSWEIN, SÁNDOR (1856–1923), Hungarian sociologist, pacifist statesman and Catholic prelate. Giesswein began his career by the study of Assyriology and comparative philology but later turned his attention to the philosophy of history and sociology. As a forerunner of Paul Barth he believed that history contemplates the flux of things, sociology the achievement; and that just as the philosophy of history is the metaphysics of history, so social philosophy is the

metaphysics of sociology. In Giesswein's sociological system the milieu and moral and social ideas form the elements whose synthesis, the cultural idea, is decisive for the development of human society. He held that individuals and society condition each other and found the reconciliation of socialistic and individualistic aims in the basic teachings of Christianity. His sociopolitical writings were the theoretical bases for his practical activity in parliament, to which he was elected in 1904, and in the foundation of the Christian Social party. Giesswein succeeded in founding ninety-eight Christian Social trade unions in Hungary, but because of their alignment with the clerical party of large landowners received no support from them for his program of agrarian and radical social reform. He later reorganized the Christian Social party, which abandoned him when he refused to cooperate with the counter-revolutionary reaction. With a few adherents Giesswein fought unswervingly for the democratic liberal tradition during the years of terror in Hungary. Even during the World War he was active in behalf of international pacifism. As member of the Central Committee for an Enduring Peace he made a report in 1915 in Berne on the idea of association in international law. In the militaristic atmosphere of post-war times Giesswein was the only scholar and politician in Hungary who entered the lists with courageous sincerity for international union and the supranational education of youth. He also took active interest in the Esperanto movement and in the struggles for the legal equality of woman and against alcoholism.

Rusztem Vámbéry

Important works: Die Hauptprobleme der vergleichenden Sprachwissenschaft (Freiburg i.Br. 1892); Deterministische und metaphysische Geschichtsauffassung, 2 vols. (Vienna 1906-07); Keresztényszociális törekvések a társadalmi és gazdasági életben (Christian Social endeavors in social and economic life) (Budapest 1913); A szociális kérdés és a keresztényszocializmus (The social question and Christian Socialism) (Budapest 1914); A háború és a társadalomtudomány ('The war and sociology) (Budapest 1915); Soziologische und geschichtsphilosophische Bemerkungen zur Organisation der zwischenstaatlichen Beziehungen (The Hague 1916); Gerechtigkeit und Friede (Pressburg 1918); Háború és béke között (Between war and peace) (Budapest 1921). Consult: Giesswein emlékhönyv (Giesswein memorial) (Budapest 1925).

GIFFEN, SIR ROBERT (1837–1910), English statistician and writer on finance. Giffen worked for several years in a solicitor's office in Glasgow, where he also attended classes at the university.

After moving to London in 1862 he became connected with the Globe and the Fortnightly Review, and from 1868 to 1876 served as assistant editor of the Economist under Walter Bagehot. In 1876 he entered the service of the Board of Trade and remained with it until his retirement in 1897. He was chief of the Statistical Department and later the first head of the Labour Department. Through his work at the Board of Trade he was responsible for considerable improvements in official economic statistics; he also directed the first national census of wages in 1886 and played an important part in the reform of bankruptcy legislation in 1882. He was one of the founders of the Statist in 1878 and editor of the Journal of the Royal Statistical Society from 1876 to 1891.

Giffen's numerous statistical studies are models of clear exposition and of legitimate statistical inference. He paid little attention to the mathematical analysis of statistical data and was acutely aware of the limitations commonly inherent in quantitative material. In his studies of wealth and taxation he dealt particularly with Irish taxation, which he considered disproportionate to the wealth of the country. In his address on The Progress of the Working Classes in the Last Half Century (London 1884) he made the earliest competent attempt to measure the industrial progress in the United Kingdom in the nineteenth century. His Growth of Capital (London 1889) is one of the early estimates of national wealth which is still consulted. Giffen's contributions were not confined to statistics. His advice was frequently sought by various governmental bodies and some of his most valuable work is to be found in the printed memoranda and evidence submitted to royal commissions and committees. In these his wide acquaintance with financial subjects and his unusual power of accurate generalization from voluminous and complex evidence appear to the greatest advantage. Of his views on broader economic questions it is sufficient to observe that he was a free trader and that he was strongly opposed to bimetallism.

W. A. BASHAM

Important works: American Railways as an Investment (London 1872, 3rd ed. 1873); Stock Exchange Securities (London 1877); Essays in Finance, First Series (London 1880, 5th ed. 1890); Essays in Finance, Second Series (London 1886, 3rd ed. 1890); The Case against Bi-metallism (London 1892, 2nd ed. 1892); Economic Enquiries and Studies, 2 vols. (London 1904); Statistics (London 1913).

Consult: Articles in Economic Journal, vol. xx (1910)

318-21, and Royal Statistical Society, Journal, vol. lxxiii (1910) 529-33.

GIFT TAX. See Inheritance Taxation.

GIFTS

PRIMITIVE. The voluntary offering of tangibles and intangibles designed to please or propitiate is a world wide practise. Gifts to children, to members of the family and friendship gifts, such as the friendship baskets given to one another by Pomo women, are usually expressions of affection. There are many ceremonial occasions on which gifts are given. Strangers, adopted persons, clans or tribes and newborn children are welcomed with gifts. At ceremonies of initiation into age societies and secret orders the gifts conferred sometimes go to the sponsor in return for relinquishing his place. Marriage gifts are given to the parents or clan of the bride and counter gifts presented by them. What is called marriage by purchase is often in fact gift and counter gift, for the women whose parents do not make satisfactory return gifts may be sent

Many types of service are rewarded by gifts, such as help of medicine men, acknowledgment of the offices of the opposite moiety in burial of the dead, as among the Kwakiutl, and services of the wife, as among the natives of the Trobriands. Propitiation gifts are offered at the commencement of a transaction, to be reciprocated in equivalence, as in the Solomon Islands, or in double value, as in the case of Kwakiutl transfer of a "copper." Gifts are often exchanged at the making of a treaty, as a pledge of good will; the original tokens, of wampum, became for the Iroquois and Algonquins the records of contract. Gifts to the dead often exceed the possessions of the dead persons when alive. Indians of southern California cast into the mortuary fire quantities of not always appropriate gifts. In many areas the ancestors may be thought to cling to the habitation, take part in the festivities and receive their share of the potlatch, as among the Kwakiutl. Offerings to supernatural beings have taken many forms: libations to the lares and penates among the Romans; burnt offerings among the Hebrews; prayer wands among the Pueblo Indians; human sacrifice among the Phoenicians and the Aztecs; mortification of the flesh, as in the torture of the Plains Indian's sun dance and the monastic haircloth shirt and scourge; and often conciliatory gifts given in the spirit of charity. Each offerer of these varied gifts expected greater counter gifts—life, health, happiness and spiritual power.

The practise of gift giving on seasonal holidays is widespread. It often takes the form of solicitation, as in the case of the asking festival of the Alaskan Eskimo and the gift begging ceremony of masked Russian children, which is similar to the Hallowe'en practises familiar in the United States. Holiday gift giving is especially prevalent in modern societies, where it is stimulated by commercial enterprise.

It is the law of the gift that it may not be summarily refused without giving offense, and a counter gift must be tendered in due season. The Maori of New Zealand class with theft failure to offer the return gift. Neglect to offer or refusal to take a gift is a declaration of war among Dyak tribes of Borneo. The Northwest Coast tribes acknowledge the potlatch to be "fighting with favors" in place of "war by deeds." Among the last named the wealth of a clan or moiety is gathered into the hands of a chief and transferred at a feast to the opposite moiety to "elevate the name." In due time this wealth is returned, during a potlatch of the latter, in double measure to be distributed among the members according to their original contribution. The transfer of blazoned mats in Samoa and the circulation of Vaygu'a in the Kula orbit in the Trobriands are comparable. The practise is not confined to the Pacific area and appears to have been the custom in ancient Ireland. Among the Kabyla of north Africa ceremonial gifts offered by invited guests at circumcisions and marriage festivities are announced by herald and recorded by scribe, to be returned with increase to the donor upon invitation to his fête. Gifts among the Plains Indians, for which no material return was expected, none the less lifted the giver in the esteem of his fellows, ultimately advancing him to the chieftainship. Striving for prestige and the feeling of the need of reciprocation are not absent in gift giving in modern societies.

The custom of gifts of welcome with their counter gifts developed into more or less organized journeys for the purpose of barter among the ancient Aztecs and more recently among British Guiana tribes. The modern use of shell money in the New Hebrides for the purchase of a pig has not replaced the obligation to reciprocate upon occasion with a pig. Nor is the opening or propitiation gift wholly obscured in the civilized practise of treating a customer. Acknowledgment for service passes into wage when the

honorarium assumes fixed value, whereas counter gifts call for enhancement, with the onus on the recipient to give more than he received.

Ceremonial gifts served both psychological and sociological ends, satisfying the ego through display and emulation, promoting fellowship and solidarity of the group, maintaining wealth in a state of flux, supporting religion and the primitive state, offering a substitute for war and cementing alliances.

H. NEWELL WARDLE

Law of GIFTS. A gift in the broad sense is any transaction with intention of gratuitously enriching another. Under this definition fall wills and legacies, but for convenience these have always been treated separately in the general category of "succession." The natural consequence ought to be that the subject of gifts covers only gratuitous enrichment *inter vivos*, but the Roman law and the common law contain the further class of gifts *mortis causa*. These are dispositions made in the form of a binding and irrevocable transaction *inter vivos*, i.e. delivery or formal promise, but containing conditions express or implicit which make them substantially equivalent to legacies.

Regarding the form required for a gift, it is useful to distinguish between executory and executed transactions or between a promise and a delivery of possession. The latter, when made of a movable object with the intention of transferring ownership, is valid in all systems of law; in the modern world a special document is required for the transfer of title to land. Although there is no difference in principle between the forms of making an executed gift and of transferring ownership for any other reason, all legal systems require more formality for a promise to make a gift than for one involving a quid pro quo. Subject to the Lex cincia, mentioned below, in classical Roman law a formal stipulatio was necessary to create an obligation; but one already existing might be gratuitously renounced in any manner, a distinction which has survived generally in Europe, although it does not obtain in the common law because of the influence of the doctrine of consideration (q.v.). In the Corpus juris Justinian allowed an action on any informal promise but provided that for an amount surpassing 500 solidi (about \$1500) the transaction should not be binding until "insinuation," a process similar to recording. For all gifts in modern Europe there is generally required a document signed before a notary. The Gifts 659

latter's presence is not necessary according to the latest code of Switzerland, and the French courts allow a gift if disguised as a document of sale. The common law follows much the same principles, demanding in lieu of delivery an instrument under seal or its modern equivalent. Difficulty has arisen, however, in connection with assets represented by such documents as stocks and bonds, savings bank books, insurance policies, warehouse receipts. There has been much controversy over the effect of gratuitous delivery of the document in these cases, and courts in England and America have taken varying positions. The Restatement of the Law of Contracts has recently declared for irrevocability if the document delivered is one the surrender of which to the debtor is necessary for enforcement of the claim. A growing tendency, evidenced by the Restatement, may be noted in favor of gifts where there is a "promissory estoppel," i.e. where the promisor ought to have foreseen that the promisee would change his position in reliance on the promised gift, as by traveling a long distance to visit the promisor, refraining from certain acts such as smoking for a certain time or the like. Furthermore, Anglo-American equity gives effect to any statement which can be construed as a declaration of trust.

Upon performance of the necessary formalities an unqualified gift inter vivos was irrevocable in classical Roman law, but Justinian instituted two exceptions: gross ingratitude of the donee or appearance of afterborn children of the donor. The content of the first exception is thoroughly if redundantly covered by the emperor, who provides that thereunder are comprised attempts on the donor's life, physical injury, atrocious insult or considerable diminution of his patrimony; the German civil code makes no attempt at definition in this respect in accord with the modern tendency to allow a reasonable margin of discretion in the application of legal rules. Except in France the donor alone, not his heirs, may revoke for ingratitude, whence a special exception has to be made in the event of his murder by the donce. The German and Swiss codes reject the exception of revocation in the case of afterborn children but allow revocation of enough to maintain the donor in his usual position if he unexpectedly and without fault becomes impoverished—an extension of the general rule of Roman law whereby the donor had when sued by the donee the beneficium competentiae, a privilege of somewhat the same import. In France the refusal of a donee to help an impoverished donor is treated under the head of ingratitude—as an ingratitude on the part of the donce.

The great exception to the rule of irrevocability has been the gift mortis causa, i.e. upon condition that the donor predecease the donee. Perhaps before and certainly under Justinian such a gift was presumed to be freely revocable on account of its resemblance to a legacy, a principle which prevails in those parts of Europe not influenced by the French code and has even found its way into the common law, although that requires the contemplation of some particular danger or disease. The rule is abrogated in France, for, with the above two exceptions, according to the ancient customary maxim donner et retenir ne vaut it is there essential that a gift be irrevocable for any but the two ordinary exceptions. The wholesale reception of the institution of gifts mortis causa into the common law is a curious phenomenon. The policy of the statute of frauds, which abolished nuncupative (oral) wills, obviously applied to these gifts, which were substantially equivalent to legacies, being freely revocable by the donor even though the power of revocation was not reserved; the only express condition was that the donor should predecease the donee. The English courts, however, recognized them as a separate institution on account of their appearance as such in the earlier works of Bracton and Swinburne. These writers had followed Justinian's law as to their revocability but had strangely overlooked his provision that they must be made before five witnesses. The fact that they are formally gifts but substantially legacies is reflected in the various rules governing them; thus they need not be proved before the probate court as a will must be, but any principle not relating to the form of a will or codicil which applies regardless of the testator's intent, such as the rules of testamentary capacity or those taxing inheritance, has necessarily been extended to them in almost all times and places. To avoid difficulties of proof by its tax commissioner the legislature of Wisconsin provided that any gift made within six years of death should be conclusively held to be in contemplation of death, but this attempt was held unconstitutional in Schlesinger v. Wisconsin [270 U. S. 230 (1926)].

Among restrictions upon gifts in Roman law were those dependent upon the fact that the donee was in a position unduly to influence the donor. A Roman statute of 204 B.C., the Lex cincia, was evoked by the undue remuneration

exacted from their clients by the rich and powerful lawyers of the day. It apparently prescribed a criminal penalty for such persons and took the opportunity to hinder all gifts above a specified sum to others than relatives by requiring absolute execution, i.e. in effect delivery as well as formal conveyance for immovables; in the case of movables an additional six months must elapse. Although this legislation was obsolete under Justinian, its principle is evident in his "insinuation." Another limitation was contained in the statutes for repetundae, which made it criminal for a public official to receive gifts from those subject to his power; such gifts were conclusively presumed to be extortionate. This sweeping presumption no longer exists anywhere; the specific intent to induce the unethical conduct must always be proved. The most important prohibition of Roman law was that by which any gift between husband and wife was absolutely void. Its effect was considerably modified by Caracalla's provision that the transaction might convalesce on the donor's death, the purpose being to assimilate the case to the Lex cincia, according to which only the donor and not his heirs could avoid the gift, a principle which it will be remembered also applied to revocation for ingratitude. As may be seen from this tendency to desuetude, the policy behind the prohibition is not very clear and its genesis is probably to be explained historically. The ancient Roman marriage resembled that of the common law in that the wife had no personality or property of her own; hence gifts were out of the question. With the growth of the empire ordinary marriages were recognized, terminable at the will of either party and involving no change in the wife's status or property. It may have seemed unfair that the feminine parties to these reluctantly recognized unions should be in a so much more advantageous position to derive pecuniary benefit from the transaction. But since the wife's property was separate during the marriage, it is difficult to ascribe any importance in this connection to the freedom of divorce. No restrictions whatever on spouses in the matter of gifts now exist in Austria, Germany or Switzerland.

It may be concluded that the great disfavor originally shown to gifts has been gradually disappearing, and for this there is probably both a practical and a theoretical reason. Practically it is almost impossible to prevent gifts; if the donor does not wish to revoke, there is nobody else entitled to claim. It is of course possible to

make the act of giving criminal under certain circumstances; antitipping legislation may be mentioned by way of example. But experience has proved such laws unsatisfactory; enacted originally in quite a number of American states, they have been by now repealed in all of them. As for allowing revocation, such a course seriously impairs the security of transactions and tends to put the donee at the mercy of the donor. From the theoretical point of view there is little justification for the practise of nullifying gifts not induced by fraud or duress, apart from the institution of prodigality. Where such conduct is a ground for the appointment of a guardian, this would be a sufficient remedy except where the gift had been of all the donor's property, a transaction which when performed by a sane person is almost necessarily intended to be either a testament or declaration of trust in favor of the donee. At common law the appointment of guardians for spendthrifts was rejected as contrary to the genius of a free people; with perfect consequence that system has never had any special rules prohibiting gifts or allowing their revocation; only in the case of the donor's murder by the donce has it felt the need of a particular exception such as exists in European countries.

JAMES BRADLEY THAYER

Sec: Property; Alienation of Property; Inheritance; Wills; Sale; Marital Property; Charitable Trusts; Mortmain; Entail.

Consult: For Primitive Gifts: Wardle, H. N., "Indian Gifts in Relation to Primitive Law" in International Congress of Americanists, 23rd, Proceedings (New York 1930) p. 463-69; Mauss, Marcel, "Essai sur le don: forme et raison de l'échange dans les sociétés archaïques" in Année sociologique, n.s., vol. i (1923-24) 30-186; Malinowski, Bronislaw, Argonauts of the Western Pacific, London School of Economics and Political Science, Studies in Economics and Political Science, no. lxv (London 1922); Firth, Raymond, Primitive Economics of the New Zealand Maori (London 1929); Boas, Franz, "The Social Organization and the Secret Societies of the Kwakiutl Indians" in United States, National Museum, Annual Report, 1895 (1897) p. 311-738.

FOR LAW OF GIFTS: Buckland, W. W., A Text Book of Roman Law from Augustus to Justinian (Cambridge, Eng. 1921) p. 253-58; Girard, P. F., Manuel élémentaire de droit romain (8th ed. Paris 1929) p. 992-1006; Ascoli, A., Trattato delle donazioni (Florence 1898); Brissaud, Jean, Manuel d'histoire du droit français (Paris 1904), tr. by R. Howell as A History of French Private Law, Continental Legal History series, vol. iii (Boston 1912) p. 703-15; Baudry-Lacantinerie, Gabriel, and others, Traité théorique et pratique de droit civil, 29 vols. (Paris 1905-09) vols. x-xi; Schröder, R., Lehrbuch der deutschen Rechtsgeschichte (6th ed. Berlin 1922) p. 311-12, 325-27; Planck, J. W. von, Kom-

mentar zum bürgerlichen Gesetzbuch, 5 vols. (4th ed. by E. Strohal and others, Berlin 1913-30) vol. in, pt. ii, p. 772-800; Thornton, W. W., A Treatise on the Law Relating to Gifts and Advancements (Philadelphia 1893); Rundell, O. S., "Gifts of Choses in Action" in Yale Law Journal, vol. xxvii (1917-18) 643-55; Mechem, Philip, "The Requirement of Delivery in Gifts of Chattels and of Choses in Action" in Illinois Law Review, vol. xxi (1926-27) 341-74, 457-87, 568-609; Bruton, P. W., "The Requirement of Delivery as Applied to Gifts of Choses in Action" in Yale Law Journal, vol. xxxix (1929-30) 837-60; Williston, S., "Gifts of Rights under Contracts in Writing of Delivery of the Writing" in Yale Law Journal, vol. xl (1930-31) 1-16.

GILBART, JAMES WILLIAM (1794-1863), English banker. In 1834 Gilbart became general manager of the London and Westminster Bank, the first joint stock bank established after the passage of the Bank Charter Act of 1833. Vested banking interests, including the Bank of England, threatened the success of the new bank with injunctions, lawsuits and adverse bills in Parliament, but Gilbart overcame all opposition. He was instrumental in enlarging the legal powers of joint stock banks and played an important role in the development of a form of banking organization which now completely dominates the field.

Gilbart also took an active part in the banking and currency controversies of his time. Although his name has been overshadowed by those of Tooke, Newmarch and Fullarton, on whose side of the battle he stood, his contribution is more imposing than may appear at first sight. To the arguments in favor of continuing the right of note issue by country banks he added the principle of periodic fluctuation. "The laws which regulate the issues of country banks," he said before the Select Committee on Banks of Issue in 1841, "are derived from the state of trade in the respective districts in which those banks are established, and I think those laws must be uniform in their operation because there are uniform fluctuations in each year." The circulation of the Bank of England was governed by the dividend payments on government securities, by the short term borrowing of the government and by the movements of bullion; these factors also tended to be periodic in their movements. Gilbart thought it undesirable to unify note issues subject to such different influences. A second and most important suggestion made by him was that the Bank of England should control exchange rates by holding "foreign securities" and "foreign credits": the Bank, he thought, could always

manage the situation if it took care not to expand circulation automatically as gold flowed in and kept foreign paper in its portfolio.

T. E. Gregory

Important works: Gilbart's writings on banking and currency are collected in Works, 6 vols. (London 1865–66).

Consult: 'The biographical memori in the Works: Select Statutes, Documents and Reports Relating to British Banking, 1832-1328, with an introduction by T. E. Gregory, 2 vols. (London 1929) vol. 1, p. ix-ls, 70-117.

GILBERT, THOMAS (1720-98), English politician and poor law reformer. Gilbert was a member of Parliament from 1763 to 1795. By suggesting the employment of the famous engineer Brindley and by other means he helped to promote the development of canals; he was also the author of acts for reforming houses of correction and for helping friendly societies, but his importance lay in poor law reform. Gilbert put his finger on the main abuses of the system of his time: first, the small size of the unit of administration, the parish; second, the institution of the mixed workhouse, in which the sick and the idle, the sane and the mad, were herded together; third, the fact that the overseers were unpaid. In his bill of 1765, which failed in the Lords after passing the Commons, and in the measure of 1782 which bore his name Gilbert proposed that parishes should be allowed to join in unions and that these should be allowed to build workhouses for the care of the aged, the sick and the infirm. Sixty-seven such unions were established under the act, comprising 924 parishes. The able bodied poor excluded from the workhouses were to be given employment by paid officers created by the act. This well conceived reform demanded careful and intelligent administration. This was lacking in the years of distress which followed the Napoleonic wars, when the provision of outdoor relief became the basis of the economic life of the villages and the underpaid laborer received assistance from the poor rates according to the size of his family This system of allowances was abolished by the drastic reform of 1834.

JOHN LAWRENCE HAMMOND

Consult: Webb, Sidney and Beatrice, "English Poor Law History," English Local Government, 9 vols. (London 1906 29) vols. vii-ix.

GILBRETH, FRANK BUNKER (1868-1924), American management engineer. After leaving high school Gilbreth entered the employ of a

contractor and builder, became foreman and then superintendent and in 1895 established himself in the same business. Stimulated by the management technique of Frederick W. Taylor, he experimentally applied its principles to bricklaying and increased output among his workers from 1000 to 2700 bricks a day. In 1912 he began practise as a consultant in manage ment. His inventive imagination and mechanical aptitude were manifest in numerous devices and systems for the building arts and in the application of micromotion methods to the study of industrial operations. His outstanding contributions to the technique of scientific management, made jointly with his wife, Lillian Moller Gilbreth, were emphasis on motions in standardizing operations; utilization of the cinematograph and cyclegraph in recording them for subsequent delayed motion analysis and elimination of unnecessary motions; classification of motions into basic types, for which he coined the word "therbligs"; a new insistence on the danger of fatigue; the development of simultaneous motion cycle charts; and the devising of instruction process graphs intelligible to illiterate workmen. Devices such as these and expressions such as "the one best way" also helped to dramatize scientific management and made Gilbreth one of its most forceful popularizers.

H. S. Person

Important works: Bricklaying System (New York 1909); Primer of Scientific Management (New York 1912, 2nd ed. 1914); Motion Study, a Method for Increasing the Efficiency of the Workman (New York 1911); Fatigue Study (New York 1916, 2nd ed. 1919), Applied Motion Study (New York 1917), and Motion Study for the Handicapped (New York 1920), written in collaboration with Mrs. L. M. Gilbreth.

Consult: Gilbreth, Lillian Moller, The Quest of the One Best Way. A Sketch of the Life of Frank Bunker Gilbreth (Chicago 1925); Drury, Horace Bookwalter, Scientific Management (3rd ed. New York 1922) p. 138-44; Witte, I. M., Taylor, Gilbreth, Ford. Gegenwartsfragen der amerikanischen und europäischen Arbeitswissenschaft (Munich 1924) p. 31-41.

GILMAN, DANIEL COIT (1831-1908), American educational administrator. Gilman, with Eliot of Harvard and White of Cornell, was the chief maker of the modern American university, which he conceived as properly devoted to advanced research, unpartisan and non-sectarian, and essentially postgraduate. After serving as librarian at Yale, as secretary and money raiser for the Sheffield Scientific School and as president of the newly organized University of California, he became first president of the Johns

Hopkins University in Baltimore. Here he introduced what was for America an innovation: the undergraduate school became but an appendage to the graduate and professional schools. Endowed universities have tended to follow this scheme, but state institutions have not. Gilman also organized the often copied Johns Hopkins Hospital, staffed by the faculty of the medical school which he developed at Johns Hopkins. By his insistence upon a college degree and scientific study as prerequisites for entrance and by strongly supporting research he raised the level of medical training.

Gilman was also a leader in general social uplift movements. He formed and for ten years was president of the Charity Organization Society of Baltimore, an early and successful example of systematic philanthropy. A plan drawn up by him became the basis of the program of the Russell Sage Foundation. He helped persuade Andrew Carnegie not to found a new university but to use his moncy in other directions, and served from 1901 to 1903 as first president of the Carnegie Institution.

Gilman had no interest in pedagogical theories, conceiving of a university as chiefly a research institute where eminent scholars shared their enthusiasms with younger men. Methodology did not interest him either in education or social work. He was concerned with immediate problems rather than with fundamental criticism of institutions.

BERNARD IDDINGS BELL

Consult: Franklin, Fabian, Life of Daniel Coit Gilman (New York 1910).

GINER DE LOS RÍOS, FRANCISCO (1839–1915), Spanish philosopher and educator. Giner studied law at the universities of Barcelona and Granada. From 1866 until his death he was professor of jurisprudence at the University of Madrid except for two brief periods during which he severed his connection with the university as a protest against religious and political tests for teachers.

Giner was a disciple of Sanz del Río, who introduced the philosophy of Krause into Spain, and he applied the latter's theories to the philosophy of law, adapting them, however, to contemporary intellectual tendencies. His chief works in this field are: Principios de derecho natural (Madrid ? 1873) and the unfinished Resumen de filosofia del derecho (Madrid 1898), both written in collaboration with his pupil Alfredo Calderón y Arana. In penology Giner developed and elab-

orated Röder's doctrines. His conception of punishment is typical of the Spanish school in that he regarded it as a tutelary process intended not only to protect society against criminal transgressions but a'so to protect the offender against himself and to effect his correction and social readaptation. Accordingly he favored the abolition of capital punishment. In sociology Giner's most interesting work is *Estudios y fragmentos sobre la teoría de la persona social* (Madrid 1899), which was based upon the social organism theory but was free from the exaggerations of the biological school of sociology.

Giner is primarily important, however, as an educator. He was a preeminent figure in the recent Spanish renascence through his personal influence upon his pupils as well as through his general educational work and his writings. He was the moving spirit of the group which in 1876 founded the Institución Libre de Enseñanza, an unofficial institution which developed an educational system complete from the primary school to the university and thereby exerted a liberalizing influence upon the general educational policy of the Spanish government. Giner's pedagogical system completely rejected the idea of reward and punishment and respected individual initiative. Its most original feature was its emphasis upon artistic training, begun in childhood, as an aid to moral development. Giner's activity among the middle and upper classes may be compared to that of Pablo Iglesias among the proletariat. Both men were outstanding in the intellectual and political movement which led to the regeneration of contemporary Spain.

C. Bernaldo de Quirós

Works: Obras completas, 19 vols. (Madrid 1916–28), containing new editions of the works mentioned in the text.

Consult: De los Ríos, Fernando, La filosofia del derecho en Don Francisco Giner, y su relación con el pensamiento contemporánco (Madrid 1916); Altamira y Crevea, R., Giner de los Ríos, educador (Valencia 1915); Madariaga, Salvador de, The Genius of Spain (Oxford 1923) p. 64-70.

GINN, EDWIN (1838–1914), American publisher and peace advocate. Ginn became actively interested in the peace movement in 1901 and was impressed by its need for efficient methods of organization, more widespread educational work and more generous financial support. He advocated the limitation of armaments and the development of a permanent international armed force. His most important contribution

to the peace movement, however, lay in the fact that he was the first to endow and organize educational peace work on a large scale. He made possible a widespread distribution of important books on peace and a mass of concise pamphlet literature. He contributed to the support of the American School Peace League and the Cosmopolitan Club movement, financed peace work among women's clubs, furthered peace activities among his associates in chambers of commerce and supported Anna B. Eckstein in her work of collecting throughout Europe more than two million signatures to an arbitration petition which was presented to the Second Hague Conference. That educational work for peace might be put on a permanent basis Ginn founded and endowed the World Peace Foundation, which, occupying a position somewhere between propagandist and scientific organization, has made facts relating to the development of international peace machinery widely available.

Ginn was also interested in the promotion of better relations between capital and labor and furthered the movement for better housing conditions for the poor.

MERLE E. CURTI

Consult: Mead, E. D., "Edwin Ginn and the World Peace Foundation" in Advocate of Peace, vol. xcii (1930) 184-90; Lake Mohonk Conference on International Arbitration, Report of the Seventh Annual Meeting (Mohonk Lake, N. Y. 1901) p. 19-22, and Report of the Nineteenth Annual Meeting (Mohonk Lake, N. Y. 1913) p. 22-29.

GINSBERG, ASHER (1856–1927), Jewish social philosopher. Ginsberg was born in Russia and was educated in an orthodox Jewish family. As a student he came under the influence of European rationalism and of English evolutionary philosophers, especially Herbert Spencer and I. S. Mill. His essays, written in an entirely new philosophical language under the pen name Ahad Ha-am ("one of the people"), are classics of modern Hebrew, which they helped create. Ahad Ha-am accepted the traditional Jewish idea that the Jews are a unique group whose life is entirely built upon ethico-religious foundations. Although he recognized the historical origin and evolution of these foundations, they nevertheless remained for him, as for those who regarded their origin as divine, absolute values. Whatever the source of Judaism (for him chiefly the doctrine embodied in the teaching of the prophets), it is the soul of the Jewish people and

must be the guiding principle of Jewish individual and group life. The weakening of Judaism, the disintegration of the Jewish people through the loss of its soul, were for Ahad Haam the true "Jewish question." In contrast to Herzl, the political Zionist, Ahad Ha-am, the founder of cultural Zionism, believed that the political and economic difficulties of the Jews in the Diaspora were incurable but that the Jewish people could be regenerated by creating in the old Jewish homeland a "spiritual center" on a sound economic basis whose Jewish thought and way of life could exercise a revivifying influence upon the Jewish soul in the Diaspora. As far back as 1891 he drew attention to the importance of the presence of the Arabs in Palestine, and even after the issuing of the Balfour Declaration realized that the existence of a large Arab population put anything like a Jewish state in Palestine out of the field of practical politics. A Jewish state or majority in Palestine were for him not only impracticable but unessential. His starting point had not been the poverty or the political and moral oppression of the Jewish masses but the heritage of centuries of Jewish life and striving for continuance and self-expression. Since Jewishness meant to Ahad Ha-am the ideas of absolute justice and impartiality, something always "anormal," a living protest of the spirit against the sword, a lewish community in Palestine could in no way be similar to other national groups or states. To "normalize" Jewish life would mean a betrayal of the Jewish mission. Although Herzl's political Zionism was predominantly accepted within the Zionist movement, Ahad Ha-am deeply influenced Jewish thought of recent years and his apolitical, spiritual nationalism, which he ascribed for historical reasons only to the Jews, became the guiding principle in the development of a new theory of nationalism by his Jewish followers.

HANS KOHN

Works: Al parashat derachim, 4 vols. (Odessa 1895–1913; 3rd ed. Berlin 1921), vol. ii tr. into German by Hugo Knöpfmacher and Ernst Müller as Am Scheidewege (Berlin 1923–24); Selected Essays (Philadelphia 1912), and Ten Essays on Zionism and Judaism (London 1922), both tr. by Leon Simon; Igeroth (Letters), 6 vols. (Jerusalem 1923–25).

Consult: Bentwich, Norman de M., Ahad Ha'Am and His Philosophy (Jerusalem 1927); Kohn, Hans, L'humanisme juif (Paris 1931); Bileski, Moritz, Achad Haam (Berlin 1916); Simon, Leon, "One of the People'" in his Studies in Jewish Nationalism (London 1920) p. 77-96; Buber, Martin, Bergmann, Hugo, and others, in Der Jude, vol. i (1916-17) 353-407; Birn-

baum, Nathan, Achad Ha-Am: ein Denker und Kämpfer der jüdischen Renaissance (Berlin 1903); Simon, Leon, Ahad Ha-Am, English Zionist Federation, Zionist Thinkers and Leaders, no. iv (London 1927); Kohn, Hans, and Weltsch, Robert, Zionistische Politik (Maehrisch-Ostrau 1927).

GIOBERTI, VINCENZO (1801-52), Italian philosopher and statesman. Shortly after his ordination as priest in 1825 Gioberti began to display the nationalistic zeal which was to dominate his life, and having fallen under the suspicion of the Piedmontese court he was exiled by Charles Albert in 1833. During the next fifteen years, which he passed in France and Belgium, he developed the principles of an idealistic philosophy known as ontologism. Continuing the battle begun by Galluppi and Rosmini against sensationalism Gioberti harmonized his philosophy with Catholicism and regarded God (Ente) not as the ideal and abstract but as the real and active creator of all visible phenomena (esistente). His philosophy, which exerted great influence on later Italian idealistic systems, became for Gioberti the basis of a nationalistic theory. History was the process by which the cycle begun in creation was completed: l'esistente ritorno all' Ente. Hence the Italian Risorgimento must be, first of all, a spiritual renaissance resting upon a reidentification with tradition. Since he believed Catholicism to be the only true terrestrial expression of the *Ente* and therefore the essence of civilization; since, moreover, Italy as the seat of Catholicism was culturally linked with the true idea, Gioberti thought himself justified in affirming the superiority of the Italians to all other people in works of genius. This was the theme of the famous excursus to Gioberti's most important work, Del primato morale e civile degli italiani (Brussels 1843, 2nd ed. 1845; new ed. by G. Balsamo-Crivelli, 3 vols., Turin 1919–20). The book won for him great renown in Italy and became one of the motive forces ushering in the nationalist movement of 1848, the more so because with its debatable doctrine of Italian hegemony it combined political proposals more firmly founded on immediate historical fact. In opposition to the revolutionary methods of Mazzinian democracy Gioberti set forth a plan of Italian unification to be effected through a series of pacts between the various Italian princes and to issue in a federation headed by the pope. The Italian people, he declared against Mazzini, was still too nebulous to be the basis of substantial hope; reality was represented only by the pope and to a lesser degree by the princes. Gioberti's

error lay in his belief that the force of such an international institution as the church could be identified with that of a single nation, and the facts demonstrated the rashness of his hopes. In 1848 when Pope Pius IX allied himself with the independence movements in the various Italian states, Gioberti seemed for a while to be an inspired prophet: he returned to Italy acclaimed by the nationalists and during a period of two months directed the government of Piedmont. But the unfortunate outcome of the campaign against Austria and the defection of the pope as well as of the princes from the Italian federation caused the rapid fading of Gioberti's prestige. In 1849 he went once more into exile. The disillusionment arising from his experiences provided, however, a salutary stimulus for the revision of his thought. In the major political work of his second exile, the Del rinnovamento civile d'Italia (2 vols., Paris and Furin 1851; new ed. by Fausto Nicolini, 3 vols., Laterza 1911-12), he abandoned the doctrine of federalism in favor of unity, advocated a democratic government instead of moderate constitutionalism and assigned the task of guiding Italian unification no longer to the pope but to the Piedmontese dynasty of Savoy. In this change of political viewpoint were reflected also the results of a profound philosophical crisis, during which Gioberti became disgusted with Catholic dogmatism and adopted a lay philosophy akin in tone to that of the German idealists.

GUIDO DE RUGGIERO

Consult: Anzilloti, Antonio G., Gioberti (Florence 1922), and La funzione storica del giobertismo (Florence 1923); Gentile, Giovanni, "Il realismo politico di Gioberti" in Politica, vol. ii (1919) 20-36, 161-78; Zbinden, Jean, Die politischen Ideen des Vincenzo Gioberti (Berne 1920); Solmi, Edmondo, Mazzini e Gioberti (Rome 1913); Cesarini-Sforza, W., "Socialismo Giobertiano" in Rivista italiana di sociologia, vol. xix (1915) 568-79; Mondolfo, Rodolfo, La filosofia politica in Italia nel secolo XIX (Padua 1924); Caramella, Santino, La formazione della filosofia giobertiana (Genoa 1927).

GIOIA, MELCHIORRE (1767–1829), Italian political theorist and economist. The early political writings of Gioia, who, as Mazzini noted, was the first champion of Italian unity, were directed against reactionary despotism, ecclesiastical domination and Jacobin intolerance. He was repeatedly imprisoned, once, in 1820, charged with being affiliated with the Carbonari. He contended in his best known work, *Del merito e delle ricompense* (2 vols., Milan 1818–19; 3rd ed. Capolago 1833), which was inspired by Beccaria's

Dei delitti e delle pene (1764), that the activities of individuals cannot lead to the common welfare unless they be free and unless their consciousness of responsibility coincide with the dictates of self-interest. His system of social ethics, built on the utilitarianism of Bentham, thus exalted personal responsibility and maintained economic utility to be the decisive criterion in moral and social questions.

In his economic works he dealt especially with such problems as the division of labor, costs of production and methods of increasing productivity and wealth. He advocated, as against Adam Smith, the desirability of state interference in industrial life for the organization of public services and as a stimulus to production and a protection for the workers. He foresaw the labor saving effects of machinery and held increased consumption to be a factor of civil and cultural progress. He perceived the errors of the mercantilists but vacillated between an endorsement of free trade and protectionism. He also made extensive statistical studies of collective lifedemographic, economic, civic and social---which give him a distinguished position in the history of the social sciences.

Rodolfo Mondolfo

Works: Opere principali, 16 vols. (Lugano 1838-40); Opere minori, 17 vols. (Lugano 1832-38).

Consult: Mornighano, F., Un pubbluista, economista e filosofo del periodo napoleonico: Melchiorre Gioia (Turin 1904); Ferri, C. E., Melchiorre Gioia economista (Milan 1925); Luzzatto, F., La politica agraria nelle opere di Melchiorre Gioia (Piacenza 1929).

GIOLITTI, GIOVANNI (1842-1928), Italian statesman. Giolitti was born at Mondovi, Piedmont, of a middle class family sprung from mountaineer stock. After he had learned the art of government during twenty years of administrative service, largely in the Board of Finance, he entered the Council of State in 1884 and the same year was elected to the Chamber of Deputies as a member of the Left. The financial inefficiency of the Depretis ministry and the economic distress resulting from the expiration of the commercial treaties with France presented a situation well fitted to accelerate the formulation of his two principal social purposes: fiscal reform directed toward more equitable distribution of taxes as well as toward greater economy, and progressive legislation. In 1889-90 he was secretary of the Treasury in Crispi's cabinet and in 1892 became premier. His ministry was troubled by the agitations of the Sicilian workers' organizations, or fasci, which he refused to dis-

solve, and by the Banca Romana scandals. To the latter he responded by abolishing the old bank and creating the Banca d'Italia subject to new legal regulations, but the report of the parliamentary inquiry commission forced him to resign in 1893. With his political influence greatly impaired but his personal integrity unimpeached he spent the next two years weathering the aftermath of the scandals, the plico affair and the "moral controversy" with Crispi. In 1897 he resumed political activity and regained his prestige through sustained attacks upon the reactionary government of Pelloux. He was appointed home secretary by Zanardelli in 1901 and two years later became premier for the second time. His three successive ministries, 1903-05, 1906-09 and 1911-14, were the period of the so-called dittatura giolittiana. His program, announced in his first ministry, for ending the "transformist" regime through the realignment of two great parties, the Conservative and Progressive, was never realized; and although he always observed strict constitutional procedure he ruled in fact through a succession of mixed, unorganized majorities. In a period of great economic expansion he progressively improved the status of the lower classes not only by multitudinous welfare and educational laws but by the non-interventionist and sympathetic attitude which he steadfastly manifested toward workers' organizations and strikes. By this policy he weakened the activity of the Socialists but they resisted his repeated invitations to join his government. The radicals were, however, included in his 1911 ministry, during the incumbency of which he passed a law of universal suffrage, raising the electorate from 3,500,000 to 8,000,000, and brought to Italian expansionist ambitions their first realization in the occupation of Tripoli and the Libyan war. When the World War came during the Salandra ministry, Giolitti stoutly defended Italian neutrality and from the May days of 1915, which his attitude provoked, until November, 1917, he remained in seclusion. At the general elections of 1919 he outlined a pacifistic and democratic program and once more made unsuccessful overtures to the Socialists, who were then dominated by Bolshevistic extremism. The following June he entered upon his fifth and last ministry (1920-21), the principal events of which were the reorganization of the budget and the conclusion of the Rapallo treaty with Jugoslavia. Fascism found in him encouragement, even after the "march to Rome," and it was not until the

autumn of 1924 that he passed over to the parliamentary opposition, at the head of which he remained until his death.

Luigi Salvatorelli

Consult: Giolitti, G., Memorie della mia vita, 2 vols. (Milan 1922), tr. by Edward Storer (London 1923); Croce, B., Storia d'Italia dal 1871 al 1915 (3rd ed. Bari 1928), tr. by C. M. Ady (Oxford 1929) chs. vii—xii; Giolitti, ed. by Luigi Salvatorelli (Milan 1920), containing a selection of Giolitti's speeches, with introduction; Quirielle, Pierre de, in Correspondant, vol. cccxii (1928) 340–57; Salvatorelli, L., "Giolitti und seine auswärtige Politik" in Europäische Gespräche, vol. vii (1929) 117–37; Claar, M., "Giovanni Giolitti und die liberale Parlamentsdiktatur in Italien" in Zeitschrift für Politik, vol. xviii (1928–29) 231–39.

GIRARD, JEAN-BAPTISTE (1765–1850), Swiss educator. Girard, a Franciscan monk generally known as Father Grégoire, played a great part in the organization of compulsory primary schools and in the creation of teachers' seminaries in Switzerland. Under the Helvetic Republic he collaborated with P. A. Stapfer, minister of arts and sciences, and in 1799 arranged a "Projet d'éducation publique pour la république l'Helvétique" (printed in Politisches Jahrbuch der schweizerischen Eidgenossenschaft, vol. viii, 1894, p. 537-72), which was, however, never acted on. In 1804 he became director of the French primary schools of Fribourg and established a system of mutual education. Later he collaborated on the report of a government commission to investigate the Yverdon school (Rapport sur l'institut de M. Pestalozzi à Yverdon, Fribourg 1810). Although a disciple of Rousseau and Pestalozzi he looked to science and liberty to regenerate mankind. Girard placed great emphasis on the moral and religious side of education. He was considerably influenced by Kant, objected to Pestalozzi's emphasis on mathematics, which, he feared, would encourage materialistic thinking, and contended that intelligence must be cultivated as the only sound basis for Christian faith. His technique of teaching was concrete and intuitive and based on interest, emulation and a discipline free from corporal punishment and other constraints. The children instructed each other under the teacher's supervision; they were encouraged to debate all questions with a view to developing their reasoning powers; and they operated a form of self-government.

Although Girard was neither profound nor wholly original, his pedagogical system attained wide renown, and his defense of the teaching of grammar as an aid to intellectual development had considerable influence, especially on French pedagogy. He worked for the separation of church and state, the establishment of non-denominational schools and the development of religious toleration in general. He founded asylums and orphanages, contributed to the abolition of torture in Fribourg and helped improve conditions in children's reformatories. After 1823, when as a result of the opposition of the Jesuits and reactionaries he was dismissed and his work destroyed, Girard devoted himself to writing on pedagogy.

N. ROUBAKINE

Important works: Mémoire sur l'enseignement religieux de l'école française de Fribourg (Fribourg 1818); De la nécessité de cultiver l'intelligence des enfants pour en faire des chrétiens (Toulouse 1822); Dialogue sur la formation d'institeurs pour les écoles alpestres (Lucerne 1826); Der moralische Wert des wohleingerichteten wechselseitigen Unterrichts (Lucerne 1826); Cours éducatif de langue maternelle à l'usage des écoles et des familles, 6 vols. (Paris 1840–48); De l'enseignement régulier de la langue maternelle dans les écoles et les familles (Paris 1844, 9th ed. 1894), tr. and adapted by the l'hird Earl Fortescue as The Mother-Tongue (London 1847).

Consult: Daguet, Alexandre, Le Père Girard et son temps, 2 vols. (Paris 1896); Compayré, G., Le Père Girard (Paris 1906).

GIRARD, PAUL FRÉDÉRIC (1852-1926), French jurist. Girard taught at the University of Paris for over thirty years and put new life into the study of Roman law in France by aligning himself with the German historical movement. He, for instance, translated Mommsen's celebrated work on the public law of the Romans (8 vols., Paris 1887-95). He made, however, many important contributions of his own to the history of Roman law. He interested himself somewhat in the Romanists of the Renaissance, but he was most strongly attracted toward the ancient Roman law and he had a particular penchant for problems of a procedural cast. Two of his earliest studies, one of them on the guaranty of eviction and the other on the noxal actions, already show his success with the historical method in the reconstruction of Roman law. The first volume of his projected L'organisation judiciaire des romains (Paris 1901)—the only one published -traced the history of the first six centuries of Roman judicial organization. Three of Girard's most important studies belong in this field: the first on the date of the lex aebutia, by which the older procedure of the legis actiones was made optional; the second or, the date of the perpetual edict of Julian, which fixed in its final form the

praetorian law which had developed Roman jurisprudence through its remedial aspects; and the third on the leges juliae judiciorum publicorum et privatorum, one of which abolished the legis actiones altogether. Girard was also instrumental in elucidating some aspects of the edict before its finat revision by Julian, when he discovered in the Bibliothèque Nationale a second manuscript of a list of abbreviations, the notae juris of the first century grammarian Valerius Probus. Girard indeed had a great interest in texts, and in a study on the Twelve Tables he defended their authenticity. But apart from all his monographs, most of which are collected in his Mélanges de droit romain (2 vols., Paris 1912-23), Girard's world wide reputation rests upon his Textes de droit romain (Paris 1890, 5th ed. 1923) and his Manuel élémentaire de droit romain (Paris 1896, 8th ed. 1929), which has been translated into German and Italian and in part into English (Toronto 1906). This great manual reveals Girard's gifts of systematization. In harmony with the newer studies it substituted for the traditional solution others more in consonance with the social evolution of the Roman world. PAUL COLLINET

Consult: Collinet, Paul, in Nouvelle revue historique de droit français et étranger, 4th ser., vol. lii (1928) 315-25.

GIRARDIN, ÉMILE DE (1806-81), French journalist. Before the time of Girardin the big Parisian dailies supported themselves by charging an annual subscription price of eighty francs per annum. No single copies were sold and only a limited amount of advertising matter was carried. Girardin founded the Presse in 1836, cut the subscription to forty francs a year and gave increased space to advertising in order to finance his paper. A greater variety of reading matter, particularly feuilletons, was printed. Like James Gordon Bennett's Herald in the United States, the Presse had a rapid success, and Girardin strengthened this by allying himself with the Société Générale des Annonces, which had a monopoly of the press of Paris. The other dailies taken over by Girardin, Liberté and afterwards France, also enjoyed great popularity.

In politics Girardin was independent and mercurial. Long well liked by Louis Philippe. ne finally became a violent opponent of Guizot. He supported the Republic in February, 1848, but became a fierce enemy of Cavaignac. He was first an adversary, later an adherent, of Napoleon III. His last great campaign against

Broglie's cabinet after the coup d'état of May 16, 1877, led the Republicans to elect him deputy from Paris. In 1870 he preached war, although ordinarily and especially in his later years he declared himself for peace and complete disarmament. He habitually presented rather adventurous and admittedly unfeasible ideas and utopias, which he deemed necessary to arouse public discussion. Although he enjoyed great popular interest, his reputation as a cynic preoccupied with money matters somewhat impaired the extent of his influence. Adept at sensing public opinion, he always followed it and always accepted a fait accompli. On only one point did he never change: of every administration he demanded freedom of the press.

GEORGES WEILL

Consult: Lebey, André, "Idées politiques d'Émile de Girardin (1840)" in Revue de Paris, année XVIII, vol. ii (1911) 564-84; Datz, P., Histoire de la publicité (Paris 1894); Avenel, Henri, Histoire de la presse française depuis 1789 (Paris 1900) p. 362-68; Renard, G. F., Les travailleurs du livre et du journal, 3 vols. (Paris 1925-26) vol. ii, p. 229-39.

GIRDLESTONE, EDWARD (1805-84), English clergyman, agrarian and social reformer. Girdlestone was educated at Oxford and seemed destined to pursue a purely clerical career, but his interest in labor problems was soon stimulated by experiences in his Lancashire incumbency of Deane, which brought home to him prevailing factory conditions. He wrote various periodical articles on labor conditions in the mines and factories and on similar subjects. Promoted to a canonry at Bristol, he turned his energies toward rural issues, winning his title of the "agricultural labourer's friend." To the 1868 meeting of the British Association for the Advancement of Science held at Norwich he described conditions in rural parishes and urged the formation of an agricultural laborers' union. Thereafter he was associated with Joseph Arch, Jesse Collings and others in their campaign of agrarian reform. His connection with the subsequently formed Agricultural Labourers' Union was weakened by its bias against the established church, but his zeal for the wider aspects of the cause never flagged. He advocated a constructive program, including the provision of better education and housing, revision of the poor law and access to the land. Holding that the clergy had "done less for this end than any other class despite their spiritual interest" he himself, when ultimately vicar of Halberton, Devonshire, was instrumental in removing several hundred families

from that impoverished county to the better paid areas of England. Canon Girdlestone combined a high organizing ability with the attributes of a conscientious cleric and devoted his life to the betterment of the working classes at a period when it was unorthodox.

J. A. VENN

Consult: Heath, F. G., British Rural Life and Labour (London 1911) chs. xxxv, xlvii.

GIRL SCOUTS. See Boys' AND GIRLS' CLUBS

GIRY, ARTHUR (1848-99), French historian Giry was professor at the École des Chartes and at the same time a member of the department of the historical sciences at the Ecole des Hautes Etudes, where he trained numerous scholars and where around 1875 he began to concentrate his research on the history of the municipal institutions of mediaeval France. This field, the interest of which had been revealed some twenty-five years earlier by the publication of documents supervised by Augustin Thierry, was still virtually unexplored. Accordingly Giry and his pupils set themselves the task of superseding Thierry's vague generalizations by a series of scholarly monographs devoted to a careful analysis of the clauses of the charters of urban franchises, to a study of the spread of these charters and their application in various French regions and to an analysis of the character of the political and administrative government of the urban or rural "communes" in the twelfth, thirteenth and fourteenth centuries. The first of these monographs to appear were Giry's Histoire de la ville de Saint Omer et de ses institutions jusqu'au XIVe siècle (Paris 1877) and Flammermont's Histoire des institutions municipales de Senlis (Paris 1881). These were followed by Giry's Les établissements de Rouen (2 vols., Paris 1883-85), a study of the municipal organization of Rouen and the cities of Normandy, Poitou, Saintonge and Gascony, all of which received from the Plantagenet kings institutions similar to those of Rouen. A collection of Documents sur les relations de la royauté avec les villes de France de 1180 à 1314 (Paris 1885), an Etude sur les origines de la commune de Saint-Quentin (Saint-Quentin 1887) and a series of volumes by his pupils (Les coutumes de Lorris by M. Prou, Paris 1884; Histoire de la ville de Noyon by A. Lefranc, Paris 1887; Histoire de la constitution de la ville de Dinant au moyen âge by H. Pirenne, Ghent 1889; Histoire de Beauvais by L. H. Labande, Paris 1892; Essai sur l'histoire d'Agen by A. Ducom,

Agen 1892) are further testimonials to the induscry of his seminar. The broader conclusions drawn from these researches are confined unfortunately to two brief chapters written in collaboration with A. Réville for Lavisse and Rambaud's Histoire générale (vol. ii, Paris 1893, chs. viii ix; ch. viii tr. by F. G. Bates and P. E. Titsworth, New York 1907). Giry prepared also a history of the reign of Charles the Bald and a collection of his acts as well as a study of Carolingian diplomatics, the Etude critique de quelques documents angevins de l'époque carolingienne (Paris 1900). The researches of his pupils, notably F. Lot, P. Lauer, R. Poupardin and E. Favre, resulted in numerous monographs on the period following Charles the Bald.

LOUIS HALPHEN

Consult: Lot, Ferdinand, "Arthur Giry" in École Pratique des Hautes Études, Section des Sciences Historiques et Philologiques, Annuaire (1900) 20-47; Omont, Henri, "Notice sur la vie et les travaux de M. Arthur Giry" in Bibliothèque de l'École des Chartes, vol. lxii (1901) 5-14.

GIUSTI, GIUSEPPE (1809–50), Italian satirist. Giusti was one of the principal literary figures of the moral revival which was the prime and indispensable condition of the political regeneration of the Italian nation. As early as 1836 he had become the poet of the patriots of union through his *Lo stivale*, which had at once become popular. In this poem Italy, represented by a boot, recounts its dolorous story and then beseeches some man of courage and vision to unite it into a single state and free it from the stranger, making it become

. . . con prudenza e con amore Tutto d'un pezzo e tutto d'un colore.

In the Incoronazione (1838) the poet attacks the sovereigns of the petty Italian states, who hastened to do homage to the new emperor of Austria when he came to Milan for his coronation; and the Brindisi di Girella (1840) is a bitter satire against politicians who bow down before the idol of the day, accepting supinely any government in power. The Gingillino (1845) is a violent satire against those of the youth who lent themselves to the sorry business of courting and even acting as spies for the petty tyrants of the time to smooth their own way to promotion in the bureaucracy. In the Guerra (1846) the poet satirizes the pacifists who cried for peace when peace was impossible, pointing out that without war Italy could not be freed. In the same year, hearing a sacred hymn set to Italian music sung in chorus by Bohemian and Croatian soldiers in the old temple dedicated to St. Ambrose, he was moved to compose one of his finest poems, the Sant'Ambrogio, in a mood of pity for the soldiers who as the unwitting instruments of a tyrannical government were holding Italy in slavery. In 1848 Grosti was elected to the Tuscan parhament and worked with the moderate party rather than with the ultrademocratic. In all his poems as well as in his prose writings Giusti lashed the servility and selfishness of the upper and middle classes and the charlatarity of the demagogues who fawned upon the people for their own selfish ends.

GATANO Mosca

Works, Pocse; compiled by P. Fanfam (nev. ed. Milan 1880); Epistolario, compiled by F. Martin, 3 vols. (Florence 1904); selections of Prose e pocse, compiled by E. Marmoni (Milan 1918).

Consult: Martini, F., Guiseppe Giasti (Milan 1909).

GLADSTONE, WILLIAM EWART (1809-98), British statesman At Eton and Oxford Gladstone gained high academic distinction as well as fame in debate. Except for a short interval in 1846 he was a member of the House of Commons from 1833 until his retirement in 1804. As vice president and president of the Board of Trade from 1841 to 1845 he served as Sir Robert Peel's chief lieutenant in a sweeping reform of the tariff which paved the way for the repeal of the corn laws in 1846. From Peel he learned the principle and practise of public economy which he always associated with private thrift. As chancellor of the Exchequer under Aberdeen and Palmerston be prepared the budgets of 1853 and 1860, in which like Peel he used the income tax to remove or reduce many protective customs duties. The latter budget was bound up with the Anglo-French commercial treaty negotiated by Cobden, and the work of free trade was thereby practically completed. In 1867 he succeeded Earl Russell as leader of the Liberal party and as prime minister from 1868 to 1874 directed what was perhaps the greatest reform administration of the century. He disestablished the Irish church, abolished the system of purchasing commissions in the army, removed religious tests from the universities, introduced the ballot at elections and set a great example in peace methods by submitting the Alabama claims to arbitration. The general elections of 1880 gave Gladstone a handsome majority; but his second administration, from 1880 to 1885, when he resigned after extending the franchise to agricultural laborers, was marred by troubles in the Transvaal, in Egypt and in Ireland. His generous scheme of home rule for Ireland was frustrated during his third administration by the defection of Liberal Unionists and by the Parnell scandal. During his fourth and final administration the second Home Rule Bill after passing through the House of Commons was thrown out by the House of Lords; and in March, 1894, Gladstone retired.

Gladstone's greatest achievements as a statesman were perhaps in public finance, every detail of which he mastered with unrivaled skill and indefatigable industry. In all the arts of public economy he was a disciple of Peel and an ally of Cobden. He waged incessant war on public waste and did more than any other statesman of the nineteenth century to arrest the growth of armaments and to provide substitutes for war between nations. His outlook on social life and on the economic problems of capital and labor was that of a sincere Christian and a convinced individualist, who endeavored to impress upon all classes the duties of self-help and cooperation as well as the dangers of relying too much upon legislation and parliamentary interference with industry.

Francis W. Hirst

Consult: Morley, John, Life of William Ewart Gladstone, 3 vols. (London 1903); Craemer, Rudolf, Gladstone als christlicher Staatsmann (Stuttgart 1930), with bibliography p. 500–06; Knaplund, Paul, Gladstone and Britain's Imperial Policy (London 1927); Eversley, George John, Gladstone and Ireland (London 1912); Burdett, O. H., W. E. Gladstone (London 1927); Buxton, Sydney, "Mr. Gladstone as Chancellor of the Exchequer" in Fortnightly Review, n. s., vol. kix (1901) 590–611, 785–807; Malarce, A. de, "Trois grands 'acts' de Gladstone" in Journal des économistes, 5th ser., vol. xxxv (1898) 62–69.

GLANVILL, RANULF DE (also written as Glanvil, Ranulph de, and as Glanville) (d. 1190), had a varied career as sheriff, judge, warrior, diplomat and statesman under Henry II. The law book now known by his name (Tractatus de legibus et consuetudinibus regni Anglie) was finished after 1187 and before 1190. It is unlikely that he wrote it, but he may have influenced his lawyer nephew and secretary Hubert Walter (afterwards archbishop of Canterbury), to whom Maitland conjecturally ascribed it. Several procedural treatises were then appearing on the continent, and in England William Longchamp may have already written his little work on civil and canonical procedure advocating a formulary system of writs; if this is so, then Glanvill's emphasis upon the writ is all the more

interesting. It is likewise significant that the Dialogue de scaccario is of the same date, the coincidence showing that separate treatises on law and administration were already possible. Glanvill implies a collection of writs already arranged along the lines of the Registrum brevium. The question of Roman influences is less difficult than with Bracton, for Glanvill does not attempt to make practical use of his Roman learning. Glanvill's influence in England was great, for his work served to standardize the rules which the king's court was evolving. It was, moreover, the first to be written exclusively about the new royal common law (as distinct from ancient regional customs). Realizing that the common law was growing around the procedural rules of the king's court and that local variants were doomed to disappear Glanvill adopted the form of a commentary upon royal writs and thereby set the pattern for legal writing for several centuries to come. Glanvill's book was widely read and was treated with respect by Bracton, whose larger book naturally superseded it. An enlarged and modified version of Glanvill was current in Scotland under the title Regiam majestatem and enjoyed high authority.

THEODORE F. T. PLUCKNETT

Works: The best edition so far is that by J. E. Wilmot and J. Rayner (London 1780); it was also printed in France by David Houard (Traités sur les coutumes anglo-normandes . . . , 4 vols., Paris 1776, vol. i, p. 373-581), and in Germany by George Phillips (Englische Reichs- und Rechtsgeschichte . . . , 2 vols., Berlin 1827-28, vol. ii, p. 335-473). A new edition by G. E. Woodbine is being prepared by the Yale University Press. John Beames' English translation (London 1812) was revised by J. H. Beale (Washington 1900). Regiam majestatem and Glanvill are printed side by side in Acts of the Parliaments of Scotland, vol. i (Edinburgh 1814).

Consult: Holdsworth, W. S., History of English Law, 9 vols. (3rd ed. London 1922-26) vol. ii, p. 176, 188-92, where further references are also given.

GLASER, JULIUS (1831-85), Austrian jurist. Glaser became professor of criminal law at the University of Vienna at the age of twenty-nine but soon gave up his teaching for legislative labors in the Austrian Ministry of Justice, the direction of which he took over in 1871. Forced to resign in 1879 as the result of a cabinet crisis, he became procurator general to the Court of Cassation in Vienna, a post which he held until his sudden death.

Glaser's chief importance is in the field of criminal procedure. The Austrian code of crimi-

nal procedure of 1873, which replaced the reactionary law of 1853 and is still in force, was his creation. It represented the realization of modern principles of criminal procedure in Austria and bears unmistakable marks of the influence of English-Scottish criminal procedure, for the reception of which Glaser had argued in a series of publications. After a hard struggle he succeeded in securing the retention of trial by jury. Like many of his contemporaries Glaser saw in the participation of laymen in the deciding of the question of guilt an indispensable guaranty against abuses arising from the prevailing judicial freedom in the evaluation of proof.

Glaser's most important literary productions were his unfinished Handbuch des Strafprozesses and the Beiträge zur Lehre vom Beweis. He conceived the central point of every process to lie in the question of proof, which for that reason must form the core of any science of procedure. In his essays on evidence, which even today are fundamental, he was particularly concerned with showing that a law of evidence was still necessary despite the acceptance of the principle of the free evaluation of proof. In conjunction with his friend and colleague Josef Unger, Glaser succeeded in reestablishing the contact of Austrian law with German national jurisprudence and in inaugurating a new and brilliant period in Austrian legal science.

ERICH SCHWINGE

Important works: Abhandlungen aus dem österreichischen Strafrecht (Vienna 1858); Schwurgerichtliche Erörterungen (Vienna 1875); Handbuch des Strafprozesses, Systematisches Handbuch der deutschen Rechtswissenschaft, ed. by Karl Binding, sect. ix, pt. iv, vols. (Leipsic 1883–1907); Beiträge zur Lehre vom Beweis im Strafprozess (Leipsic 1883); Gesamrelte kleinere Schriften über Strafrecht, Civil- und Strafprozess, 2 vols. (Vienna 1868, 2nd ed. 1883).

Consult: Lammasch, Heinrich, in Zeitschrift für das Privat- und öffentliche Recht der Gegenwart, vol. xiv (1887) 675-703; Benedikt, Edmund, in Allgemeine deutsche Biographie, vol. xlix (Leipsic 1904) p. 372-80; Unger, Josef, Julius Glaser, ein Nachruf (Vienna 1885).

GLASIER, JOHN BRUCE (1859–1920), British socialist. Glasier was born in Glasgow and was a designer of art metal work by vocation. Beginning with a stern Calvinism he moved with the rising wave of social revolt which at the beginning of the eighties carried many British intellectuals from Darwin and Huxley through Ruskin, Mill and Henry George to socialism. In 1879 he began to lecture on social problems. He took an active part in the Irish and Highland

Land League and was one of the organizers of the Henry George campaign in 1883. In 1884 he became a member of the Social Democratic Federation and after its split joined the Socialist League founded by his friend William Morris. With the formation of the Independent Labour party (I.L.P.) in 1893 Glasier, who despite his Darwinism was essentially idealist, ethical and inclined toward mysticism and conceived socialism as a humanist religion, found his most congenial sphere of activity. The I. L. P. conceived its socialism as a living faith, caring nothing for materialist determinism nor for revolutionary economics. In homely speech, in hymns and songs, some of which Glasier composed, it appealed to the moral and primitive Christian sentiments of the working people, asking them at the same time to act logically and apply trade union principies to politics, i.e. to form a party of their own to secure social justice for all. Carrying this message Glasier was second only to Keir Hardie in preparing the way for the formation of the Labour party in 1900. He held the highest offices of the I.L.P. and edited its weekly, the Labour Leader, from 1905 to 1909 and its monthly, the Socialist Review, from 1913 to 1917. Max Beer

Works: Meaning of Socialism (Manchester 1919); William Morris and the Early Days of the Socialist Movement (London 1921); On the Road to Liberty: Poems and Ballads, ed. by J. W. Wallace (Manchester 1921).

Consult: Beer, Max, History of British Socialism, 2 vols. (London 1919-21) vol. ii.

GLASS AND POTTERY INDUSTRIES. Despite isolated survivals of handicraft production glass and pottery manufacture at present is definitely a mechanical industry. Before the end of the eighteenth century output was artistic in quality and limited in quantity; it expressed cultural more than utilitarian requirements. Potters were among the most highly skilled and best paid artisans, who jealously guarded and restricted membership in their guilds; in Venice a glassworker became a nobleman by virtue of his trade. (For early history see POTTERY.) The situation is now completely different: at present quantity production rules, and potters and glassworkers are on the whole on the same level both in status and earnings as the workers in other mechanized industries. On the other hand, the use of glass and pottery products (particularly glass) has been extended far beyond the small class which almost monopolized their output in the past.

The modern era in the production of glass and pottery began at the end of the eighteenth century, when the handicrafts gave way to the factory system. Mechanical methods were introduced to do work formerly done by hand, and a larger division of labor developed. The change in pottery production was signalized by the appearance of English white ware, which created a revolution in the industry. By the new method, which was more mechanical and economical than applying a coating of white or of tin enamel, the English produced a ware which was white throughout; it was superior in durability and its finish bore comparison with expensive porcelain. In addition, printed patterns were developed which were transferred instead of painted on the ware. These changes and an abundance of coal and coarse clays gave England the lead in developing a modern pottery industry.

In pottery as in other products England intensively developed its exports; the bulk of white ware was produced for sale abroad. These large exports led to the displacement of more artistic and expensive wares in foreign markets and the gradual ruin of the old pottery handicrafts. But other countries, particularly France, Germany and the United States, adopted the English methods and by 1840 England's pottery supremacy was over. Handicraft methods persisted in the making of more artistic wares; but pottery as a whole went over to quantity production under pressure of increasing demand and larger markets.

Changes developed more slowly in the production of glass, but when they came they went far beyond the technological changes in the pottery industry. Early in the nineteenth century American manufacturers introduced molding machines for making pressed glass, which revolutionized the process and considerably cheapened the prices of the product. But the really important changes were initiated by two European inventions—Siemens' regenerative furnace in 1861 and the continuous melting tank in 1872. In the regenerative furnace, which is now in use in all large glass plants, the heat produced is supplied by the combustion of air and gas. Formerly direct fire furnaces used wood or coal as fuel. Wood, particularly after all its moisture had been extracted, was a very effective fuel for the production of small quantities of good glass but very expensive. Coal was considerably cheaper, but the glass produced was darker and of an inferior quality. Not only is the regenerative furnace more economical, saving nearly 50 percent

in fuel, but its heat is more intense and uniform, extremely desirable for the proper melting of glass, especially in large quantities. The continuous melting tank, invented in 1872, took the place of the open or closed pots. Use of the continuous tank has become universal, except in the production of lamp chimneys and the better kind of pressed and blown glassware and colored glass. The principal advantage of the continuous tank lies in the opportunity for uninterrupted working of the glass; the batch is supplied at regular intervals to the melting end of the tank, while the molten glass is continuously withdrawn from the working opening. The regenerative furnace combined with the continuous tank made the glass industry ripe for the introduction of machinery, and it was not long afterward that the successful operation of the first semi-automatic machine for the production of wide mouthed jars was reported.

Although it introduced machinery in the making of pressed glass the American glass and pottery industry lagged behind Europe in both technological advance and output. In the colonial period there were a few glass and many pottery works producing household and kitchen ware; the white ware industry of New Jersey exported comparatively large quantities to the West Indies. Glassworks were established in Pennsylvania and New Jersey. After the revolution both industries developed considerably; some capital and many skilled glass and pottery workers were imported from Europe. One glass company in Massachusetts in 1815 had a capital of \$400,000 and employed 450 workmen producing cut, engraved and gilded glass. There were many small plants scattered over the country serving local markets, as a result of the widespread distribution of raw materials and the inadequacy of transportation. The glass and pottery industries did not develop rapidly until after the Civil War, when they were stimulated by the rapidity of general industrial expansion.

By 1870 power driven machinery was being used in the majority of American potteries, most of which specialized in the production of white ware. The great increase in the output of pottery, however, came from the production of sanitary ware, bound up with progress of sanitation and improvements in the construction of dwellings, factories and offices. By 1890 the output of sanitary porcelain was a substantial part of pottery production and thereafter increased rapidly. Simultaneously a few art potteries were established; they made an important contribution to artistic pottery by developing an original type of underglaze decorated faïence.

In the glass industry the Siemens furnace was not adopted in the United States until 1871 and the continuous melting tank not until 1888. mainly because of the abundance of fuel and the large number of small plants. In 1873 the first plant was established for the production of polished plate glass, an important American contribution to the glass industry; and the output increased rapidly to supply the great demand by stores for show window glass. There was also considerable expansion in the output of window glass, large quantities of which had formerly been imported from Europe. At this time also electric light bulbs were first manufactured. The value of glass products increased from \$18,500,-000 in 1870 to over \$40,000,000 in 1890.

In spite of the adoption of modern technical methods and the increase in output the American glass and pottery industries in 1900 were still behind Europe, with Germany and England in the lead. But American progress thereafter was rapid. By 1914 the value of pottery products was \$36,900,000; the output of glass products increased from \$41,000,000 in 1899 to \$123,-100,000 in 1914. The production of commercial glass and pottery was concentrated in five nations: Germany led in scientific ware; England in artistic glassware and France in artistic pottery; the United States and Germany in sanitary porcelain and electric light bulbs; and the United States, Germany and Belgium in plate glass. Germany in particular made important contributions to the development of optical glass and of porcelain products for the use of the chemical and electrical industries.

The growth in the output of glass and pottery in the nineteenth century was bound up with the development of clay manufactures and with the general expansion of markets and industry. Demand was stimulated by rising standards of living, supplemented in Europe by intensive development of export markets. A whole series of new industries created new needs for glass and pottery, particularly the electrical industry with its demand for electric light bulbs and porcelain fixtures. The growth of cities stimulated the demand for window glass and sanitary porcelain. In the case of glass, however, the most important single factor was the introduction of new technical methods, particularly in the United States, which increased productivity to an extent equaled in few other industries.

Once given an impetus through the successful

application of the Siemens furnace and the continuous tank the glass industry rushed through all the stages of development from an almost 100 percent hand to a completely mechanized state, in the amazingly brief period of less than a quarter of a century. In 1899 the census reported only a few experimental attempts to blow bottles by the machine process. Twenty-five years later the glass industry had not only completely left behind the hand process of making glassware, but had also replaced with a more modern and automatic type of machine several types of machines which had taken the place of the skilled glassworkers. The semi-automatic machine first replaced the blower with a machine operator but still retained the gatherer and the presser. The Owens automatic machine and later also the "feed and flow" devices displaced all the skilled glassworkers, formerly used in the hand unit known as the "shop" or the "chair."

The development of machinery has not proceeded uniformly in all branches of the glass industry. Bottles and jars were the first to be affected by the machine process, and in this branch of the industry the development of automatic machinery went further than in any other glass product. Prior to the introduction of the machine process a hand shop consisting of three skilled workers -- two blowers and one finisher--and four helpers could produce under normal conditions 30 gross of four-ounce prescription ovals during the regular working shift of eight hours. This amounts to 3.75 gross per shop hour, or .536 gross per man per hour. In 1925 the Owens automatic ten arm double triplex machine (sixty bottles per revolution) with an automatic conveyor attended by two machine operators and one machine foreman for each machine and one chief foreman for six machines averaged 69.75 gross of the same type of bottle per machine per hour. This amounts to 22.03 gross per man per hour, or more than 4100 times as much as with the hand process. The increase in productivity per man per hour shown in other articles ranges from 642 percent to 4009.8 percent in bottles and jars, from 391 to 1128.1 percent in pressed ware and from 42.3 to 3042.6 percent in blown ware. In window glass the increase in productivity is 128.4 percent in glass of double strength and 161.4 percent for single strength; in plate glass the increase in productivity is 45 percent for rough plate and 60.5 percent for polished glass.

Such a revolutionary change in productivity and in labor cost of producing glassware caused

by the introduction of machinery in the industry tremendously affected its economic and social structure. In 1899 the entire glass industry comprised 355 establishments employing 52,818 wage earners, or an average of 149 per establishment; in 1929 there were only 267 establishments employing 71,416 wage earners, or an average of 267 per establishment. But the figures for the industry as a whole do not tell the story of what happened in the separate branches, as the effects of the introduction of machinery have not been the same in the four principal divisions. In bottles and jars the general adoption of automatic machinery resulted not only in a diminution of the number of plants and wage earners in the industry but also in a decrease of the average number of wage earners per establishment. Fewer workers are seen in a large up to date machine bottle plant than in a small hand plant. In the pressed and blown ware the automatic machine has so far invaded only a small section of the industry, and the growth in this branch has therefore resulted in an increase in the number of plants and wage earners as well as in the average number of workers per establishment. In the window glass branch the predominance of the cylinder machine process cut the number of establishments by more than half, somewhat diminished the total number of wage earners and increased the average number of workers per plant nearly one and one third times. In plate glass, which until very recently witnessed no revolutionary changes, the growth of the industry more than tripled the number of wage earners used and nearly tripled the average number of workers per establishment.

The total number of workers employed and the average number per establishment cannot, however, be used as an indication of the change in the size of the establishment. A better means of measuring the change may be found in the quantity output per establishment, which in 1925 was 4.1 times as much as in 1899 in the case of bottles and jars; 3.7 times in the case of pressed and blown glass; 6.2 times in window glass; and 5.9 times in plate glass.

Another important result of the introduction of machinery is the disappearance of the smaller type of plant and the concentration of the industry in the larger establishments. In 1904 out of a total of 399 establishments 164, or 41.1 percent of the total, were of the type with a yearly output of less than \$100,000; and only five establishments, or 1.3 percent of the total, had a yearly output of more than \$1,000,000. In 1925 out of

a total of 310 establishments only 49 plants produced an output of less than \$100,000; and 83 plants, or 26.8 percent of the total, had a yearly output of more than \$1,000,000. Even more striking than the number of establishments in these two groups is their total value of output. In 1904 the 164 plants in the lower group reported a combined output of \$8,341,000, or 10.5 percent of the total value of the output for the entire industry. In 1925 the 49 establishments in the lower group reported an output of \$2,-652,000, or less than I percent of the total value of the output. In 1904 the five establishments in the million dollar group produced 11.3 percent of the total output, while in 1925 the 83 establishments in the million dollar group produced 72.5 percent of the total value of the output of the entire industry.

Prior to the introduction of machinery the glass industry was predominantly a small unit industry. The amount of capital needed for a plant was comparatively negligible and the principal items for expenditure were fuel and skilled labor. A cheaper rate on coal or natural gas was sufficient inducement for the removal of a glass plant from one locality to another and from state to state. The history of the discovery of natural gas in Pennsylvania, Indiana, West Virginia and Oklahoma also tells the story of the migration of the glass industry to and from these states. With the advent of machinery the situation changed completely. Fuel is still a very large item in the cost of production of glass and is still considered the principal factor determining the site of a new glass establishment. But once the plant is built, the capital outlay on the building, the furnaces and the machines prevents the moving of the establishment irrespective of the cost of fuel. With the increase in the size of the plant and in the use of machinery the advantages of large scale production were brought into play, with the result that in the short span of twenty-five years the glass industry has been converted from a small and loosely connected industry into a large and well integrated one.

The glass industry is on the whole dominated by a few large corporations in spite of the many small shops. The Pittsburgh Plate Glass Company, manufacturing all kinds of window glass as well as paints, varnishes and safety glass, had assets in 1930 of \$99,605,000. The Owen-Illinois Glass Company, organized in 1903 as the Owens Bottle Machine Company, had assets of \$46,311,000; it is the largest manufacturer of bottles in the world as well as of bottling machines, the

patents of which it controls; it has practically a monopoly position and has paid unusually high dividends.

Machinery has not played so important a part in pottery as in the glass industry, but its influence is growing. Power driven machinery is in general use, and specialization is increasing. A considerable amount of up to date equipment and of labor saving devices are now used in preparing the slip and in firing the ware, and large quantities of sanitary porcelain are made by the casting process. This process secures the formation of the clay by pouring it into molds and removing it when the articles have dried. Nevertheless, pottery is still an industry in which manual dexterity is important; even in the casting of sanitary ware, which comes closest to an automatic process of production, there is still need for some skilled workers to handle the product. In the shop proper the potter's wheel, the jigger, the jolly and the potter's lathe constitute the sum total of machinery used in the actual making of pottery. The slip makers, jiggermen, pressers, kiln men, dippers, decorators and others, all highly skilled artisans, still occupy the most vital positions in the pottery industry. This accounts for the fact that wages of the pottery workers constitute the largest item of expenditure in the manufacturing of earthenware and china. In 1899 the census reported 1000 establishments producing pottery, terra cotta and fire clay products; the 43,714 wage earners employed received in wages \$17,692,-000, which constitutes 54.7 percent of the total value of \$32,348,000 added by manufacturing. In 1929 the preliminary census report gives 307 establishments producing pottery and sanitary ware only; the 34,958 wage earners employed received in wages \$43,365,000, which constitutes 53.2 percent of the total value of \$81,620,-000 added by manufacturing, compared with an average of 36 percent for manufacturing as a whole. Thus more than 50 percent of the total value added by manufacture in the pottery industry is paid out in wages.

In spite of differences in the extent of mechanization the average yearly earnings of glass and pottery workers in 1929 were almost the same—\$1259 and \$1240 respectively: in both cases below the average of \$1300 for manufacturing industries as a whole. While skill is still required of pottery workers, it appears that manual dexterity among the majority is of the unskilled kind.

A comparison of rates of wages in the glass

industry between 1899 and 1929 is of no significance, because the nature of the work done and the kinds of labor used in the two years were entirely different. Thirty years ago the majority of workers employed in the glass industry consisted of highly skilled blowers, pressers, finishers and the like. By now only a small percentage of skilled labor has been retained, and the new class of glassworkers requires little if any preliminary training in handling the machines. In 1899 all skilled workers were paid on a piecework basis, while now the overwhelming majority of the workers are paid on a time basis—by the hour, week or month. It is possible, however, to compare yearly earnings. In 1899 the 52,818 wage earners in the industry received a total wage of \$27,084,000, an average of \$512 per wage earner per year. In 1929 the yearly average was \$1250, or nearly two and one half times as much as in 1899. But in spite of this increase in money wages the trend of real earnings, with 1914 as a base, has been downward. In 1904 real earnings were 21 percent above those of 1914, while in 1919 they were 5.4 percent lower than in 1914. Since then the trend has been upward, but real earnings are still not so high as in 1904 or 1899.

The transition from the hand to the machine process in the glass industry exerted a tremendous influence on the trade union movement in the industry. From 1904 to the present time the records of the labor organizations in the industry tell the story of an endless struggle of organized labor to ward off the effects of the machine, which threatened the very existence of their organizations. Until recently the three major unions in the industry were the National Window Glass Workers, the Glass Bottle Blowers' Association for workers on bottles and jars and the American Flint Glass Workers' Union for pressed and blown ware. The attitudes of these organizations toward the machine have not been the same, and the results of their struggles against its invasion have proved to be very different. The National Window Glass Workers, in spite of the inroads of machinery on the hand plants, particularly the cylinder drawing machine, refused to recognize the significance of machinery and decreed that any member working in a machine plant automatically suspended himself from membership in the union. The rule was finally eliminated at the last convention of the union held in Cleveland in May, 1927. At the same time the union also decided to enter upon an effective campaign to organize the machine plants in order to retain their membership. But the change of heart came too late; and when the campaign to organize the machine plants failed, the executive board of the union met in June, 1928, and formally disbanded the organization. With the disappearance of this union there disappeared one of the most highly skilled and highly paid group of artisans. Not hampered by any progress in the industry and conscious of their skill and power, the window glassworkers had successfully developed the policy of confining their trade to a small group of workers and their families. No one but the nearest kin of a blower or gatherer could ever become an apprentice to either, and the number of apprentices in the trade had been strictly limited. With this policy also went the rigid rule of strict limitation of output on the part of the workers. It was this situation as much as the natural trend of progress which probably hastened the advance of machinery in the making of window glass, resulting in the complete elimination of hand production.

The bottle blowers' and the flint glassworkers' organizations did not declare open warfare on the machine. From the very beginning their method of struggle had been an attempt to adapt themselves to it and to keep their organizations intact by retaining jurisdiction over the machine operators. In 1914 the bottle blowers went so far as to change their constitution from a craft to an industrial form of organization and proceeded to organize within their fold the unskilled trades, such as glass packers, batch workers and others. Unquestionably this attitude toward the machine on the part of the two unions saved their organizations from sharing the fate of their brothers in the window glass trade. Although not unscathed and with a considerable diminution in prestige and in the ranks of their membership, the two organizations have managed to survive a succession of invasions by machines such as no other trade has experienced in recent years.

If the machine has worked havoc among the glassworkers and their organizations it has not been without its salutary effects in other directions. This is particularly true in the case of child labor. Prior to the introduction of machinery the glass industry was one of the greatest exploiters of child labor. This was especially the situation in the bottle and pressed and blown ware branches, for very few children had been employed in the making of window glass and none in plate glass. In 1899 of the total of 40,916

wage earners employed in making bottles and pressed and blown ware 7035, or 17.2 percent, were minors under the age of sixteen. With the introduction of machinery the child labor situation changed. The mold boys, the cleaning off boys and the snapping up boys were at once dispensed with even in the case of the cruder, semi-automatic machines. The job of "carry-in boys" was retained for some time, but the introduction of the Owens automatic machine with its automatic conveyor completely eliminated all the work formerly done by minors. Although considerable credit for the reduction in the number of children employed in the glass industry is due to the pressure of social legislation which marked the first quarter of this century, it was the automatic machine which contributed more than all other factors combined to the climination of child labor from the glass industry.

The early history of unionism in the pottery industry was stormy. The employers refused to recognize the potters' union organized in the Knights of Labor, and in 1882 it was put on the black list and all men known to be members of the organization were locked out from the shops of East Liverpool. From 1882 to 1897 the pottery industry was in a constant state of agitation because of ceaseless warfare between the manufacturers and their employees. In 1890 the National Brotherhood of Operative Potters was organized in East Liverpool with a membership of 200. This organization was independent of the Knights of Labor and in 1899 received its charter from the American Federation of Labor. It was not, however, until 1900 that the pottery workers' union was officially recognized by the United States Potters' Association and an agreement concluded between the two organizations, inaugurating a system of collective bargaining which made the pottery industry famous as a sample of industrial self-government established by mutual agreement between capital and labor The principal points of this agreement were: the establishment of regular procedure for the regulation of rates of wages, hours of work and other labor conditions by means of biennial agreements prepared by a permanent labor committee with equal representation from both organizations; the adoption of a uniform wage rate list for the entire industry; and the adoption of specific rules pertaining to strikes and lockouts, regulation of apprenticeship, sanitary and health conditions and the like. This agreement established peace in the industry, and for more than twenty years the pottery industry did not have

a single strike or other labor disturbance. The rapid introduction of the casting process in making sanitary ware was chiefly responsible for the strike which occurred in 1922. The strike was lost by the workers and was officially called off in 1923; the employers agreed to employ such union men as they could find room for at a general reduction of 10 percent in the wages prevailing before the strike.

Although collective bargaining has been retained, the power and prestige of the workers' organization have been greatly reduced. In 1928 the brotherhood reported only 6900 members, which is less than 20 percent of the total number of wage earners in the industry in 1927. The pottery workers' union is strictly a craft organization and is limited to skilled workers only; it completely ignores the semiskilled and unskilled workers employed in the industry.

From the point of view of the health of the workers the production of pottery ware may be classified as a hazardous industry. The causes which are responsible for the prevalence of occupational diseases among the pottery workers are traceable to dust and to lead poisoning. The former pervades all the processes wherein potters' clay and flint dust are in use. The dangers of silicosis and lead poisoning in the pottery industry were early recognized by the Home Office of Great Britain, which from time to time issued regulations aiming to minimize these dangers. As a result of this campaign the Home Office reported only 47 cases of lead poisoning among the pottery workers in 1924 as against 200 in 1900. In the United States an exhaustive study of lead poisoning in the pottery industry was made in 1911 by Dr. Alice Hamilton, whose complete survey was published as Bulletin no. 104 of the United States Bureau of Labor, A more recent study was made by the United States Public Health Service and published in 1921. Both reports call attention to the existence of unsatisfactory conditions in a large number of pottery shops; little or no precautions are taken to protect the workers against the dangers of silicosis and poisoning from lead glazes. The American pottery manufacturers are inclined to use larger percentages of lead in the preparation of their glazes, yet very little or no instruction is given to the workers concerning the hazards of their work or the habits they should form as precautions against lead poisoning. In 1911 the Brotherhood of Operative Potters introduced a system of limited death benefits for their membership, because the insurance companies were

charging very high rates on account of the hazards to the pottery workers. In 1913 the brother-hood also organized a tuberculosis fund, in the management and operation of which the United States Potters' Association later joined by adding an endowment of its own. There has, however, been some improvement; according to brother-hood reports the average age of deceased potters in 1915 was 41.33 years compared with 55 years in 1928, while the proportion of deaths from tuberculosis declined from third to one eighth.

Industrial hazards in the glass industry are considerable. The workers inhale poisonous and irritating dusts while mixing the batch, aggravated by the danger of silicosis from silica. There is much danger from the intense heat, smoke and gases from the furnaces, while the glare produces eyestrain. The tuberculosis rate is high. Lead poisoning occurs from the use of paints in shops making decorated ware. In 1925 the accident severity rate involving permanent disability was 1.00 compared with the general average of 1.20 and higher than the average for accidents involving temporary disability. In recent years there has been an influx of women and children into the industry, particularly in cut glass shops, where they work over steel wheels and are exposed to the dangers of speed up, stooping positions and nervous tension as well as to the danger from fumes and burns due to the considerable use of hydrofluoric acid.

As has been previously stated, the commercial production of glass and pottery in 1914 was concentrated in five nations. The World War changed the situation completely. German exports of chemical, scientific and optical wares were cut off and the Allies compelled to manufacture their own supply. Imports by the United States almost ceased, while exports increased tenfold. Factories were built in Latin America, Australia, China and Japan; the last named country in particular organized its glass and pottery industries on an export basis and struggled aggressively for foreign markets. After the war Czechoslovakia became an important factor in foreign trade; intense specialization and the most modern technique prevail alongside of small shops and home work in certain branches, and most of the product is exported. Czechoslovakia is the only country in which glass and pottery exports are an important factor in the national economy. Germany in 1929 imported \$8,500,000 of glass products and exported \$60,-250,000; it imported \$3,900,000 of pottery prod.

ucts and exported \$35,700,000. In the same year Great Britain imported \$32,000,000 of glass products and exported \$11,000,000; it imported \$11,600,000 of pottery products and exported \$30,600,000. Over one half of British exports go to the dominions, while the bulk of German exports go to other European countries. All the chief producing countries adopted modern machinery and plant capacity was overdeveloped, leading to the raising of tariffs and attempts to control export prices, such as the Belgian machine glass cartel. Another cartel of European plate glass manufacturers has successfully stabilized prices and limited output. In the United States both the glass and pottery industries have had the benefit of heavy tariff protection.

Glass and pottery production in the United States since 1914 has more than doubled. The value of glass products rose from \$123,100,000 to \$283,921,000 in 1929, and of pottery from \$36,-900,000 to \$108,131,000. The most important items in pottery were: white ware, \$31,568,000; vitreous china or porcelain fixtures, \$27,886,000; porcelain electrical supplies, \$21,349,000; hotel china, \$11,081,000; art pottery, \$2,211,000. Plate glass, valued at \$51,840,000, was the most important glass product; medicinal and toilet containers, \$32,670,000; bulbs for electric lamps, \$30,758,000; other electric and gas goods, \$9,-438,000. The chief factors in the growth of the glass and pottery industries were rising standards of living, the increase in building construction and the expansion of the automobile industry. Exports and imports, while higher than in 1914, remained fairly constant between 1926 and 1929. Exports of glass products in 1929 amounted to \$10,931,000 and imports to \$13,-993,000, and of pottery to \$5,159,000 and \$18,-803,000 respectively. The imports consisted largely of decorated china, porcelain and glasswares—the more artistic products which were once the staple of the glass and pottery crafts.

BORIS STERN

See: POTTERY; INDUSTRIAL ARTS; HANDICRAFT; LO-CALIZATION OF INDUSTRY; INDUSTRIAL HAZARDS; CHILD, section on CHILD LABOR; TRADE UNIONS; SANITATION.

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GLASSON, ERNEST DESIRE (1839–1907), French jurist. Glasson studied at Strasbourg under Aubry and Rau, the celebrated commen tators upon the French civil code. At the University of Nancy he held the chair of Roman law and at the University of Paris that of civil procedure. His lectures were clear, full of life and interest; enriched by his knowledge of English procedure and of the services it had rendered

to the development of substantial law in that country, he was able to make even the subject of procedure attractive. At the Ecole Libre des Sciences Politiques he also lectured on comparative legislation, and Taine came to hear him. Glasson's two chief works are his Histoire du droit et des institutions politiques, civiles et judiciaires de l'Angleterre comparées au droit et aux institutions de la France depuis leur origine jusqu'à nos jours (6 vols., Paris 1882-83) and Histoire du droit et des institutions de la France (8 vols., Paris 1887-1903). Other essays confirmed his reputation, notably Etude historique sur la clameur de haro (Paris 1888). A truly encyclopaedic mind, Glasson contributed to the spread in France of a taste for comparative studies and of an interest in Anglo-Saxon institutions. He was a great admirer of British traditionalism and the historic evolution of English law yet preferred the clear and systematic synthesis of legal currents which had formed French law. Although transcended by later publications his work still remains noteworthy.

HENRI LÉVY-ULLMANN

Other important works: Étude sur Gaïus (Paris 1867, new ed. 1885); Étude sur les donations à cause de mort (Paris 1870); Le mariage civil et le divorce (Paris 1879, 2nd ed. 1880); Le code civil et la question ouvrière (Paris 1886); La réforme de la procédure civile en France (Paris 1887).

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HUNTINGTON GLEASON, ARTHUR (1878-1923), American publicist. After graduating from Yale, Gleason shared, notably as one of the editors of Collier's Weekly, in the part the American periodical was playing in the civic ferment of the times. He served in the World War and for six years was close to the struggle, writing first of the men in the trenches and then of the peoples under the stress of war and reconstruction. The first of his three books on England, Inside the British Isles (New York 1917), portrayed how a loosely united empire organized for conflict. The later volumes, British Labor and the War (with Paul U. Kellogg, New York 1919) and What the Workers Want (New York 1920), traced the new economic tendencies in the older English political idealism. The entire trilogy interpreted the emergence of British labor in the midst of the World War in the light of a workers' movement as significant for democracy as was the rise of the middle classes a

century before at the close of the Napoleonic conflict. In the idea of production for use and of work for service he saw a changing basis of civilization. His disparaged prophecies of the rise of the British Labour party were realized and at his death Premier MacDonald recognized him as its outstanding interpreter in America. Upon his return to the United States he dealt with economic, racial and religious cleavages underlying the surface of post-war prosperity. He had previously had a hand in the inception of the American cooperative movement, the League for Industrial Democracy and the Foreign Policy Association; now he did pioneer work in workers' education and in helping to formulate a miners' program for nationalizing the coal industry. His personal contacts and his writings had creative influence because of the incandescent simplicity with which he handled truths that men might take to heart and because of a poet's genius for crystallizing what they vaguely strive for.

PAUL U. KELLOGG

Consult: Gleason, Helen Hayes, The Book of Arthur Gleason (New York 1929).

GLOSSATORS. The glossators were a famous school of Italian jurists, whose creative work at Bologna was done between the early part of the twelfth and the middle of the thirteenth century. During the early Middle Ages legal studies in the west had never been completely abandoned and gradually old schools were revivified and new schools established. Pavia became the chief school of Lombard law; while for the study of Roman law Ravenna and Bologna were the main centers. Odofred, the Bolognese jurist, writes that the success of the school of Roman law at Ravenna was due to its use of Justinian's law books and that at a later time Bologna's eminence was equally caused by its possession of these manuscripts, which had been transferred thither from Ravenna. Other factors, such as its central geographical position in a region favorable to the spirit of renaissance, its judicial and commercial importance and its enjoyment of political influences friendly to legal studies, also furthered the rise of Bologna as the most illustrious of all the mediaeval Italian law schools; but the chief cause was the genius, the scientific method and the achievement of its teachers, the glossators. Assimilating and adapting the main traditions of east and west in scholarship and education and at the same time combining these elements with the aims and methods of the contemporary Renaissance movement, the glossators not only laid the foundations of a European legal science but influenced the spread of Roman law in all the regions of Germanic and feudal custom.

The method of the gloss, or textual interpretation, followed by the Bolognese school of glossators, had already been employed in the study of Lombard and Roman legal texts. The main achievement of the Bolognese glossators was the application of this method for the first time in history to the texts of the Justinianian codification; the work of interpreting these texts by the glossatorial method gave the school both its name and its unique position in the history of legal science.

When the school was in its beginnings there was special need of literal interpretation as a means of arriving at a correct text of each one of the several parts of Justinian's legislation, the Digest, Institutes, Codex and Novellae. There existed, for example, several texts or readings of the Digest known as literae; the manuscripts of the Digest earlier than the famous Pisan manuscript or differing from it were called the Litera vetus (Litera communis, Litera antiqua). The Pisan manuscript itself was known as the Litera pisana, while a composite text, formed by a collation of all the other texts for school use at Bologna, was known to the glossators as the Litera vulgata.

The glossators regarded the several portions of Justinian's codification as an entirety and treated these texts as forming with certain other legal sources, to be mentioned presently, the Corpus juris civilis. In studying manuscripts of the Digest they employed a threefold division of its contents: the Digestum vetus to book xxiv, title 2; the Infortiatum from the Digestum vetus to the end of book xxxviii; and the Digestum novum containing book xxxix to book 1 inclusive. They distributed the matters of the Corpus juris civilis into five volumes. In the first three volumes they placed the three parts of the Digest formed in the manner already explained and in the fourth volume the first nine of the twelve books of the Codex. The fifth volume contained all the remaining portions of the Corpus juris civilis, some of which were Justinianian, namely, the Institutes, the Novellae in Latin (Authenticum) and the remaining three books of the Codex (Tres libri); and some of later date, namely, the text of the Lombard feudal law (Liber feudorum) and several laws of the emperors Frederick I, Frederick II and Conrad.

As applied to the Digest and also to the other parts of the Justinianian codification the gloss was at first only a short interpretation or explanation of difficult single words in terms of an equivalent; this explanation was placed above the word between the lines and was called an interlinear gloss. In the hands of the jurists the gloss assumed, however, a second form, the marginal gloss; for when the gloss was an explanation of a passage, an entire lex or a legal principle embodied in the text it was placed on the margin. To each gloss, whether interlinear or marginal, the jurist affixed his initials or some other mark of identity; and as the work of the school progressed the gloss became increasingly elaborate and lost much of its original signification. The gloss not only embodied critical notes on the variant readings (variantia) of different manuscripts (*literae*), but in order to elucidate a particular point it brought together parallel passages (loci paralleli); and when these passages were in conflict (antinomia) it sought either to reconcile them or to choose the preferable one. Becoming more and more the exposition of the results of the master's researches the gloss finally developed into a genuine commentary with all its proper appurtenances and variations. It not only took the forms of a summary (summa) and the stating of illustrative cases (casus) but it also became the deduction of a genuine maxim (brocardus) and the discussion of concrete legal problems (quaestiones).

The beginnings of the glossatorial school at Bologna date from the end of the eleventh or the first years of the twelfth century. Although Pepo, a Pisan jurist who had migrated to Bologna, was the first of the glossators, the true founder of the school was Irnerius (q, v). Irnerius combined in his teaching both theory and practise and moreover covered in his glosses the whole field of the Justinianian texts. He was followed by Bulgarus, Martinus, Jacobus and Hugo, the famous Four Doctors (q. v.), whose labors constituted perhaps the most brilliant stage in the history of the school. Johannes Bassianus and Rogerius were pupils of Bulgarus and were the teachers of Azo (q. v.) and Hugolinus. Azo rose into a position of the highest authority. His Summae of the Institutes and the Codex superseded all similar productions of the school. In legal studies it was treated as being quite as essential as the text of the Corpus juris civilis itself, while in the realm of practise it acquired an equal fame. Azo's eminence was recognized throughout Europe. Bracton has derived from

Azo's works some of those jurisprudential ideas which helped him in the writing of the greatest mediaeval treatise on the laws and customs of the realm of England. Various other distinguished jurists belonged to the school of the glossators and contributed to the growing mass of its literary productions; among them were Placentinus, Vacarius (q. v.), Burgundio, Carolus of Tocco and Roffredus of Benevento. The last of the prominent glossators, Accursius (q. v.), is also the most famous of them all. The gloss of Accursius, which as the Accursiana or Ordinaria was distinguished from all the other glosses produced by the school, demands special notice.

At the time when the school had its beginnings the intent of the glossators had been to base study and practise upon the texts of Justinian's codification as the primary and pure sources of the Roman law; and the gloss was regarded therefore as being merely an interpretation and elucidation of them. During the progress of the work of the school, however, this original policy was largely displaced by the growth of a vast glossatorial literature in which the sources of the pure Justinianian law were increasingly adapted to the current practise of the courts. In the wealth of its details and even more in the variety of the juristic opinions which it embodied the accumulated glossatorial learning of a century and a half became, however, confusing not only to practitioners and judges but also to students and teachers; they found it difficult and often impossible to make their way through the complicated maze which generations of scholars had established. What was needed therefore was a comprehensive and orderly collection of glosses in which the whole mass should be clarified by a master's hand; this was the great achievement of Accursius. The Accursiana supplanted in the schools and in the courts alike all the other glosses; and within the province of jurisprudence it represented in fact the whole meaning of the Bolognese school. The gloss of Accursius was held by the courts to be the law itself, a proof that the glossatorial school having accomplished its work was already in process of decline; and a clear indication that the pure Roman law had been displaced by a mediaeval civil law which although based on the Roman embodied also other elements derived from the legal development of the centuries that had passed since the time of Justinian. In the time of Irnerius the glossatorial school represented the science of the pure Roman law; in the

hands of Accursius the work of the school meant that this scientific treatment of the Justinianian texts had yielded place to the exigencies of thirteenth century practise. The time had come for the emergence of a new juristic method that would give new life to the study of law and at the same time, basing itself upon the requirements of practise, take fully into account not only the Roman law itself but also the manifold legal growths of the Middle Ages, such as feudal and town laws and the ever growing body of canonical law. At the very time when the Accursiana was still in its ascendancy a new school of jurists began slowly to displace the glossators. The rise of the school of the commentators was in large measure a reaction against the authority of the Accursian gloss. Although they followed a method essentially different from that of their predecessors the commentators, or Bartolists, based their work in part on the accumulated learning to be found not only in the Accursiana but also in the writings of the other great glossators. During the latter part of the fifteenth and in the sixteenth century when the Renaissance jurists, such as Zasius and Cujas, came into prominence they recognized the contribution which the glossators had made to an understanding of the texts in the Corpus juris civilis; and although the legal humanists of the Renaissance epoch, studying the Roman texts in the light of philology and history, made notable advances in the science of the pure Roman law, their work and also the work of later civilians was based in many respects upon the pioneer textual studies of the glossators.

Although the term glossators is applied primarily to the civilians, the work of the canonist glossators not less than that of the civilian school of Irnerius formed an important feature of the revival of juristic studies at Bologna and other Italian schools. The Italian school of glossators therefore included, in its widest meaning, the magistri who glossed the several canonical texts. After the appearance of Gratian's Decretum (c. 1139-41) and Gregory 1x's decretals in 1234 canonists glossed these and the other texts that were finally embodied in the Corpus juris canonici. Moreover, the canonist writings like the civilian gloss gradually expanded into several distinct types of legal literature, represented, for example, by the glossa ordinaria on each of the several texts, such as the Decretum, and by systematic Summae. Thus the gloss of Johannes Teutonicus, completed by Bartholomaeus Brixiensis, became the Glossa ordinaria decreti; while the Glossa ordinaria on the decretals of Gregory IX was written by Bernardus Parmensis.

The writings of the civilian glossators, which covered the whole field of law, embodied many jurisprudential and political theories that have had in all subsequent ages an important influence on thought. These theories, based partly on the Roman texts and partly on mediaeval sources of law, contained elements also of the original thought of the glossators themselves. Each one of the principal theories, as, for example, those in regard to the nature of law and justice, the relation of jus to aequitas and justitia, the meaning of jus naturale, the source of political authority, and the relations between the ecclesiastical and secular powers, was the result of the study and reflection of successive generations of civilian glossators. The civilians derived some of their ideas from the canonists, while the canonists owed a heavy debt to the store of juridical and political thought contained in the ever expanding body of civilian glosses. Many theories, based on Roman legal texts and then expanded or modified by the glossators, were carried to a further stage of elaboration by the canonists; while in later times through the commentators and the jurists of the Renaissance these same theories were frequently adapted to meet changed conditions of legal and political life. Of this process in the development of doctrine the Romano-canonical theory of the juristic person, the corporation, is a striking illustration.

The revival of juristic studies in the schools of northern Italy and southern France, but chiefly at Bologna, was one of the momentous aspects of that mediaeval revival of Latin culture, the lesser Renaissance, which culminated in Dante. By their intensive and scholarly study of the Justinianian texts the glossators effected a salvage of one of the most essential elements of ancient Latin civilization; and their influence as teachers of the Roman system of law spread throughout Europe, leading to the establishment of glossatorial schools in many countries, as, for example, at Oxford and Cambridge. This cultural prestige of the Bolognese glossators influenced the judges and legislators of European communities; and, in fact, it was the civilian glossators from Irnerius to Accursius, assisted by contemporary canonists who were glossing ecclesiastical texts based partly on Roman legal conceptions, who set in motion that extensive reception of Roman and canon law which so largely colors the legal history of Europe during the later Middle Ages. The revival of the study

of Roman law by the glossators of the twelfth and thirteenth centuries not only inspired the reception in Europe as a whole but gave to many legal systems long before the close of the mediaeval era a marked and permanent Romanic character. The glossators were a vital legal force not alone in their own time but also, through the widespread influence of their writings, in the ages that followed.

H. D. HAZELTINE

See: ROMAN LAW; CANON LAW; CORPUS JURIS CIVILIS; COMMENTATORS; FOUR DOCTORS; LEGAL EDUCATION.

Consult: Savigny, F. C. von, Geschichte des römischen Rechts im Mittelalter, 7 vols. (2nd ed. Heidelberg 1834-51) vols. iii-v; Fitting, Hermann, Die Anfänge der Rechtsschule zu Bologna (Berlin 1888); Chiappelli, Luigi, Lo studio bolognese (Pistoia 1888); Hazeltine, H. D., "Roman and Canon Law in the Middle Ages" in Cambridge Medieval History, vol. v (Cambridge, Eng. 1926) p. 729-43; Association of American Law Schools, A General Survey of . . . Continental Legal History, Continental Legal History series, vol. i (Boston 1912) p. 128-42; Pertile, A., Storia del diritto italiano, 6 vols. (2nd ed. Turin 1892-1902) vol. ii, pt. ii, p. 35-63; Ficker, Julius, Forschungen zur Reichs- und Rechtsgeschichte Italiens, 4 vols. (Innsbruck 1868-74) vol. iii, p. 135-49; Kruger, Paul, Geschichte der Quellen und Litteratur des römischen Rechts (2nd ed. Munich 1912) sects. 50-53; Carlyle, R. W. and A. J., History of Mediaeval Political Theory in the West, vol. i-v (Edinburgh 1903-28) vol. ii. Consult also bibliographies following articles on individual glossators.

GNEIST, RUDOLPH VON (1816-95), German jurist. Gneist belongs to the universal jurists of the nineteenth century. In his youth he was very much influenced by Savigny and by the romantic school, from which he inherited the idea of the law as a living force and part of the moral order of the universe. Gneist's career as jurist, judge, administrator and political reformer was confined to Prussia. But through extensive travels in Italy, France, England and the United States he gained a profound insight into the structure of foreign legal institutions. This was particularly true of England, to whose constitutional history and government he devoted most of his chief works. Indeed, he practically rediscovered English political institutions for the European continent; he investigated the problems of English administrative law before there was any general awareness that such a body of law existed in England.

Together with the historical school, Gneist conceived law to be undergoing perpetual change. Since his main interest lay in reform he became a legal publicist in every field, and his participation in politics and administration made it possible for him to put his ideas as a moderate Prussian liberal into immediate action. Particularly in the field of Prussian administrative reform his ideas were epoch making for the development of self-government and the building of the constitutional state (Rechtsstaat). By the constitutional state Gneist meant one in which the administration was duly subjected to law and in particular judicial independence maintained; thus he urged administrative courts which, while they should be integral parts of the administration, should nevertheless be entirely independent, at least in the higher instances. By self-government Gneist meant the old English form of government under which the business of administration was discharged by local honorary officeholders. But this "selfgovernment" was not local government because it was integrated in a central administration under the supremacy of Parliament. The failure to achieve this integration was Gneist's explanation of the failure of parliamentary government upon the continent. Gneist held the life of the state to depend upon the personal service of its citizens. Only thus could a bridge be thrown from the state to society, which Gneist, like Lorenz von Stein and under the influence of the Hegelian philosophy of history, saw in unrelaxing tension.

ERNST VON HIPPEL

Important works: Die Bildung der Geschworenengerichte in Deutschland (Berlin 1849); Das heutige englische Verfassungs- und Verwaltungsrecht, 2 vols. (Berlin 1857-63), 3rd ed. of vol. i separately published as Das englische Verwaltungsrecht der Gegenwart in Vergleichung mit den deutschen Verwaltungssystemen, 2 vols. (Berlin 1883-84), 3rd ed. of vol. ii as Selfgovernment; Kommunalverfassung und Verwaltungsgerichte in England (Berlin 1871); Der Rechtsstaat und die Verwaltungsgerichte in Deutschland (Berlin 1872, 2nd ed. 1879); Englische Verfassungsgeschichte (Berlin 1882), tr. by P. A. Ashworth, 2 vols. (2nd ed. London 1889); Das englische Parlament in tausendjährigen Wandlungen vom 9. bis zum Ende des 19. Jahrhunderts (Berlin 1886), tr. by A. H. Keane (4th ed. London 1895).

Consult: Walcker, Karl, Rudolf von Gneist, Deutsche Denker, vol. i (Berlin 1888); Gierke, Otto von, Rudolf von Gneist: Gedächtnisrede (Berlin 1896); Bornhak, Conrad, in Archiv des öffentlichen Rechts, vol. xi (1895-96) i-xix; Hatscheck, Julius, in Allgemeine deutsche Biographie, vol. xlix (Leipsic 1904) p. 403-13; Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 963-75; Redlich, Josef, Englische Lokalvervaaltung (Leipsic 1901) p. 743-96, 806-23;

Schiffer, Eugen, Rudolph von Gneist (Berlin 1929); Smith, Munroe, A General View of European Legal History (New York 1927) p. 111, 215-55.

GOBINEAU, (JOSEPH) ARTHUR DE (1816-82), French publicist. Born of old patrician stock, Gobineau began his career as a royalist journalist. In 1849 he entered the diplomatic service, which took him to Berne, Athens, Rio de Janeiro, Stockholm and Rome. His voluminous works, Les religions et les philosophies dans l'Asie centrale (Paris 1865, 2nd ed. 1866) and Histoire des perses (2 vols., Paris 1869), in which his discovery of Babism was of particular significance, were a product of his travels in the Orient. He attempted a history of civilization in the form of exotic novels and in dramas such as his popular work La renaissance (Paris 1877; tr. by P. V. Cohn, New York 1913). His chief opus, however, is the Essai sur l'inégalité des races humaines (4 vols., Paris 1853-55; 2nd ed., 2 vols., Paris 1884; bk. i tr. by Adrian Collins, London 1915), which he acknowledged to have been written from the point of view of a conservative Catholic as a polemic against the democratic sentiment then surging in Europe. Because of the Germanophilia of its author the book at first received little attention in France; it was through the circle of Richard Wagner in Bayreuth that its theory of the decadence of Teutonism became popular. His race theory was then readily taken up by the nationalists, who found in it a justification of the French nobility against the Third Republic. Gobineau regarded racial intermixture as harmful and he interpreted the passing of the old families and the rise of the middle class and proletarian strata as auguring decadence. He considered the culture of the white races and especially that of the Teutons as superior to that of the other races and ascribed their culture to outward manifestations of superior innate tendencies. He attempted to disprove the idea that the lower races could ever reach a higher level of civilization by maintaining that civilizations are incommunicable and that every race creates a civilization of its own without any outside contact and influence. He found justification for Aryan superiority in ancient Greece and claimed that European history began only with the Teutonic invasion. He encouraged the cult of ancestor worship as a device by which nations can succeed in preserving their racial purity and thus rule the world. Gobineau's theories have been revived and elaborated by Houston Stewart Chamberlain in Germany and by other proponents of Nordic superiority in the United States.

GOTTFRIED SALOMON

Consult: Schemann, Ludwig, Gobineau, 2 vols. (Strasbourg 1913-16); Seilhère, E., La philosophie de l'impérialisme, 4 vols. (Paris 1903-08) vol. i; Dufréchou, A., Gobineau (Paris 1909); Dreyfus, Robert, La vie et les prophétics du comte de Gobineau (Paris 1905); Kretzer, E., Comte de Gobineau (Leipsic 1902); Friedrich, Fritz, Etudes sur Gobineau (Leipsic 1906); Spiess, Camille, Impérialismes (Paris 1917); Hertz, F. O., Rasse und Kultur (3rd ed. Leipsic 1925), tr. by A. S. Levetus and W. Entz (New York 1928) p. 159-62; Sorokin, Pitirim A., Contemporary Sociological Theories (New York 1928) p. 222-29; Hankins, Frank H., The Racial Basis of Civilization (New York 1926) ch. iii; Hone, J. M., "Count Arthur of Gobineau: Race Mystic" in Contemporary Review, vol. civ (1913) 94-103.

GOBLET D'ALVIELLA, EUGÈNE FÉLI-CIEN ALBERT, COMTE (1846-1925), Belgian historian and sociologist of religion. Goblet was born in Brussels, the son of a general and politician, and took doctorates in law and political science at the University of Brussels. He frequently contributed to a score of journals, particularly the Revue des deux mondes and the Revue de l'histoire des religions, and from 1874 to 1890 collaborated with the editors of the Revue de Belgique. He was a member of numerous scientific bodies; in 1894 he became professor and from 1896 to 1898 was rector of the University of Brussels.

When Goblet offered his first course at the University of Brussels only four chairs in European universities were devoted to the scientific study of religions. The new discipline was encountering determined opposition not only from church leaders and proclerical politicians but also from historians and philologists, who disputed its claim to be a science. Goblet insisted that all facts of religious experience are data for science and that the origin and development of religions may be studied without accounting for supposed supernatural influences. He divided the science of religion into hierography, the history of religions; hierology, the psychology of origins and development; and hierosophy, the philosophy of religion. He was especially interested in hierology. At first he supported Tylor's animistic theory of the origin of religion but later, confronted by the complex data of early religions and influenced by C. P. Tiele and Albert Réville, he enlarged the meaning of animism to include necrolatry, spiritism and naturism. In seeking to formulate a law of religious

development he used the comparative method. Although he defended this method he recognized its defects and insisted that final conclusions can be safely made only after considering the findings of all auxiliary sciences— prehistory, ethnography, history, folklore, philology, archaeology, psychology and sociology. Like all scholars in this early phase of the science he defined religion in terms of relation to the supernatural. His Hibbert lectures of 1891 are a good illustration of his method.

He made his scholarly researches the basis of a public religious policy. He urged tolerance, sympathy and understanding among representatives of all religions and cultures and to this end advocated the extension of the teaching of the history of religions throughout the public educational system. He served a number of terms in the Belgian parliament and from 1892 to 1894 was the liberal leader in the Senate.

In 1871 he had won the prize of the Société des Amis de la Paix of Paris for his essay on disarmament. During the World War he conducted an active propaganda to enlist pacifists into the patriotic cause on the ground that a decisive Entente victory was the only way to achieve a lasting peace, and he served in the wartime cabinet.

A. EUSTACE HAYDON

Important works: L'évolution religieuse contemporaine chez les Anglais, les Américains et les Hindous (Paris 1884), tr. by J. Moden (London 1885); Introduction à l'Instoire général des religions (Brussels 1887); Histoire religieuse du feu (Verviers 1887); L'idée de Dieu d'après l'anthropologie et l'histoire (Brussels 1892), tr. by P. H. Wicksteed as Lectures on the Origin and Growth of the Conception of God as Illustrated by Anthropology and History, Hibbert Lectures, 1891 (London 1892, 2nd ed. 1897); La migration des symboles (Paris 1891), English translation (London 1894); Crovances, rites, institutions, 3 vols. (Paris 1911); Désarmer ou déchar, essai sur les relations internationales (Brussels 1872); Le vrai et le faux pacifisme (Paris 1917), English translation (London 1917).

GODEFROY, DENIS and JACQUES, jurists Denis Godefroy (1549–1622) was a Huguenot jurist who in 1580 fled from France to Geneva, where he became a professor of law. After a short unhappy venture into practical affairs as bailiff of several villages he spent the rest of his life as professor of law at Strasbourg and Heidelberg. He was also an editor and commentator of ancient texts. His edition of the *Corpus iuris civilis* (2 vols., Lyons 1583; best ed. Elzevir, 2 vols., Amsterdam 1663) was the first to present Justinian's

law books as a complete typographical entity in the modern form and under their proper name. It displaced the old vulgate text, and if his commentary did ot attain the authority of the Accursian Gloss it was nevertheless highly serviceable for the nex two centuries. Denis was neither a great textual critic nor a great interpreter, but he was extraordinarily industrious in garnering the fruits of the humanist school, then rapidly declining, and he displayed in addition a keen sense of the practical book.

His son Jacques (1587-1652), a faithful Calvinist, remained in Geneva. He was appointed professor of law in 1619 and became a leading citizen, serving four times as syndic. Jacques' fame rests on a work similar to his father's, his posthumously published Codex theodosianus (6 vols., Lyons 1665; improved ed. by J. D. Ritter, 5 vols., Leipsic 1736-43). This work, however, is a masterpiece of historical and legal scholarship, which places its author second only to Cujas. His text has been superseded, but his commentary is still indispensable for the study of the Roman Empire from the third to the sixth century. Although perhaps not a very great jurist he was one of those astounding men cf universal learning whom his period produced. Through thirty years of effort he marshaled all available knowledge of antiquity for the elucidation of the Theodosian code. His other works, which deal with ancient literature, law, history and all branches of theology, are negligible in comparison. He left his mark upon the reconstruction of the Twelve Tables. Among his other important juristic works are Opera iuridica minora (ed. by C. II. Trotz, Leyden 1733; new ed. Paris 1806) and Manuale iuris (Geneva 1654).

F. DE ZULUETA

Consult: Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. i, p. 208-09, 384-89, vol. iii, pt. i, p. 231-32; Godefroy Ménilglaise, D. C. de, Les savants Godefroy (Paris 1873).

GODIN, JEAN BAPTISTE ANDRÉ (1817–88), French social reformer. From his eleventh to his seventeenth year Godin worked in his father's blacksmith shop. Later he became a successful manufacturer of improved heating apparatus, invented and patented a new method of enameling cast iron and became wealthy. About 1842 he became acquainted with the ideas of Fourier and was inspired with the idea of productive cooperation on the model of the pha-

lanstères. When, after the unsuccessful Revolution of 1848, Victor Considérant appealed for means to found a Fourierist colony in Texas, Godin gave 100,000 francs. In 1859 Godin founded a familistère for 1200 persons in Guise (Aisne), which was finished in 1877. In 1882 and 1883 he constructed two similar buildings for 600 persons, each equipped with a cooperative store, children's nursery, school, hospital, dispensary and theater. Health insurance and pension schemes were provided. Later Godin introduced profit sharing and in 1880 concluded a contract admitting the workers to full partnership in what is today a fully cooperative productive society with the largest output of ovens and enamel vessels in France.

Godin was unsuccessful candidate for the Constituent Assembly in 1848, became deputy in 1871, worked for legislation for the protection of women and children and wrote in support of trade unions. Just before his death he began to publish a monthly magazine *Devoir*, continued by his widow.

V. TOTOMIANZ

Important works: Le gouvernement, ce qu'il a éte, ce qu'il doit être (Paris 1883); Mutualité sociale et association du capital et du travail (2nd ed. Paris 1891), tr. by L. Bristol as The Association of Capital with Labor (New York 1881); La richesse au service du peuple (Paris 1874); Solutions sociales (Paris 1871), tr. by Marie Howland (New York 1886).

Consult: Axhausen, G., Utopic und Realismus im Betriebsrätegedanken (Berlin 1920); Honnegger, H., Godin und das Familistère von Giuse, Zuricher volkswirtschaftliche Studien, n.s., vol. vi (Zurich 1919); Prudhommeaux, D. F., Le familistère illustré (Paris 1900), tr. by A. Williams as Teventy-Eight Years of Copartnership at Guise (2nd ed. London 1908); Asch, Käte, Die Lehre Charles Fouriers (Jena 1914) pt. v.

GODKIN, EDWIN LAWRENCE (1831-1902), American editor. Godkin was born in Ireland and educated at Belfast in the Mill-Bentham-Grote tradition. In 1856 he came to the United States seeking a society sympathetic to liberalism and the ambitions of a youth without powerful connections. He refused a partnership in the New York Times, in 1865 founded the Nation, an independent news weekly whose incisive editorials and scholarly criticism soon made it a national influence, and in 1883 became editor of the New York Evening Post. Neither paper won substantial circulation, but both always powerfully affected informed upper class sentiment. Godkin's writing reflected his superior education, acquaintance with the more mature institutions of British

life and a penetrating mind. He attacked the abuses of reconstruction, corruption under both Grant and Tammany, did pioneer work for tariff, civil service, municipal and election reform and was a leader in the independent movement which helped elect Cleveland. He advocated free trade, colonial autonomy, world peace and the exclusion of government from business and industrial spheres. In all this he echoed the political and economic philosophy of the Manchester liberals. The rise of agrarian and proletarian movements he viewed with contempt as signs of democratic decay. In opposing cheap money, railroad rate legislation and attacks on the use of injunctions against organized labor his usually precise, dignified editorials became violently vituperative. The jingoism of the Spanish American War found him again on the liberal side, denouncing the imperialist wave which he feared would submerge democracy and wipe out civilization. A thoroughgoing supporter of the rights of capital and with strong class feeling, he looked to an intellectual élite to mold and perfect the social order. The development of imperialism and radicalism impaired his faith in democratic ideals and in 1899 he retired, returning to the English aristocratic society he had repudiated as a youth. Allan Nevins

Works: Reflections and Comments 1865-1895 (New York 1895); Problems of Modern Democracy (New York 1896, 3rd ed. 1903); Unforeseen Tendencies of Democracy (Boston 1898).

Consult: Life and Letters of Edwin Lawrence Godkin, ed. by Rollo Ogden, 2 vols. (New York 1907); Nevins, Allan, The Evening Post: a Century of Journalism (New York 1922); Parrington, Vernon I., Main Currents in American Thought, 3 vols. (New York 1927–30) vol. iii; Bleyer, W. G., Main Currents in the History of American Journalism (Boston 1927).

GODWIN, MARY WOLLSTONECRAFT. See Wollstonecraft, Mary.

GODWIN, WILLIAM (1756–1836), English political philosopher. Godwin, the husband of Mary Wollstonecraft and the father of Mary Shelley, filled in his own generation a place of the first importance as the interpreter to England of the French encyclopédistes. Trained as a minister in the rigid Calvinist tradition, he retained its love of logic and system. His chief work, the Enquiry concerning Political Justice (2 vols., London 1793; 2nd ed. 1796), develops the thought of the prerevolutionary school, especially of Helvetius, with an unflinching logic and an elabora-

tion of method that are his own. He conceived the book chiefly as an answer to Montesquieu and incidentally to Burke, and one may call it the prolegomenon to all future progress. It is an argument for the perfectibility of the human species, a refutation of contradictory theories and an examination of the social and political conditions conducive to this perfection. Starting from an impressionist and individualist psychology he proves to his own satisfaction that education (i.e. social environment) and not climate or innate ideas is the sovereign factor in the formation of character, and reason the guide of conduct. Vice is error and will yield to persuasion. The chief condition of progress is the climination of the "positive institutions" (priestcraft, aristocracy and coercive legislation) which dwarf and poison the mind. Violence is to be avoided as an offense against reason. His ideal society is complete anarchism, but he regretfully tolerates in the transitional period a loosely knit laissez faire democracy, which would federate selfgoverning parishes. Intensely equalitarian, he permits property only that it may be given away. A communist, however, he was not, for he disliked cooperation hardly less than government. In this book he carries the obligation of "universal benevolence" so far as to disrupt the family altogether, although he afterward modified the doctrine. In his final picture of perfection man has vanquished death and even sleep. History in these speculations is naïvely distorted and economics forgotten. The book enjoyed a brief popularity and a rather longer influence, which may be traced throughout Shelley's poems and even in the early work of Coleridge and Wordsworth. It is the ablest reflection in the English language of the intellectual ferment of the French Revolution, while the honesty of its reasoning, aided by total lack of humor, exposes the fallacy of its individualist starting point.

Godwin wrote indefatigably; but of his many essays, novels, histories and schoolbooks only Caleb Williams (3 vols., London 1794), a romantic novel with a social purpose, deserves to be remembered.

H. N. Brailsford

Consult: Brown, Ford K., The Life of William Godwin (London 1926); Brailsford, H. N., Shelley, Godwin and Their Circle (London 1913); The Life of Thomas Holcroft, ed. by E. Colby, 2 vols. (London 1925).

GOETHE, JOHANN WOLFGANG (1749–1832). Famous as the author of a historical drama (Götz von Berlichingen, 1773) and of a novel (Die

Leiden des jungen Werthers, 1774), Goethe was hailed at an early age as the leader of an awakened youth, for whom the ideas of Rousseau had pointed the way to a cultural revolution. In 1775 he was summoned by the young duke of Weimar to his court and was soon burdened with official duties. After ten years of this irksome life Goethe escaped to Italy, where the radiation of new influences and scenes brought him to maturity. Upon his return to Weimar in 1788 he assumed the management of the court theater and of the educational system of the duchy. Under the stimulus of his intellectual comradeship with Schiller between 1794 and 1805 his trend toward classicism, first clearly manifested during his sojourn in Italy, was completed and his poetry, no longer the impetuous outpourings of the Sturm und Drang, came to reveal the classic harmony which is the mark of the mature Goethe. To the period of his ripened powers belong the stylistically perfect dramas, I phigenie auf Tauris (1787) and Torquato Tasso (1790); the novel, Wilhelm Meisters Lehrjahre (4 vols., 1795-96); the idyll of middle class life, Hermann und Dorothea (1708); and the first part of his great life work, Faust (1808). Goethe remained in Weimar until his death. At first worshiped by the romantic youth of Germany and later attacked for his admittedly reactionary and quietistic tendencies, he assumed ever more majestic proportions as the cultural leader of Germany. In the last period of his life he engaged in painstaking researches in many branches of natural science, while continuing his activity as a poet. The works of this period include the novel Die Wahlverwandtschaften (1809); Dichtung und Wahrheit (4 vols., 1811-33), an autobiography treating the period prior to his summons to Weimar; West-ostlicher Divan (1819), a lyrical poem; Wilhelm Meisters Wanderjahre (pt. i, 1821), a continuation of the story of Wilhelm Meister's apprenticeship; and the second part of Faust, published only after his death.

Goethe is the most profound and universal of Germany's poets. His imagination draws its sustenance from an immediate intuition of life; it is restrained less by the intellect than by an innate standard of beauty. Ideologically Goethe's poetry is significant in that it represents the first fully conscious embodiment of the modern conception of the individual's relation to the world. His Wellanschauung may be described as natural idealism. It rests upon an idealistic faith in nature conceived pantheistically as a living alloneness perpetually striving toward reason and

held in a state of equilibrium by the polar tension between creative freedom and the operation of eternal law. From this conception Goethe derives a twofold ideal of life: the aesthetically perfect man who achieves an energetic and harmonious reconciliation of the antinomies of life, and the Faustlike man who eternally strives for this adjustment but eternally questions it, since struggle itself and the perpetual striving for an ever higher form of satisfaction become for him the most compelling ideal. Thus Goethe is the first poetic herald of a philosophy of all embracing reverence in many ways opposed to Christianity; his Faust has been called the Bible of modern man.

HERMANN A. KORFF

Works: Among the numerous collections of Goethe's complete works, a standard edition is that published at Weimar (50 vols, 1887–1912). Others of recent date are the jubilee edition by E. von der Hellen (40 vols., Stuttgart 1902-12) and the Propylaen edition (48 vols., Munich 1900-31) English translations of most of the works are found in the Bohn Standard Library (14 vols., London 1848-90), a standard translation of Faust is that by Bayard Taylor (2 vols. Boston 1871–73).

Consult: Bielschowsky, A, Goethe, sein Leben und seine Werke, 2 vols. (new ed. by W Linden, Munich 1928), tr. by W. A. Cooper, 3 vols. (New York 1905–08); Korff, H. A., Geist der Goetheezit, vols. i-ii (Leipsic 1923–30); Kühnemann, E, Goethe, 2 vols. (Leipsic 1930); Simmel, Georg, Goethe (Leipsic 1913); Brandes, Georg, Wolfgung Goethe (2nd ed. Copenhagen 1915), tr. by A. W Porterfield, 2 vols. (New York 1924), Gundelfinger, F, Goethe (11th ed. Berlin 1922); Francke, Kuno, A History of German Literature as Determined by Social Forces (4th ed. New York 1911); Hettner, H., Literaturgeschichte des achtzehnten Jahrhunderts, 3 vols. (5th ed. Brunswick 1894–1999) vol. iii; Steinmetz, F. F., Die pädagogischen Grundgedanken in Goethes Werken (Freienwalde 1919).

GÖK ALP, ZIYA (1875–1924), Turkish nationalist and sociologist. From an early age Gök Alp was interested in Turkish revolutionary activities. After 1908 he achieved prominence as one of the outstanding figures in the Young Turk party and as a journalist in the nationalist cause. He was associated with and wrote prolifically for the leading reviews, including Türk Yurtu, Yeni Mecmua and Küçük Mecmua. In 1912 he accepted the chair of sociology which was established for him at the University of Istanbul. He was a delegate to the National Assembly in 1923 and a member of its Committee on Public Instruction.

Gök Alp was the theorist of the nationalist movement and as a writer and teacher did a great

deal to prepare the intellectual ground for the recent social reforms in Turkey. His weekly Genç Kalemler (Young pens) published shortly after the Young Turk revolution and his collection of poems called Kizil Elma (Red apple) (Istanbul 1914) offered the Turkish people for the first time a sociological approach to their problems and their destiny as a nation and attracted attention to the early history of the Turks in central Asia. Then came "Eski Türklerde, Içtimaî Teşkilât" (in Millî tetebbü'ler Mecmua-si, no. iii, 1912, p. 385-456), an article dealing with the social life of the early Turkish tribes. At his death Gök Alp left the completed manuscript of Türk Tarih-i Medeniyeti, a history of Turkish civilization. His program for national unity and reform was epitomized in the slogan "Turkify, Islamize and Modernize," which was the title of his leading group of articles on Turkish nationalism (in Türk Yurtu, nos. 11, 13, 15, 17, and 23). Subsequently he published Türkcülüyen Islave (The principles of Turkish nationalism, Angora 1924).

Gök Alp popularized western sociology in Turkey. He was inclined toward the teachings of Émile Durkheim, whose work on the sociological method (Les règles de la méthode sociologique, Paris 1895) became, through Gök Alp's political prestige, a sort of Bible for Young Turk thinkers. He himself analyzed existing Ottoman and Mohammedan institutions in the light of the sociological method and presented as the ideal the old Turkish institutions modified to conform with the modern technical achievements of the West.

His most extreme ideas were expressed only to his immediate followers. Some of his radical ideas, such as those against veiling, polygamy and theocracy, were embodied in pamphlets and published anonymously, while others appeared in magazine articles and in his various books. In all of these works he tried to give the Turkish nation an appreciation of its past as well as a realization of its present and future problems.

AHMET EMIN

Consult: Deny, J., "Zia Goek Alp" in Revue du monde musulman, vol. lxi (1925) 1-41; Rossi, Ettore, "Uno scrittore turco contemporaneo: Ziya Gök Alp" in Oriente moderno, vol. iv (1924) 574-95; Hartmann, Martin, "Aus der neueren osmanischen Dichtung II" in University of Berlin, Seminar für orientalische Sprachen, Mitteilungen, vol. xx, pt. ii (1917) 86-149.

GOKHALE, GOPAL KRISHNA (1866–1915), Hindu nationalist and social reformer. Gokhale was educated at the Elphinstone and Deccan colleges and in 1885 became a professor at Fergusson College in Poona, where he taught mathematics, history and economics. In 1902 he resigned in order to devote himself entirely to politics he had already been active in the Indian National Congress and had been elected to the Bombay Legislative Council in 1900 and again in 1901. In 1902 he was nominated to the Viceregal Council, where he opposed Lord Curzon's educational policy and became known as a severe critic of Indian government finance, of which he had made a special study. In 1905 he was chosen president of the National Congress, a selection which marked a victory of the moderates over the extremists. He was the leading figure in the new Indian councils established in 1909 by Lord Minto and during the viceroyalty of the latter was continually consulted by John Morley, the secretary of state for India.

Gokhale was the founder and leading spirit of the Servants of India Society, established in 1905. The society, which stood for complete religious toleration, was composed of both Hindus and Mohammedans of the highest ability. The members were expected to surrender all personal ambition, ignore caste distinctions and dedicate themselves to the service of their country in social as well as political work. The purpose of the society was to train national missionaries to work for the unification and self-government of India within the British Empire. Social reform and education were to be the first steps toward the realization of this plan, for, according to Gokhale, they were the necessary concomitants of political freedom. The specific program of the society included the promotion of free compulsory education and of cooperative enterprises, the elevation of women's position and social service and relief work. The society was an influential factor in the early development of Indian nationalism.

In 1912 Gokhale paid a memorable visit to South Africa in order to obtain redress for the Indian agricultural laborers who had been sent there under indenture. His strong and reasoned opposition to the Indian indenture system first attracted public attention to its social and moral evils. He worked on the Royal Commission on Public Services in India from 1912 to 1915, and during those years he also devoted much of his time to championing further the cause of the Indians in South Africa, where the color bar had brought with it social injustice of a deplorable character. Gokhale's speeches and writings have been published under the title *The Speeches of*

the Honorable Mr. G. K. Gokhale (Madras 1908, 3rd ed. 1920).

C. F. Andrews

Consult: Bannerjea, D. N., India's Nation Builders (London 1919) p. 146-63; Fisher, F. B., India's Silent Revolution (New York 1919) p. 87-91.

GOLD is a brilliant, mallcable, ductile metal; its density is greater than that of all common metals except platinum, but it is too soft to be used without alloy. Native gold occurs chiefly in two forms: lodes associated with quartz or other non-metallic minerals; and placers, or alluvia, derived from lodes by the erosive action of water. Alluvial gold when not buried under hard layers of lava is clearly recognizable and easily obtainable at or near the surface; placers worked with crude tools thus afforded the earliest sources of gold supply. Gold in lodes is not chemically associated with other minerals; the ore must be merely dug from the lode and crushed or milled to a size permitting recovery through amalgamation with mercury or by the cyanide process. Gold may also be found in chemical combinations with sulphur, tellurium and the like; such refractory ores were the last to be worked, but an appreciable proportion of the present output is derived from them. In recent times gold has been largely derived from the so-called banket, or sedimentary formation, occurring in the Rand.

Gold has been mined from very early times. Ancient civilizations derived their gold from Armenian deposits, mentioned by Strabo; from Chaldean lodes and placers; from the several mining centers of Asia Minor, well known in the fifth century B.C.; from the equally celebrated mines of Macedonia and Thasos, visited and described by Herodotus; and from Egyptian lodes found in the mountain ranges between the Nile and the Red Sea. At the beginning of the Christian era Egyptian mines, although failing, were reputed to produce about 750,000 ounces annually. It is also reported that in Spain during the three centuries of Roman occupation 320,-000 ounces were won annually. In late antiquity, however, the mines worked by primitive methods were exhausted, the accumulated stocks of gold were dispersed and gold ceased to function as a circulating medium. The scattering of gold stocks continued through the Middle Ages, so that by the thirteenth century the visible gold supply of Europe probably did not exceed 3,-750,000 ounces. In the thirteenth century the active working of mines was resumed, but after Columbus' visit to America the European gold output became insignificant as compared with the American yield of precious metals. In fact, Charles v suspended the working of Spanish mines in 1535 in order to dispatch miners to the New World. In the sixteenth century gold was also won in Africa on the Gold Coast, in Rhodesia, Madagascar and Abyssinia.

A reasonably reliable record of the world's gold output dates only from the end of the fifteenth century. As may be seen from Table 1 only 15 percent of the quantity won since then was obtained before 1850. While in 1847 the world's output was about \$20,000,000, it reached \$150,000,000 in 1853 following the Californian and Australian gold discoveries. As gold was then derived mostly from alluvia, the output dwindled to \$95,000,000 by 1883; of this \$80,-000,000 was obtained from the United States, Australia and Russia alone. The subsequent rise of output was caused mainly by the discoveries in the Rand district of the Transvaal, although the discovery of the Klondike-Yukon alluvia in 1896 and of the Ontario lodes in 1907 were of material help. Considerable assistance was also rendered by technological improvements, such as the invention of the cyanide process, which is more efficient than mercury amalgamation and permits of the recovery of chemically bound gold, the development of drift mining in alluvial soils located under heavy crusts of lava and the adoption of dredges in working large low grade alluvial deposits. Apart from the setback from 1899 to 1902 caused by the Boer War gold production advanced after 1885 almost without a break to \$470,000,000 in 1915; it declined after that to a new low point of \$319,000,000 in 1922, largely because of the white miners' strike in the Rand, from which it rose to over \$400,000,000 in 1928, 1929 and 1930. It is significant that over a half of the gold won since 1493 was obtained in the first thirty years of the present century.

TABLE I
WORLD GOLD OUTPUT
(In \$1,000,000)

Years	TOTAL Output	Average Annual Output
1493-1600	502	4.65
1601-1700	606	6.06
1701–1800	1,263	12.62
1801–1850	787	15.74
1851-1885	4,242	121.21
1886-1900	2,666	177.71
1901-1930	11,862	395.40

Source: Compiled from the Annual Reports of the Director of the United States Mint.

The most important gold field in the world has been and remains the Rand district in the Transvaal, an area some fifty miles long by a few miles wide surrounding the city of Johannesburg. During its relatively short life it has contributed almost a quarter of the world's gold won since 1493, and in the post-war years it has been the source of over a half of the world output. The older portion of the Rand reached a peak output of \$150,000,000 in 1912, since which time it has declined by about one third, but the newer portion is still expanding, thus accounting for a continued increase of the total Rand production. Because work has to be conducted at an increasing depth, the present cost of opening a new mine is in the neighborhood of \$0,000,000 and the time required is from six to seven years. For this reason new mines are infrequent, but old companies continue to add to their areas worked and increase their milling capacity. Although since 1913 twenty-seven mines in the old Rand ceased operations and only seven new mines in the new Rand began production, the total output may be expected to increase for perhaps another five years, but after that a decline seems to be inevitable.

ΥΑΒLΕ II

OUTPUT OF THE PRINCIPAL GOLD FIELDS

		NTAGE CON TO W	YKAR'S RECORD OUTPUT		
Country	BEGIN- NING WITH	TOTAL TO END OF 1930	lи 1910- 1930	YEAR	OUTPUT (1N \$1,000,- 000)
Transvaal	1884	23.6	51.0	1930	222
United States	1846	20.9	12.7	1915	101
Australasia	1851	16.1	4.4	1903	90
Russia	1814	8.6	3.6	1910	35
Canada	1858	3.5	8.1	1930	44
Mexico	1521	3.4	4.0	1910	25
India	1889	1.6	_	1912	12
Rhodesia	1900	1.6		1915	19
West Africa	1903	0.8		1914	8

Source: Compiled by author from official data.

The United States ranked in the twentieth century as the second gold producing country in the world until Canada surpassed it in 1930. Its output became really important with the California gold rush of 1848. In 1883 after the decline of the California output its production was approximately \$30,000,000. In the following thirty years production increased, reaching about \$88,000,000 in 1905 and fluctuating in the neighborhood of \$93,000,000 in the decade 1905

to 1914. In 1915 American mines had a record output of \$101,000,000, a peak from which production declined to about \$42,000,000 in 1930. Of the twenty-five principal producers in 1927 six suspended operations by the beginning of 1930. In Australasia the output reached an early maximum two years after the discovery of gold in the eastern part of the continent. Another peak was attained fifty years later in 1903, after gold had been found in western Australia, the source of the greater part of present production; but the decline which set in then still continues. Russia was the chief gold producer in the first half of the nineteenth century. In 1741 gold was discovered in the Ural Mountains and in 1829 rich placers were found in Siberia; of these the Lena gold field is the largest reservoir of alluvial gold in the world. Output which had been increasing until 1910 has declined since but has picked up in recent years with the restoration of political tranquillity. In Canada gold was discovered in 1823, but its output was insignificant until more important deposits were found in 1855. Later history comprises the Klondike boom and the discovery of the Ontario lode, which at present accounts for over 85 percent of the Canadian output. Production has been on the increase since 1909 and may be expected to expand in the future.

Although the past increase in the production of gold has been phenomenal, there is reason to believe that, unless there is some outstanding new discovery, 1915 will prove to have seen the zenith. Within the next ten years a shortage of gold, which has in the past caused recurrent apprehensions, may be expected to materialize. Apart from the Transvaal the world gold output declined from \$282,000,000 in 1915 to \$184,-000,000 in 1930. The Transvaal production is represented to the extent of 98 percent by the Rand, whose decline may be anticipated to begin in 1935 or 1936. The Rand is really a unique phenomenon; no other single gold field has as yet added more than some \$25,000,000 to the annual output and the probability of finding another Rand is small, even though there was once some sign of it on the Gold Coast, where banket also exists. While the Canadian output is certain to increase and the production of Russia and Mexico may possibly be larger than in the past decade, their contribution to the world output is not so great as to affect its trend appreciably. There is still room for technological improvements for reducing the cost of gold production; but not much more gold can be won Gold 691

from the type of ore worked at present, since the proportion of gold recovery is now from 90 to 95 percent. The hope of averting the threatened decline in the annual yield of gold thus depends upon some outstanding new discovery. While it is not reasonable to dismiss such a possibility, it should be borne in mind that the world is now much more prospected for gold than it has ever been, the unprospected regions comprising mainly the desert areas of Australia, some regions in Central Asia and around the Sudan and the tropical localities at the headwaters of the Amazon and Orinoco rivers.

Not all of the newly won gold is available for monetary purposes. A part of it is used in the arts; in the manufacture of jewelry, rings, watch cases and chains, spectacle frames, pens, gold teeth and fillings, gold lace; in gilding, chemical and photographic work and the like. Another part is exported to India, China and Egypt, where it is turned into jewelry or hoarded, thus representing a net deduction from the stock of monetary gold. The total non-monetary demand for gold is by no means inconsiderable; according to estimates it has absorbed to date 48 percent of the total output. In Table III an attempt is made to collate data for the non-monetary consumption of gold in the last ninety-five years in order to arrive at an estimate of the addition of gold to the monetary stock. No great accuracy can be claimed for the figures in this table except for world output. The data on industrial consumption of gold are probably the least reliable: a great deal of old gold, including coined gold, is used in the arts and not all of the new gold once used in the arts is irretrievably lost for monetary purposes. The table is, however, sufficiently accurate to afford a general idea of the trends in gold consumption. The proportion of total output remaining for monetary uses is now greater than it was a hundred years ago, and the relationship between the different non-monetary uses has undergone considerable change. The industrial consumption of gold has not grown so rapidly as the output, while the share of the current output absorbed by India has virtually doubled, the absolute amount increasing from \$12,000,000 to nearly \$95,000,000 per annum.

Since during the nineteenth century the world increasingly adopted the gold standard, the amount of annual additions to the stock of monetary gold has become of considerable importance as a factor influencing through the quantity of money in circulation the rate of economic development. It has been shown, for example, that the trend of commodity prices, which had been rising in the years 1850 to 1873, declining in 1873 to 1895 and rising once more from 1896 to the opening of the World War, is distinctly correlated with the increases in the stock of monetary gold, which during these three periods amounted to 4.0, 1.6 and 3.7 percent per annum respectively.

On the experience of the period from 1850 to 1910 Gustav Cassel has shown that to keep wholesale commodity prices stable the annual addition to the world's total stock of gold should be 3 percent. Operating with the stock of monetary gold rather than the total gold stock Kitchin arrived at approximately the same percentage. It happens that the world's rate of economic development for that period, as judged by the production of basic commodities, was also about 3 percent, which is equivalent to allowing 1 per-

TABLE III WORLD PRODUCTION AND EMPLOYMENT OF GOLD, 1835-1929 (In \$1,000,000)

		Non-Monetary Demand				Additions	Monetary
	World Output	Indus- irial*	India †	China and Egypt‡	TOTAL	TO MONBIARY GOLD STOCK	GOLD STOCK AT END OF PERIOD
1835-89 1890-99 1900-09 1910-19	5,046 1,965 3,584 4,380	1,805 569 846 1,100 927	652 135 397 622 1,046	88** 59 189 103	2,545 763 1,432 1,825 1,978	2,501 1,202 2,152 2,555 1,772	3,461 4,663 6,815 9,370

[†] Net imports for years cuding March 31 following, plus the country's own production for calendar years. Since 1909 net imports are also taken for calendar years.

1 Imports plus China's own production.

Source: Adopted with some corrections from table prepared by author for the Gold Delegation of the Financial Committee of Source: Adopted with some corrections from table prepared by author for the Gold Delegation the League of Nations. First Interim Report of the Gold Delegation of the Financial Committee (Geneva 1930) p. 62.

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(In \$1,000,000)

TABLE IV

Distribution of Monetary Gold, 1913 and 1930 *

		END OF 1913		End of 1930		
	IN CENTRAL BANKS AND TREASURIES	In Circula- tion and Other Banks	TOTAL	In Central Banks and Treasuries	In Circula- tion and Other Banks	TOTAL
France	679	1,021	1,700	2,099	_	2,099
Germany	296	699	995	544	_	544
United Kingdom	170	600	770	722	8	730
United States	1,290	634	1,924	4,225	368	4,593
South American countries	344	76	420	550	14	564
Japan	67	19	86	412	_	412
World	4,811	3,818	8,629	10,905	641	11,546

Source: Adopted from League of Nations, First Interim Report of the Gold Delegation of the Financial Committee (Geneva 1930) p. 114-17, and Selected Documents on the Distribution of Gold Submitted to the Gold Delegation (Geneva 1931) p. 66.

*This table agnores most of the gold in private hoards, especially in Asia and Africa. The world total shown in this table differs from that of the League because it excludes India and Egypt.

cent for the increase of population and 2 percent for improvement in the standard of living. It is, broadly speaking, correct to say that in periods when gold money advanced at a rate greater than 3 percent commodity prices rose and business greatly improved, while when the rate was less than 3 percent prices fell and business was less prosperous.

But this experience cannot be made to apply to conditions today. During the sixty years since 1850 the world was increasingly passing from the silver to the gold-silver and then to the gold standard. Moreover, the employment of gold was increasingly economized by the greater use of banknotes, checks and other credit instruments. Toward the end of the period the rate of increase in gold money required to keep prices stable was probably nearer 2 percent than 3 percent. Since 1914 an extraordinary economy has also been effected by the transfer of gold money from the pockets of the public and from other banks to the vaults of central banks and treasuries; that is, gold, which while in circulation remained relatively ineffective, was made the basis for note issues, bank deposits and other forms of currency of a superior velocity. The extent of this change can be seen from Table IV. During those seventeen years central banks and treasuries have withdrawn a very considerable proportion of gold formerly in circulation or in other banks besides absorbing about 55 percent of the new gold produced, the balance of which was taken by the industrial arts and the hoarding countries of the East. Thus while the world's stock of monetary gold increased at an average of something like 1.75 percent per annum, the

amount in central banks and treasuries rose from 1913 to 1924 by about 6 percent per annum and then by about 3.3 percent annually. The fact that so large a proportion of gold has been secured by central banks and treasuries indicates that one of the greatest means of economizing gold has already been realized. Not much further assistance can be expected from this source, unless new economies are made possible by a growing substitution of deposit for banknote circulation and by a reduction in the legal or customary rates of reserve for the note and deposit liabilities of central banks.

Table IV indicates also the change in the distribution of monetary gold between countries. South American countries and Japan have become much larger holders of gold than they were before the war. The most radical change, however, is represented by the increase of the monetary gold stock of the United States from less than a quarter of the world stock to more than a third. Unlike Germany and Great Britain, both of which lost gold as compared with 1913, France increased its gold holdings and more than tripled the amount of specie functioning as the monetary reserve. Since 1928 the international flow of gold tended to accentuate the position of the United States and France as holders of the largest stocks of monetary gold, these countries being the main recipients of German reparation moneys. This "maldistribution" is partly responsible for the slump of prices in 1929 and the following years and unless corrected by the adoption of appropriate political, banking and investment policies is apt to prove as important a factor in influencing the

wholesale price level and associated economic phenomena as the absolute additions to the stock of monetary gold.

A shortage of gold for monetary uses has been anticipated ever since the end of the war. It is for this reason that the Genoa conference has recommended the return to gold on the basis of the gold-exchange standard rather than to the pre-war gold standard. Its advice to central banks to prevent gold from returning to domestic circulation has also been largely followed, as may be seen from Table IV. But even such economies have not assuaged the fear of a "scramble for gold" by central banks and of a future shortage. The delegation appointed by the Financial Committee of the League of Nations to deal with the question estimated in 1930 that on the basis of a 2 percent annual increase in the amount of circulating media and a 33 percent cover for notes and sight liabilities of central banks a shortage of gold may be expected to set in by 1938, if the forecasts of future gold production and of non-monetary demand for gold are at all accurate. The question of the future of gold as the basis for money is thus raised. It is, however, doubtful whether it will be practicable, even if the desire should exist, to take gold off its solitary pedestal and one may safely assume that a generation will pass before an effective substitute is devised. Effort should be concentrated in the direction of better distribution of gold reserves between central banks and the effecting of further economies in its use. In this connection should be mentioned the proposal to abolish legal reserve requirements for central banks and to restrict the use of central bank reserves to the settling of deficits in the balances of international payments.

Joseph Kitchin

Sec: METALS; MONEY; COINAGE; BIMETALLISM AND MONOMETALLISM; CENTRAL BANKING; FOREIGN EXCHANGE; BALANCE OF TRADE; ORNAMENT.

Consult: Launay, Louis de, L'or dans le monde (Paris 1907), tr. by O. C. Williams as The World's Gold (London 1908); Soetbeer, Ad., Materialien zur Erläuterung und Beurteilung der wirtschaftlichen Edelmetalverhältnisse und der Währungsfrage (2nd ed. Berlin 1886), tr. in Great Britain, Gold and Silver Commission, Appendix to the Final Report (1888) p. 139-244; Del Mar, A., A History of the Precious Metals from the Earliest Times to the Present (2nd ed. New York 1901); United States, Bureau of Mines, "Summarized Data of Gold Production" by R. H. Ridgway, Economic Paper, no. 6 (1929); International Geological Congress, Fifteenth, The Gold Resources of the World (Pretoria 1930); Coyle, E. S., "The World's Industrial Consumption of Gold," and Berridge, William

A., "The World's Gold Supply" in Review of Economic Statistics, vol. ii (1920) 147-54, 181-99; Kitchin, Joseph, "The Position of Gold" in Review of Economic Statistics, vol. iii (1921) 257-63; Kitchin, Joseph, in Great Britain, Royal Commission on Indian Currency and Finance, Report, 6 vols. (London 1926) vol. iii, p. 519-43; League of Nations, First Interim Report of the Gold Delegation of the Financial Committee (Geneva 1930), Second Interim Report of the Gold Delegation of the Financial Committee (Geneva 1931), and Selected Documents on the Distribution of Gold Submitted to the Gold Delegation (Geneva 1931); Lehfeldt, R. A., Gold, Prices and the Witwatersrand (London 1919); Edie, L. D., Gold Production and Prices before and after the World War, Indiana University Studies, no. 78 (Bloomington, Ind. 1928), and Capital, the Money Market and Gold (Chicago 1929); Koch, F., Der Londoner Goldverkehr, Munchener volkswirtschaftliche Studien, no. 73 (Stuttgart 1905).

GOLD-EXCHANGE STANDARD. See Money; Foreign Exchange.

GOLD STANDARD. See Money.

GOLDENWEISER, ALEXANDER SOLO-MONOVICH (1854-1915), Russian lawyer and criminologist. When a student in St. Petersburg Goldenweiser attended the lectures of Vladimir Solovyev, idealistic philosopher, under whose influence he became a follower of Hegel. Later, in middle life, he turned to Herbert Spencer and devoted an essay to an exposition of his philosophy. As an attorney he regarded himself and his colleagues as the advance guard of social progress and defenders of the rights of man. He won his early fame in criminal cases, but finding the human tragedies attending this practise unendurable he soon abandoned it, devoting himself henceforth to civil law. In this field his reputation was second only to that of Passaver; his speeches in court while not always brilliant were distinguished by a comprehensive erudition and an infrangible logic.

Goldenweiser's real interests, however, lay outside the court room. He took an active part in the work of the Kiev reformatory for boys and attended religiously the sessions of the International Prison congresses. In Kiev, where Goldenweiser practised law for thirty-eight years, his fame acquired mythical proportions. Attuned as he was to all human suffering, the events of the World War broke his optimistic spirit and hastened his death.

ALEXANDER GOLDENWEISER

Important works: Sotsialnoye zakonodatelstvo Germanskoy Imperii (Social legislation of the German Empire) (Kiev 1890); Sotsialnie techeniya i reformi xix stoletiya (Social currents and reforms of the nineteenth century) (Kiev 1891); Voprosi vmeneniya i ugolovnoy otvetstvennosti v pozitivnom osveshchenii (Imputation and criminal responsibility from a positivist viewpoint) (St. Petersburg 1902); Herbert Spencer. Idei svobodi i prava v ego filosofskoy sisteme (Herbert Spencer. The ideas of freedom and right in his system of philosophy) (St. Petersburg 1904); Prestuplenie kak nakazanie i nakazanie kak prestuplenie (Kiev 1908), tr. by E. A. Goldenweiser as Crime as Punishment and Punishment as Crime (Washington 1909).

GOLDIE, SIR GEORGE DASHWOOD TAUBMAN (1846-1925), British colonial administrator. Goldie went to west Africa as a result of his family's interest in a company trading at the mouth of the Niger River. In order to eliminate competition from the palm oil trade he consolidated British trading interests into the United African Company and had agents negotiate treaties with native chiefs, exchanging protection for trading monopolies. In 1886 a royal charter was granted to the Royal Niger Company, after Goldie had threatened to seek foreign protection. Goldie availed himself sparingly of the political rights conferred by the charter, administering through native chiefs (some of whom were subsidized) in accordance with native law and custom, except as to slavery and trade, and levying no direct taxes. These policies anticipated the methods of colonial administration since developed by Sir Frederick Lugard. Goldie's company held a virtual monopoly of commerce and paid consistent dividends, a result not achieved by other African chartered companies. He required that all his agents give bond to impart no information of any kind with regard to company activities. The company extended control into the interior, warding off French and German encroachments, until the final partition of the Niger area in 1898 secured to the British more than half the 500,000 square miles originally covered by the company's vague treaties. Goldie retired from the management of his company in 1899 when Great Britain assumed direct political control of Nigeria. In compensation he secured reimbursement of a large share of the company's capital expenditures and extensive long term mining rights. His accomplishment represents a pure case of imperial expansion developed directly out of the interests of a particular commercial undertaking.

LELAND H. JENKS

Consult: Geary, W. N. M., Nigeria under British Rule (London 1927) ch. vii; Burns, A. C., History of Nigeria (London 1929) ch. xiii; Mockler-Ferryman, A. F.,

British Nigeria (London 1902) ch. vi; Baillaud, E., La politique indigène de l'Angleterre en Afrique occidentale (Paris 1912) chs. xxii-xxv; Vandeleur, S., Campaigning on the Upper Nile and Niger (London 1898), with an introduction by Goldie; Orr, C. W. J., The Making of Northern Nigeria (London 1911) ch. ii.

GOLDSCHMIDT, LEVIN (1829-97), German jurist. Goldschmidt was the greatest authority on commercial law during the nineteenth century in Germany and perhaps in the world. When he commenced his labors German commercial law, which had long been under the predominant influence of the Italians, had gradually begun to attain independence. Frederick the Great's Allgemeines Landrecht of 1794 had codified Prussian commercial law, but German industry and commerce had expanded greatly since that time. A new era opened with the adoption of the German bills of exchange law of 1847, followed by the general German commercial code of 1861, which became the law of the North German Confederation and later of the German Empire. While these legislative labors were proceeding, Heinrich Thöl had begun to elaborate the principles of a German science of commercial law; but it seemed to Goldschmidt that the latter was founding it dogmatically upon an essentially Roman basis. Goldschmidt began by demanding the severance of commercial law from the dominance of purely Roman legal conceptions. He then proceeded to outline and execute a program based upon historical research, comparative method and economic factors.

Goldschmidt began to realize his program practically when in 1858 he founded the still flourishing Zeitschrift für das gesamte Handelsrecht. In 1869 a federal Supreme Court of Commerce was founded in Leipsic, and the following year Goldschmidt entered it and began a great career as a commercial judge in his interpretation of the general German commercial code of 1861. When in 1875 he also became professor at the University of Berlin, he was enabled to exert a great influence upon the coming generation of teachers of commercial law.

The scientific monument of Goldschmidt's work is his great Handbuch des Handelsrechts (2 vols., Erlangen 1864-68; 2nd ed. 1875-83; vol. i, 3rd ed. Stuttgart 1891). In the second edition the treatment became more thorough and the third edition of the first volume is entirely confined to a history of the mediaeval commer cial law of southern Europe. The work had thus been converted into a series of comprehensive monographs; but in it Goldschmidt had outlined

the method that should obtain in the study of commercial law and laid down the fundamental principles of the subjects he treated.

Goldschmidt also wrote numerous studies of a Romanistic character on the civil law, which for the most part are collected in his *Vermischte Schriften* (2 vols., ed. by H. V. Simon, Berlin 1901). His notable studies upon the Roman law of possession should be particularly mentioned. Despite his objections to Romanistic concepts he still held firmly to them upon many questions of the positive law, but by the general tenor of his whole work started a current of opinion against regarding them as exclusive. Consequently Brunner's Germanistic investigations of securities and Otto Gierke's investigations of commercial companies could start from his work and give commercial law a still broader basis.

ERNST HEYMANN

Consult: Levin Goldschmidt, ein Lebensbild in Briefen (Berlin 1898); Pappenheim, Max, in Allgemeine deutsche Biographie, vol. xlix (Leipsic 1904) p. 438-48, and in Zeitschrift fur das gesamte Handelsrecht, vol. xlvii (1898) 1-49; Riesser, Jacob, Levin Goldschmidt (Berlin 1897); Stintzing, R. von, and Landsberg, E., Geschichte der deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 938-49; Lyon-Caen, Charles, in Société de Législation Comparée, Bulletin, vol. xxvii (1897-98) 119-21; Heymann, Ernst, "Hundert Jahre Berliner Juristenfakultät" in Liebmann, Otto, Die juristische Fakultät der Universitöt Berlin (Berlin 1910) p. 48-49, 154, 160-64. A bibliography of Goldschmidt's writings compiled by Max Pappenheim is included in Simon's edition of Goldschmidt's Vermischte Schriften.

GOLDZIIIER, IGNAZ (1850-1921), Hungarian orientalist and Islamic scholar. Born of a Jewish family, Goldziher studied at Budapest, Berlin, Leipsic and Leyden, visited the Orient and spent most of his life in Budapest as professor of Semitic languages in the university. After two highly acclaimed studies in Biblical criticism he concentrated his attention upon Arabic and Islam. His chief works are Die Zâhiriten (Leipsic 1884), Muhammedanische Studien (Halle 1889-90), Vorlesungen über den Islam (Heidelberg 1910) and Die Richtungen der islamischen Koranauslegung (Leyden 1920). The first is a condensed monograph recounting the evolution of an extinct Sunnite juridical school. The Muhammedanische Studien inaugurated the use of methodical historical criticism in Islamic studies to explain the many survivals of Bedouin tribal life in the structure of the Mussulman community and the growth of the "tradition," that fundamental juridical source containing the

sayings attributed to the Prophet. The Vorlesungen is a scholarly manual containing a summary of various aspects of Islamic civilization and the Richtungen an exposition of the different schools of Koranic exegesis. Goldziher accumulated and condensed an exceptional amount of new information, drawn chiefly from manuscript sources, and made it easily available through his capacity for exposition: he was more a historian than a philologist. He laid the basis for an appraisal of the *Hadith* (canonical collections), showing that much of it had been fabricated by theological politicians after Mohammed's death, and indicated its influence upon the collective religious consciousness. His counsels have guided subsequent research not only in the history of Arabic grammar but also in that of the formation of sects; in the foreign influences on Islam, such as the gnostic, Christian and neo-Platonic; and in the organization of workmen and trades.

Louis Massignon

Consult: Heller, Bernard, "Bibliographie des oeuvres d'Ignace Goldziher," École Nationale des Langues Orientales Vivantes, Publications, 6th ser., vol. i (Paris 1927); Systematische Bibliographie der Palàstina Literatur, ed. by Peter Thomsen, vols. i-iv (Leipsic 1908-27); Becker, C. H., in Der Islam, vol. xii (1922) 214-22.

GOLTZ, THEODOR VON DER (1836-1905), German agricultural economist. Goltz at first studied law but turned his attention to the study of agriculture. He taught at several agricultural colleges in Germany and from 1896 until his death was director of the agricultural college at Poppelsdorf (Bonn)—the school in which he had obtained his professional training. At a time when the study of agriculture was dominated by the natural sciences under the influence of Liebig and preoccupied with technological problems Goltz emphasized the business aspect of agriculture. He held that the ultimate goal is not the gross yield but the net profit. In order to increase the remunerativeness of agriculture he advocated the combination of the small and middle sized peasant holdings for the purpose of cooperative cultivation of the soil and common use of tools, machinery and draft animals. Such combination would secure to the smaller enterprises the benefits of large scale production and management and assure the survival of the peasant class-an important element in the population of a country. In contrast to modern tendencies Goltz would not have the cooperative system extended to large capitalistic enterprises. He contributed greatly to the reform of rural education on the basis of the actual needs of the rural population. He also recognized the necessity of cooperation and understanding between laborer and landlord and consistently urged upon the latter the need of raising the cultural level of the laborer, improving rural education and ameliorating rural housing. His treatises repeatedly stressed the mutual interdependence of all classes in their pursuit of social welfare.

F. Beckmann

Important works: Vorlesungen uber Agrarwesen und Agrarpolitik (Jena 1899, 2nd ed. 1904); Geschichte der deutschen Landwirtschaft, 2 vols. (Stuttgart 1902–03); Die ländliche Arbeiterfrage und ihre Lösung (Danzig 1872, 2nd ed. 1874); Die landwirthschaftliche Buchführung (Berlin 1866; 13th-14th ed. by Conrad von Seelhorst, 1922); Landwirtschaftliche Taxationslehre (Berlin 1880, 3rd ed. 1903); Handbuch der landwirtschaftlichen Betriebslehre (Berlin 1886; 4th ed. by Conrad von Seelhorst, 1912).

Consult: Biographisches Jahrbuch und deutscher Nekrolog, vol. x (Berlin 1907) p. 227-34.

GOMEL, CHARLES (1843-1921), French economist. Gomel was member of the state council from 1872 to 1886, resigning at the time when the decrees were issued ordering the expulsion of the house of Orléans from France. He soon joined the administration of the Compagnie des Chemins de Fer de l'Est, of which he became president, retaining the post until his death. He was well versed in all problems pertaining to the administration of railroads and contributed many authoritative studies on this subject to the Economiste français in the period from 1886 to 1906. He successfully disproved the unjust criticism leveled against the conventions of 1883, which represent one of the most important agreements regulating the relations of the state to the railroads. Gomel was also interested in foreign railroads, in the working of mines, particularly coal mines, in public works and in other fields of economic activity Of no less significance are his writings on the financial causes of the French Revolution; they deal in a most elucidating manner with the administrations of Turgot and Necker and the last of the controllers general and with the financial history of the Constituent Assembly, the Legislative Assembly and the Convention.

MARCEL MARION

Works: Les causes financières de la Révolution française, 2 vols. (Paris 1892-93); Histoire financière de l'assemblée constituante, 2 vols. (Paris 1896-97); Histoire financière de la législative et de la convention, 2 vols. (Paris 1902-05).

GOMME, SIR GEORGE LAURENCE (1853-1916), English anthropologist and historian Gomme was the most active cofounder of the English Folklore Society, parent of all similar movements throughout the world, although it was W. J. Thoms who had coined the word folklore itself in 1846. Moreover, Gomme did most to give the new science its orientation by insisting on the study of customs in their historical setting: "custom, rite and belief . . . become veritable monuments of history—a history too ancient to have been recorded in script, too much an essential part of the folk-life to have been lost to tradition" (Folklore as an Historical Science, London 1908, p. 170). The theoretical justification of this ethnological line of research is also stated in his Ethnology in Folklore (London 1892). Those were the days of E. B. Tylor's influence, when psychological interpretations prevailed and interest was therefore mainly directed toward beliefs. Gomme did his best to call attention rather to social institutions, especially as viewed in the light of the movements and clashings of peoples out of which they arose. These working principles are well illustrated in his masterly study of the British village community (The Village Community, London 1890), which he treats as a result of culture contact between Aryan and pre-Aryan folk elements. Gomme was also an efficient public servant on the London County Council from 1900 to 1916 as well as an authority on the history and antiquities of London (see The Governance of London, London 1907; and London, London 1914). He is to be regarded as a pioneer who, while avoiding the extravagances of a one-sided diffusionism, nevertheless made it clear that for a comprehensive study of culture originating and borrowing must count as the warp and woof of human progress.

R. R. MARETT

Consult: Haddon, A. C., in Man, vol. xvi (1916) 85-87; Marett, R. R., Psychology and Folklore (London 1920) p. 72-98.

GOMPERS, SAMUEL (1850–1924), American labor leader. Gompers was born of Jewish parents in the East End of London and after four years' schooling was apprenticed to cigar making, his father's trade, which he followed for twenty-six years. In 1863 the family emigrated to New York's East Side with no marked improvement in well-being. Driven by a consuming energy and unbounded ambition Gompers threw himself into every activity that might

lead an East Side immigrant boy out of the alienism of his environment into the full stream of American life. In social clubs, fraternal orders, saloon gatherings, cigar shops and trade unions he sought and found a hard, practical wisdom and facility in handling men as individuals and en masse.

Gompers joined his local trade union (no. 15) in 1864, and ten years later he and his Left wing friends broke it up to create local 144, of which he was president until 1881 and a member for the rest of his life. In 1877 he was instrumental in making Adolph Strasser president of the nearly defunct Cigar Makers' International Union and proceeded to reorganize it as a benefit society on the English model. When in 1881 a new Left wing ousted Gompers from the presidency of his local, he turned to the national field and gained control of the newly formed Federation of Trades and Labor Unions. Gompers' passionate distrust of socialists and intellectuals, particularly those of continental European stamp, grew out of his experience with the cosmopolitan radicalism of New York in the seventies and made him increasingly American and trade unionist.

In 1886 he was able to mobilize the trade unions against the Knights of Labor and became first president of the American Federation of Labor, a post he retained with the exception of one term (1895) until his death. For nine years this militant labor general fought a successful rear guard action against all comers with a loosely federated group of touchy national unions. He avoided the stigma of the Haymarket bomb, the effect of socialist propaganda and intrigue, the failure of the American Railway Union, free silver sentiment and a prolonged depression. His defeat in 1895 gave him a trip to Europe, which completed his education in Americanism. He returned with reviving prosperity, was reelected president of the Federation and moved his headquarters to Washington.

In Washington Gompers found himself in a completely congenial environment, and although he preached more loudly than ever his doctrine of voluntary trade unionism unhampered by government he became increasingly involved in lobbying for labor's measures and patronage. In 1906 the American Federation of Labor openly adopted a non-partisan political program, and from 1908 to 1920 it supported the Democratic party, securing the passage of the Clayton, the seamen's and the Adamson acts

The election of Woodrow Wilson gave labor for the first time in American history a place among the mighty, and during the World War Gompers was made a member of the Advisory Commission to the Council of National Defense. Convinced of his messianic mission, he created the Alliance for Labor and Democracy to promote loyalty. He toured Europe in 1918, meeting kings, presidents, generals, but encountering a recalcitrant proletariat.

In the period of post-war reaction he was denied a place on the Peace Commission but was made chairman of the Commission on International Labor Legislation, which drew up what, with some modification, became the labor covenant of the Treaty of Versailles. After failure to control the Amsterdam International he came back to the United States to face schism and defeat. Strikes of the steelworkers, of the Boston police, of the miners and of the shopmen; the failure of the president's industrial conferences; the activities of the Communists; the Plumb plan; the defeat of the Covenant of the League of Nations, of the Democratic party and almost of Gompers himself for the presidency of the Federation left the old man, then nearly blind, sick indeed.

But in the end Gompers found complete, if illusory, satisfaction. He had been the friend of Mexico when its friends were few. Turning from European failure and confusion at home he sought Pan-American unity. He restated in labor terms the Monroe Doctrine. In 1924 Mexican and American labor met at the international boundary. At the inauguration of Calles in Mexico City Samuel Gompers divided with the new president the adulation of the Mexican proletariat, expressed with the Latin exuberance and éclat which touched the emotional and theatrical side of his character as practical labor politics had never done. He died shortly after the conference in San Antonio, Texas.

NORMAN J. WARE

Consult: Gompers, Samuel, Seventy Years of Life and Labor, 2 vols. (New York 1925); Reed, Louis, The Labor Philosophy of Samuel Gompers, Columbia University, Studies in History, Economics and Public Law, no. 327 (New York 1930), which contains an extensive bibliography of writings by and about Gompers.

GONNER, SIR EDWARD CARTER KER-SEY (1862-1922), English economist. From 1891 until his death Gonner, an Oxford graduate, held the Brunner chair of economic science at the University of Liverpool. Writing in the

period before specialization, he made fruitful contributions to many difficult aspects of the science. His edition of Ricardo's Principles (London 1891), his textbook, Commercial Geography (London 1894), and his survey of the modern economic development of Germany in Germany in the Nineteenth Century (ed. by C. H. Herford, Manchester 1912; 3rd ed. 1915) display uniform competence. Among his other minor writings were The Socialist State (London 1895), a designedly sympathetic yet warily discriminating account, and Interest and Saving (London 1906), which shows the penetrating quality of Gonner's mind occasionally leading him into somewhat subtle and elusive argument but nevertheless well matched against the complex subject in hand. His two most considerable works, The Social Philosophy of Rodbertus (London 1899) and Common Land and Inclosure (London 1912), were preceded by an enormous amount of research. Treating the movement as "continuous and as due in the main to the operation of large economic and, so to say, normal causes," buttressed by statistics, pleading no cause, Common Land and Inclosure will undoubtedly remain the final verdict when other more partial pronouncements on the vexed subject have been set aside as suspect. The fine balance and insight which directed Gonner's exact and patient inquiry in this enduring contribution to economic history also made him a talented man of affairs. During the World War, when he was economic adviser and director of statistics in the Ministry of Food as well as an arbitrator of industrial disputes, he won the confidence and esteem of his chief, Lord Rhondda. In the words of an experienced colleague, Sir William Beveridge, "he was one of the men of academic training who most conspicuously made good in practical administration during the War." When he died he was collaborating in the preparation of a history of food control.

L. L. PRICE

Consult: Beveridge, W. H., in Economic Journal, vol. xxxii (1922) 264-67.

GONZÁLEZ DE CELLORIGO, MARTÍN, Spanish economist of the late sixteenth century. González was the author of several memorials addressed to Philip III, *Memoriales* (Valladolid 1600), in which he presented interesting and novel economic theories. In the first, "De la política necesaria y útil restauración a la república de España," González frequently cited Bodin's *Republic*, which undoubtedly inspired his

surprisingly modern doctrines of work and wealth. Natural laws, he asserted, teach man to work; hence work is the "true and certain wealth" of nations. Considering money but an "instrument of exchange" he argued that an increase in its volume, representing no increase in wealth, might hamper commercial intercourse. False ideas of the wealth of the Indies had led to an abandonment of agriculture and industry; and idleness and the consequent dearth of goods had brought on epidemics, which had depleted the population more than war or emigration. This view of Spain's economic decay led González to the conclusion, astonishing for his time, that Spain would have been more wealthy if no treasure had come from America. His most prominent proposal for reform was the abolition of leisure, and he prescribed for the nobility business pursuits in conformity with their rank. He decried excessive poverty and wealth and was opposed to the egalitarian ideas of More's Utopia; in his ideal society the middle class was to be the most numerous. Sections of Augustín de Rójas Villandrando's El buen repúblico (Salamanca 1611), dealing with economic doctrines, are taken verbatim from González's Memoriales without acknowledgment.

The second and third memorials were entitled "Sobre los moriscos" and dealt with the problem of the Moors. Since the converted Moors were notoriously industrious, González pleaded for their better education in Christian virtues, so that no occasion might arise for expelling them upon religious grounds.

ROBERT S. SMITH

GOOD OFFICES. See MEDIATION.

GOOD ROADS MOVEMENT. See ROADS.

GOODWILL originally meant that part of the value of an established business which was attributable to the continued patronage of its customers. This meaning has since been extended. Economists continue to adhere essentially to the original concept of goodwill as a relation between the business and the market. But while they still consider the goodwill of the consumer as by far the most important type they recognize also the existence of goodwill in the labor market, the credit market and elsewhere. Jurists and accountants, on the other hand, have broadened the meaning of the term to include all the advantages which a particular business possesses over its competitors. The jurist's approach to good-

will remains fundamentally different from that of the economist. The economist tends to conceive it as emanating from its source. The jurist, because of the necessities of legal transfer, tends to think of it as attaching to the business and as a species of property despite the fact that ordinarily goodwill cannot be conveyed apart from the business.

In England the term goodwill seems to have been used first in 1571, when a testator willed the goodwill of his quarry as part of his possessions. In the case of Broad v. Jollyfe [Cro. Jac. 596 (1620)] the purchaser of the wares of an old shop was awarded judgment against the vendor for violation of an agreement not to keep a shop in that vicinity. For the first time the courts thus recognized the validity of contracts which limited the freedom of the vendor to compete, and which had previously been considered as in restraint of trade. In Crutwell v. Lye [17 Ves. 335 (1810)] Lord Eldon, who was important in the development of the law of goodwill in England, described it as "the probability that old customers will resort to the old place." It thus became something essentially connected with convenient location. American and British courts still recognize the importance of goodwill in raising the value of the sites on which successful businesses are located. In England goodwill is utilized by officials as an aid in measuring rent for tax purposes. Furthermore, by the Landlord and Tenant Act of 1927 the tenant who has been located in one place for at least five years is given a right to compensation for the loss of the goodwill attached to the place or, if compensation would be inadequate, a right to a new lease. In the United States goodwill is not held to be property within the meaning of the constitutional limitations on the taking of property.

The early emphasis upon location was due to the fact that the concept of goodwill was first applied to small scale businesses treating with the consumer directly and personally. The elements first added to the concept-firm name, trademarks, personal qualities-were also applicable to the type of business concerned. With changes in the economic structure and the broadening of the goodwill concept other factors have entered and have become perhaps more important than those earlier associated with the term. Thus location has ceased to play its former predominant role and personal qualities are almost meaningless in an impersonal economic organization. The length of time in business, so important in the establishment of custom in the

earlier economy, has become less important in the development of goodwill than high pressure salesmanship and advertising. These methods of attracting custom attempt to and do create goodwill in a relatively short period of time. With the concentration of industry mere size or quasimonopolistic position in the industry has become an element in goodwill through the common belief that size guarantees quality, cheapness, reliability, service and the other desiderata which determine the purchaser's choice in the competitive system.

The basic element in goodwill is the tendency, in a competitive situation in which many choices are possible, for a particular business to be chosen a large number of times. It is not sufficient that this choice shall be due to lower prices or better quality relative to price; there must exist some tendency in the business to attract consumers, laborers and capitalists out of proportion to the price it charges, the wages it pays or the interest and security it offers. Goodwill is a quasi-monopolistic factor in a competitive society, a factor which "lifts the business somewhat above the daily menace of competition and enables it to thrive without cutting prices" (Commons, J. R., Industrial Goodwill, ch. iii).

It is reflected in higher prices or larger sales, either of which means larger profits than those normally received by competitors. While courts have occasionally held that goodwill may exist even if no net profits are carned, the general rule is that the existence of goodwill can be predicated only upon earnings in excess of the normal competitive return. Economists distinguish the excess profits resulting from internal economies from those resulting from the exploitation of the quasi-monopolistic position achieved by the company by virtue of its goodwill. Because, however, of the practical impossibility of segregating profits arising from efficiency from those resulting from goodwill in the narrow sense of the term jurists and accountants, faced with the practical problem of evaluating goodwill, have tended to attribute all excess earnings to goodwili.

The value of goodwill is therefore generally arrived at by capitalization either of total net earnings or of earnings above the normal. The normal return, including both interest and profit, upon the total cost of the tangible assets of an industry is about 10 percent (Simpson, K., Economics for the Accountant, New York 1921, ch. xi). All return above this amount may be considered extra profits attributable to goodwill.

The number of years' purchase of the profits to be used in capitalization is essentially a matter of fact to be determined for each particular business. Courts, however, rarely allow valuations involving more than five years' purchase. The British law of partnership capitalizes goodwill at two years' purchase of total profits.

Goodwill represents an asset only because of the probability of earning excess profits in the future. General accounting practise is therefore against its inclusion as an asset unless it has been purchased. If an established company shows an abnormally large return, there can be no objection to the capitalization of goodwill as an asset on the balance sheet so long as the return is thereby not reduced below the normal and so long as stockholders, actual and potential, realize what is back of the stock. Since earnings rather than assets are the chief criterion of market value, investors may be justified in buying this so-called water.

A considerable number of industrial corporations and partnerships with valuable trade names have sold their assets to new corporations in return for preferred and common stock of the new companies. The F. W. Woolworth Company, the S. S. Kresge Company and the B. F. Goodrich Rubber Company are examples. The preferred stock of these companies was generally equal to the original cost of the tangible assets. This stock was usually sold to the public, while the common stock, covered for the most part by goodwill justified by earning power, was presumably retained by those responsible for the development of the business. These flotations enabled the original owners to draw out their original investment through the sale of the preferred stock and to capitalize their goodwill in the form of common stock. The total capitalization of a merger often exceeds the combined capitalization of the old companies, the difference representing the goodwill or the capitalization of the prospective excess earnings.

Considerable disagreement exists as to whether goodwill once purchased and entered on the book should be written off with the passage of time. An English court has held that such depreciation is not necessary [Wilmer v. McNamara & Co., Ltd., 2 Ch. 245 (1895)]. Furthermore, obvious difficulties in the way of writing off goodwill arise where stock is issued against the goodwill. A considerable body of opinion, however, inclines to the view that since it is of an impermanent, evanescent character, requiring constant care for its maintenance, it should be

written off in the period of time used as the basis for calculating its value.

Because goodwill was originally assumed to depend upon freedom of choice, the courts have consistently refused to allow monopolistic public utilities to include it in valuation for purposes of rate regulation. Nevertheless where the "going-concern value" is admitted as an element in utility valuation, goodwill comparable to that in competitive businesses is allowed for. The dependence of the sale value of goodwill upon its transferability has led Anglo-American courts generally to limit closely or disallow goodwill as an independently calculable or realizable asset in professions or businesses dependent upon the personality of the individual. That these may possess a goodwill based not alone on skill and ability would seem evident. But despite the fact that only to a very limited extent, varying with the profession and circumstances involved, can the owner transfer the confidence of his clients, patients or patrons to his successor, English and American courts since the time of Lord Eldon have put no obstacles in the way of sales of practise. Such sales are construed as giving an exclusive right of presentation and as compelling the retirement of the vendor from the neighborhood. The goodwill of a newspaper might also seem to be difficult to transfer, but large payments have occasionally been made for it, as in the case of the purchase of the New York World by the New York Telegram in 1931. The goodwill of capitalists and of those from whom the business buys is hardly transferable. That of labor, however, may be fairly successfully transferred, especially where change of ownership does not involve change of the personnel treating directly with labor. The employees may not even know that the ownership has changed.

Goodwill as regards particular products may attach to particular locations, as in such expressions as Sheffield cutlery and Paisley shawls, or even to certain countries, as in the case of German optical goods and English woolens. But these types of location value are common to all businesses in the country or district concerned. Location value becomes important for a particular business only when and in so far as it increases the profits of that particular business.

Recognition of goodwill as a transferable asset involved protection of the rights of the purchaser. Court decisions early recognized the legality of the vendor's agreement not to compete, although the courts have tended to invalidate agreements involving unreasonable conditions, Goodwill 701

holding these to be in restraint of trade. The general rule in England and the United States (except in Massachusetts) is that in the absence of a specific agreement to the contrary the vendor may open a business and compete with the purchaser. American law generally restricts such competition only by requiring that it be fair and free from fraud, but in England and in the state of New York while the vendor may advertise publicly he may not solicit his former customers directly. In case of violation the purchaser may obtain an injunction restraining further interference by the seller.

The legal treatment of goodwill in continental countries bears a strong resemblance to that in English and American law. The continental law too is mostly case law, engrafted upon the codes. In the Latin countries two terms are employed to express goodwill; in France, for example, clientèle and achalandage—the first representing the personal goodwill of the customers and the second the impersonal goodwill resulting from the connections of a business. Agreements for the transfer of goodwill are everywhere held not to be in restraint of trade. While under German law the mere sale of a business does not, in the absence of special circumstances, restrict the seller from further competition, in France the obligation de garantie which is implied in the sale of a business has been held to forbid the seller from any diminution or withdrawal of the goodwill. The French courts have been much more liberal than the German in sanctioning the transfer of goodwill in the sale of professional practises. The German courts before the war uniformly condemned the transfer of lawyers' and very often of doctors' practises. Such transfers were not only not recognized by the courts but were condemned by professional ethics. From a much earlier period, however, the French courts had withdrawn their opposition to the sale of professional practise. The transfer of the goodwill of all sorts of professional practises and commercial agencies has long been very common in France. Even a notary's practise may be transferred in France despite the fact that he is an official and his service is not subject to real competition, because of the limitation of the number of notaries. The consent of the government must be obtained but it is granted practically as a matter of course. In czarist Russia, where the number of apothecaries was also legally limited, the sale of their goodwill was similarly allowed. Such transfers are really survivals of the once common buying and selling of offices.

The French legal treatment of goodwill is far more advanced than the German. Under the law of 1909 relating to fonds de commerce it is possible to mortgage a business itself, and in the absence of express stipulation the pledge is limited to "l'enseigne et le nom commercial, le droit au bail, la clientèle et achalandage"—in other words, to the intangible assets, of which the goodwill is regarded as the most important. The debtor may be threatened with foreclosure if he manages the business badly or injures his credit or goodwill, and he may not change the place of business without good cause. Such a mortgage is impossible under German law and for that matter under Anglo-American law.

The law of goodwill is conventionally considered only in connection with the transfer of specific businesses or professional practises. As a result, the general protection afforded to goodwill by many provisions of law is often forgotten. Goodwill along with other forms of intangible assets is preserved by the whole law of unfair competition (q,v_*) , which in recent decades has undergone a tremendous expansion. Other legal devices which aid in protecting goodwill include actions of libel or slander, criminal statutes against endangering the credit of a business and laws against the enticement of employees and against picketing and boycotting.

Kemper Simpson

See: Frofit; Corporation Finance; Valuation; Cap-ITALIZATION; TRADE MARKS; UNFAIR COMPETITION. Consult: Commons, John R., The Legal Foundations of Capitalism (New York 1924) p. 159-62, 191 213, 261-73, and Industrial Goodrell (New York 1919), especially ch. iii; Foreman, C. J., Efficiency and Scarcity Profits (Chicago 1930) chs. ix-xi; Yang, J. M., Goodwill and Other Intangibles (New York 1927); Simpson, Kemper, The Capitalization of Goodwill (Baltimore 1921); Dicksee, L. R., and Tillyard, F., Goodwill and Its Treatment in Accounts (3rd ed. London 1906); Leake, P. D., Commercial Goodwill (2nd ed. London 1930); Allan, Charles E., The Law Relating to Goodwill (London 1889); Wright, F. A., "Nature and Basis of Legal Good Will" in Illinois Law Review, vol. xxiv (1929-30) 20-43, and "Tort Responsibility for Destruction of Good Will" in Cornell Law Quarterly, vol. xiv (1929) 298-315; Cendrier, Gaston, Le fonds de commerce (Paris 1919); Emelina, Louis, Essai d'une théorie générale sur la clientèle (Nice 1907); Vivante, C., "La proprietà commerciale dell' avviamento o della clientela" in University of Rome, Facultà Giuridica, Scritti . . . in onore di Antonio Salandra (Milan 1928) p. 229-47; Viñassa, W., Die Kundschaft, Abhandlungen zum schweizerischen Recht, n.s., vol. ix (Berne 1925); Domke, Martin, Die Veräusserung von Handelsgeschäften, Arbeiten zum Handels-, Gewerbe- und Landwirtschaftsrecht, no. 35 (Marburg 1922); Kleckow, Wolfram, Die entgeltliche Veräusserung ungeschützter materieller wirtschaftlicher Güter (Grünberg 1910); Schreyer, K. F. W., Wird das Recht am bestehenden Unternehmen nach Sect. 823 Abs. 1 BGB geschützt? (Greifswald 1921); Oppikofer, Hans, Das Unternehmensrecht (Tübingen 1927).

GOOS, CARL (1835-1917), Danish jurist and political figure. Goos was professor at the University of Copenhagen and occupied at various times the posts of director of prisons, minister of education and minister of justice. The influence exerted on Goos by his teacher and predecessor, F. C. Bornemann, a devotee of Hegel, was later counterbalanced by his study of English thinkers, especially John Stuart Mill. One of his principal works, the Forelaesninger over den almindelige retslaere (2 vols., Copenhagen 1885-92), presenting an exposition of a general theory of law, is equally remote from Hegelian dialectic and any logical deduction from abstract ideas; it rests rather upon a solid foundation of knowledge of human institutions, and the legal analysis contained in it became of fundamental importance to Goos' treatment of positive law. Thus in the law of contracts he started from the principle of good faith as its primary element, in contradistinction to the Roman law doctrine of consent. Again, where the nature of an illegal act was to be determined, he emphasized the necessity of objective limits ruling out all metaphysical or subjective decisions. Remarkable powers of exegesis, precise definition and the capacity for systematization stamp Goos' other principal work, Den danske strafferet (5 vols., Copenhagen 1875-96), an analysis of Danish criminal law. Fundamentally Goos' criminological views were closely akin to those of the classical school. Originally he regarded punishment as directed toward disciplining the will of the delinquent to law obedience, but later he combined with this view the principle of retribution. This change was caused in part by his reaction to indeterminate sentences, which he held would jeopardize the rights of the individual in his dealings with the community. Goos' exposition of particular crimes in the special part of this treatise is hardly rivaled by any other book in European literature. In the sphere of legislation too Goos did splendid work, particularly in the fields of procedure and criminal law. Moreover, he was looked upon everywhere as an authority not only on penology but also on international law. Preeminent among Danish jurists, Goos holds a central position as a thinker of genius who bridged the gap between the realism of Oersted and the speculation of Bornemann. The whole succeeding generation of jurists has been more or less consciously influenced by him.

FRANTZ DAHL

Consult: Hagerup, F., Dahl, Frantz, and Thyrén, J. C. W., in Nordisk tidsskrift for strafferet, vol. iii (1915) 1-55; Dahl, Frantz, in his Juridiske profiler (Copenhagen 1920) p. 11-59, and bibliography in Ugeskrift for retsvaesen (1915) 24-32; Teisen, Axel, in American Law Review, vol. i (1916) 262-68.

GORDON, AARON DAVID (1856–1922), Jewish social philosopher. At the age of forty-eight Gordon left Russia, where he had been employed as a bookkeeper and minor estate official, to become an agricultural worker in Palestine and later a member of the communal settlement, Dagania.

Through his many writings, which were posthumously collected into five volumes (Kitve, Tel Aviv 1925-29), Gordon made two outstanding contributions to the philosophy of Jewish life in Palestine: his concept of the creative basis of agricultural work and his theory of Jewish nationalism. In these beliefs, which were based on libertarian individualism and religious idealism, Gordon showed the influence of Tolstoy. He believed in self-perfection, which for him meant self-expression by work in harmony with the laws of nature. He rejected every difference between individual and national ethics. In one of his treatises he stressed the power of suggestion exercised by force, might and wealth and held that it lay not in the virtue or greatness of the ruling classes but in the longing for power in the souls of the governed. Gordon insisted upon the duty of the individual to free himself from mass suggestion and to develop his independent critical reflection. The nationalism which evolved out of this basis was of a peculiar type. For Gordon the Jews were not and could never become a nation like other nations: the rebirth of Judaism meant not a political or an economic but a spiritual and moral regeneration based on the ideals of the prophets. As the Jews had once proclaimed that man was created in the image of God, they must now strive to lead and to realize a race or nation created in the same image. During the World War Gordon, almost alone among Palestine Jews, was actively opposed to the creation of a Jewish Legion but his doctrines of nationalism remained without any considerable influence.

His emphasis on the creative value of agricultural work, especially for the Jewish people which had so long been divorced from "pro-

ductive" labor, made him the spiritual father of the Chalutz, or pioneer, movement, and despite his opposition to socialism because of its roots in rationalism and mechanism he was considered one of the leaders of the Jewish labor movement in Palestine.

Hans Kohn

Consult: Selected essays from Gordon's collected works have been translated into German by V. Kellner as Erlösung durch Arbeit (Berlin 1929), with a biography; Kohn, Hans, L'humanisme juif (Paris 1931); Spiegel, Shalom, Hebrew Reborn (New York 1930) p. 409-17, 467-68; Aaronovitch, J., and Dayan, S., A. D. Gordon, Young Jew series, no. 3 (New York 1930).

GORING, CHARLES BUCKMAN (1870-1010), English psychiatrist and criminologist. After medical studies in London and Paris, Goring was in 1903 appointed deputy medical officer of the Parkhurst Prison, where his predecessor, Dr. Griffiths, had already begun an anthropometric investigation designed to test Lombroso's theory of an anthropological criminal type. Assisted by medical officers of other prisons Goring enlarged and concluded this investigation. The result was a report on The English Convict: a Statistical Study (London 1913; abridged, 1915) which has as yet no equal in the field of statistical criminological research. The report was based on biological and social data gathered from a random sample of 3000 male convicts. In the process of analysis various groups of prisoners were compared with each other and with the prison and the general population of the country; and all or significant portions of data concerning them were correlated with similar data personally gathered or found in contemporary studies made by other scholars on Cambridge, Oxford and Aberdeen undergraduates, Scottish criminals and insane, New South Wales criminals, hospital inmates and certain army units.

Assuming that there exists in all persons a constitutional proclivity toward crime, which he called criminal diathesis, Goring proceeded to uncover the associations of this factor with the environment, training, biological stock and physical attributes of prisoners. His anthropometric data caused him to deny the existence of a criminal type in the Lombrosian sense. He found, however, that those imprisoned for crimes of violence had on the average a finer physique and greater constitutional soundness than other prisoners or the general population and showed a greater incidence of suicidal or insane tend-

encies, ungovernable temper and obstinacy of purpose; and that burglars and thieves, who comprised 90 percent of the prisoners studied, were on the average inferior in stature and weight to other prisoners and to the general population. The defective intelligence of offenders against property was also pronounced. He was forced to the conclusion that defective physique and intelligence are the two significant factors associated with criminality.

Rarely has such a challenging work as Goring's been received with such acclamation. The opponents of Lombroso saw in it the death knell of the theory of an anthropological criminal type. The disciples of the Italian criminologist regarded it as a complete vindication of their master.

THORSTEN SELLIN

Consult: Article in Lancet, vol. exevi (1919) 914; Harris, J. A., in Science, n.s., vol. li (1920) 133 34; Pearson, K., Lucas, E. V., and Goring, K. M., in Biometrika, vol. xii (1918-19) 297-307; "Charles Goring's "The English Convict," a Symposium" in American Institute of Criminal Law and Criminology, Journal, vol. v (1914-15) 207-40, 348-63. See also controversy between Goring and H. Bryan Donkin in Journal of Mental Science, vol. xiii (1917) 16-35, vol. xiv (1918) 129-46, and vol. xv (1919) 87-96.

GOROSTIAGA, JOSÉ BENJAMÍN (1822-91), Argentine statesman. Gorostiaga was a delegate to the Constitutional Assembly at Santa Fé in 1853 and subsequently became minister of the interior under General Justo José de Urquiza, the first constitutional president of Argentina. He was a national deputy, and vice president of the Chamber in 1862. In 1877 he was appointed president of the Supreme Court, an office which he held for ten years.

Gorostiaga was the central figure of the Constituent Assembly and one of the chief authors of the Argentine constitution. As a jurist he was superior to Alberdi, whose plan of a constitution, published in 1852, contained many defects. Gorostiaga reported the progress of the project to the Assembly and in the debates proved his thorough knowledge of public law. The main body of the constitution, with the exception of the general sections, was edited by Gorostiaga. In its final form it showed the influence of the Constitution of the United States, adapted, however, to the exigencies of Argentine national experience.

Juan A. González Calderón

Consult: Quesada, Ernesto, La Argentinidad de la constitución (Buenos Afres 1918) p. xxi-xxxi.

GÖRRES, JOSEPH VON (1776-1848), German publicist. Görres was born in Coblenz and in his youth came under the influence of the rationalist cosmopolitan thought of the Enlightenment. He was an enthusiastic supporter of the French Revolution, violently anticlerical and for a time an advocate of the creation of a free Rhenish republic after the French model. Toward the turn of the century he became disillusioned concerning the prospects of the salvation of humanity through French influence. His association with the Heidelberg romanticists during the period between 1802 and 1805 and more especially his preoccupation with the works of Herder aroused in him a deeper sympathy for the Middle Ages, for traditionalism and for national individuality.

In January, 1814, Görres assumed the direction of the Rheinischer Merkur, the first important newspaper in the history of German journalism. This paper became the focal point for the German national movement and the most violent literary opponent of the French. Görres followed the German troops in the Rhineland, inflamed them with German patriotism and proclaimed the Rhineland as German territory from time immemorial. The most important German literary figures like Arndt, Kleist and the brothers Grimm contributed to this paper; it was used by Baron vom Stein as his mouthpiece, was read and translated in England and in France and was so influential as to be termed by Napoleon la cinquième puissance. During the course of the peace negotiations Görres pressed for the solution of the German national problem. He advocated the restoration of the old mediaeval empire with Prussia and Austria as the leading states of northern and southern Germany respectively. His opposition to the Prussian aims at hegemony as well as his protests against the policy of reaction brought about the suppression of his newspaper on January 10, 1816. For similar reasons his pamphlet Teutschland und die Revolution (Coblenz 1819) was confiscated by the Prussian government and Görres was forced to flee to Strasbourg.

Görres subsequent career is marked by his closer affiliation with the Catholic church. With his growing interest in the Middle Ages had come also an increased appreciation of religion in general and the mediaeval church in particular. Called in 1827 to Munich as professor of history, he became the center of a circle of Catholic intellectuals and politicians which marked the beginnings of organized Catholic political

action in Germany. His pamphlet, Athanasius (1837), was the great trumpet call for the political equality of the Catholics and for the freedom of the Catholic church. The Historische politische Blätter für das katholische Deutschland, founded in 1838 at the instigation of Görres, was both before and after his death the most important organ of Catholic public opinion.

Görres was not an original thinker. His theory of nationalism was but an elaboration of Herder's and his organismic, hierarchical, authoritarian and anti-absolutist theory of the state was in all essentials identical with that of all the other leading conservatives of the period of reaction. But Görres clothed all these ideas with a concrete and symbolical expression, infused into them such a spirit of moralism and earnestness and pursued them with such unbounded energy and ardor that he may justly be called the greatest of German publicists.

KOPPEL S. PINSON

Works: Gesammelte Schriften, ed. by Wilhelm Schellberg and others, vols. i-ii, vi-xiii (Cologne 1928-29); Gesammelte Schriften, ed. by Marie Görres, 9 vols. (Munich 1856-74).

Consult: Schellberg, W., Joseph von Görres (Gladbach 1922), and his introduction to Görres' Ausgewählte Werke und Briefe, 2 vols. (Munich 1911); Galland, Joseph, Joseph von Görres (2nd ed. Freiburg i.Br. 1876); Görres Festschrift, ed. by Karl Hoeber (Cologne 1926); Borinski, F., Joseph Görres und die deutsche Parteibildung, Leipziger rechtswissenschaftliche Studien, no. 30 (Leipsic 1927); Berger, M., Görres als politischer Publizist (Bonn 1921).

GORTER, HERMAN (1864-1927), Dutch socialist. After taking his doctorate in classics at the University of Amsterdam and publishing a lyrical poem, Mei (Amsterdam 1889, 3rd ed. 1900), which placed him among the foremost of modern poets, Gorter became interested in philosophy, translated Spinoza's Ethica and then studied the works of Marx. He wrote several works popularizing Marxian doctrines, showing a remarkable ability to present abstract material lucidly. Gorter also made several able and original applications of the methods of historical materialism to art and poetry. In 1897 he joined the Sociaal-Democratische Arbeiderspartij and became an indefatigable propagandist of militant socialism. As one of the staff of the Marxian monthly, De nieuwe tijd (The new times), he fought against the opportunism of the party leaders. In 1909 after the expulsion from the party of the radical group prominently identified with the weekly Tribune he became associated with them in establishing the SociaalDemokratische Partij. Shortly after the outbreak of the World War he wrote a brilliant pamphlet denouncing imperialism and the socialists who supported the war and arguing that the working class had no reason to wish for the triumph of any of the belligerent powers. Gorter hailed the Russian Revolution of October with boundless enthusiasm and helped found the Kommunistische Partij in the Netherlands in 1918. He soon diverged, toward the left, from the views of the Communist International. He helped draw up the program of the Kommunistische Arbeiterpartei in Germany and in 1920 replied to Lenin's pamphlet Radicalism, the Infantile Discase of Communism in an open letter in which he differentiated between the tactics successful in Russia and those advisable in western Europe and attacked the policy of Communist participation in parliamentary activity. In the fall of 1921 he founded the Kommunistische Arbeiderspartij and in 1922 retired from politics. In 1917 he published Pan, a poem of the proletarian world revolution and a glorification of dialectical materialism.

HENRIETTE ROLAND HOLST

Important works: Het imperialisme, de wereldoorlog en de sociaal-democratie (Amsterdam 1914, 4th ed. 1921); De vereldrevolutie (Amsterdam 1910, 3rd ed. 1921); Het opportunisme in de nederlandsche communistische partij (Amsterdam 1921); Open brief aan partijgenoot Lenin (Amsterdam 1921).

Consult: Blom, D. van, "Schriften niederländischer Sozialisten über den Krieg" in Archiv fur die Geschichte des Sozialismus und der Arbeiterbewegung, vol. vi (1915) 314-37; Ravesteyn, W. van, Herman Gorter (Rotterdam 1928).

GOSCHEN, FIRST VISCOUNT, GEORGE JOACHIM GOSCHEN (1831-1907), British statesman and financier. He was of German extraction. After taking a classical course at Oxford he entered his father's firm of merchant bankers in London. He soon turned to politics, entering Parliament in 1863 and being given cabinet rank in 1866. As a politician he was chiefly known for his consolidation and simplification of local government loans and taxes and for his conversion of the 3 percent national debt (consols) into securities bearing 23 percent for fifteen years and thereafter 2½ percent—an operation which meant a large saving for the government but which was held to have weakened the state's power to borrow except on a basis of par redemption at a fixed date.

Goschen did not profess to be an economist but he wrote a number of illuminating studies on monetary subjects, some of which were regarded by bimetallists as supporting their doctrines, and on the incidence of local rates in England. His Theory of the Foreign Exchanges was the first systematic theoretical account of the mechanism whereby international price adjustments are brought about. Although not free from inconsistencies it was yet a lucid presentation of the view that a country's foreign exchanges are regulated as much by the amount of its short term indebtedness as by the quantity of its monetary stock and the internal price level. It was rapidly recognized as a standard work throughout the world. Criticism of it has been directed chiefly against the doctrine that the adjustment of the foreign exchange position is automatic and that the central bank in altering its discount rate is following rather than controlling market conditions. The desire to emphasize this point of view sprang from Goschen's distrust of authoritarian interference with the "natural" workings of the price system. As chancellor of the Exchequer at the time of the Baring crisis in 1800 he was adamant in refusing government assistance to prevent a credit collapse. A convinced free trader, he was opposed to Joseph Chamberlain's policy of tariff reform. He also took a leading part in the movement for abelishing religious tests in the older universities. In other spheres, however, he was less radically individualist. In 1884 he fought Gladstone's franchise bill on the ground that complete democracy meant the dictatorship of the lowest classes. Two years later his hostility to Irish home rule made him one of the leaders of the Liberal Unionists and soon brought him into the Conservative party, where he ended his governmental career.

LINDLEY M. FRASER

Important works: The Theory of the Foreign Exchanges (London 1861, 16th ed. 1894); Reports and Speeches on Local Taxation (London 1872); Addresses on Educational and Economical Subjects (Edinburgh 1885); Essays and Addresses on Economic Questions (1805–1803) (London 1905).

Consult: Elliot, A. R. D., The Life of George Joachim Goschen, First Viscount Goschen, 1831-1907, 2 vols. (London 1911); Farrer, T. H. F., Mr. Goschen's Finance, 1887-1890 (London 1891); Angell, J. W., The Theory of International Prices, Harvard Economic Studies, vol. xxviii (Cambridge, Mass 1926); Ansiaux, Maurice, Principes de la politique régulatrice des changes (Brussels 1910) chs. i-ii.

GOSPLAN is the abbreviated name of the Gosudarstvennaya Planovaya Kommissiya pri STO. or the State Planning Commission of the Council of Labor and Defense, which was instituted by decree of the Russian Soviet government (the Council of People's Commissars of the R. S. F. S. R.) on February 24, 1921. Its parent body, the STO, or the Council of Labor and Defense, composed of leading members of the government, is the supreme economic general staff, exercising a coordinating control even over the work of people's commissariats, or ministries, and possessing within limits certain legislative powers of its own. The Gosplan is an advisory commission of experts, subordinated to the STO, whose function is the drafting of plans for the future economic development of the Soviet Union along socialist lines.

It is no part of Communist theory that a planned economy can be developed over night or that a Five-Year Plan can appear upon the scene as a deus ex machina. According to Communist theory the political prerequisite, the transfer of power from the propertied class to the working class, is an act of revolution supplanting the previous capitalist state by one of a historically new type, a workers' state, which is the concrete form of what Marx called the dictatorship of the proletariat. And just as this political revolution marks a stage in the historical process, so the subsequent building of socialism, the economic revolution, must be conceived as a part of that developing process. Lenin did not attempt to introduce complete communism at one fell swoop on the morrow of the revolution of November, 1917; and a five-year plan, although much talked of in earlier years, was introduced only in 1928 after the ground had been prepared by the economic policy of the preceding eight years.

The economic policy of these years falls into three clearly marked periods. The first period, which embraces the eight months preceding the outbreak of civil war in July, 1918, was the period of the first crude attempts at building a new apparatus of economic administration, of cautious and on the whole experimental nationalization. For the time being only key enterprises were nationalized and the state confined itself to such measures of general economic control as were witnessed in all belligerent countries during the war. At the same time considerable powers of control over the actions of private owners were delegated to workers' committees in each enterprise (see Bolshevism).

This first period was sharply broken by the advance of the White armies from the Urals and from the Caucasus. The economic system was

subordinated to immediate military ends, and the control of industry was hurriedly centralized under an improvised semimilitary machine. Since the civil war was essentially a class war, the administration of industry could hardly rest on the basis of cooperation with private capitalists. Hence that improvised system of centralized control, which in capitalist countries during the war was termed war socialism, in Russia necessarily took the much more drastic form of war communism. Industry was hastily nationalized in a more sweeping manner than would have otherwise been contemplated, and its administration was directly subordinated to industrial departments (glavki) organized as sections of the Supreme Council of National Economy (Vesenha). A special Commissariat of Supply (Narcomprod) was set up to organize the distribution of primary products and of finished commodities, and distributive organizations such as the cooperatives were progressively subordinated to its control. A rationing system of supplies quickly replaced ordinary retail trade and the open market, and to insure food for the towns and the army a system of requisitioning was applied to the peasants' grain surplus in the villages. Collection of foodstuffs and raw materials and the distribution of finished industrial products assumed the form of a giant system of centralized state barter. Relentless struggle against the capitalists prevailed in industry and trade as well as on the military fronts. Improvised military measures were everywhere the order of the day.

Whether or not without the civil war, war communism would have been a normal stage of Communist policy is largely an academic question, for it is hardly conceivable that after so sweeping an event as the October revolution the former privileged class would have failed to make some effort by military measures to regain what they had lost. As the civil war broke this counterattack on the military front, so war communism eliminated the bourgeoisie from all the positions of vantage it had previously held in the social system and crushed its resistance. War communism was a product of civil war, not of an a priori utopia; and as such it was simply a continuation of the political revolution of October, 1917. And when the third stage, the period of the NEP, or New Economic Policy, succeeded war communism at the close of the civil war in 1921, the change was a return to "normal" conditions, not a retreat from a shattered utopia.

The keynote of the NEP was the abolition of grain requisitioning and the restoration of free

trade in grain for the peasant. As a corollary of this there followed abolition of the centralized organization and distribution of supplies and the restoration of the retail and wholesale market. The decentralization of economic administration took the form of the reorganization of the industrial departments of the Vesenha into organs of general supervision and control and the organization of industry, still almost entirely nationalized, into "trusts," which with a few exceptions were horizontal combinations responsible for the detailed administration of the constituent plants. Some of them embraced plants of allunion importance, others operated to a large extent within the area of a single republic and the smallest were limited to single regions or provinces. The trusts were state bodies in the sense that their fixed capital was owned by the state. their directorate was appointed by the economic council of the state, their production programs were subject to the approval of the appropriate economic council and their accounts were audited and their reports scrutinized by the same council. At the same time they existed as separate legal entities and functioned as financially autonomous bodies: their working capital stood in their own corporate right and they were free to engage at their discretion in commercial transactions such as purchasing raw materials, hiring labor, marketing their products (subject only in some cases to price restrictions), raising credits and the like. A similar position of legal and financial autonomy was also restored to the cooperatives. Private trade was legalized, subject to the grant of a license by the appropriate state authority; private traders were liable, however, to a discriminatory business tax. Foreign trade, however, remained strictly controlled; all import and export transactions were subordinated to the program of the Commissariat for Trade. Provision was also made for the formation of joint stock companies, with capital provided by various state organs, and of mixed companies, with joint state and private capital, to operate in the sphere of wholesale and foreign trade. In 1923 and the following years the trusts in the various industries took advantage of this provision and organized on their own initiative "syndicates," to which they delegated the functions of selling their products and of purchasing the necessary raw materials. In the course of time many of the syndicates took over the general regulation of the industries with which they were dealing. By giving "preliminary orders" to the various trusts, by extending credit to them out of

the working capital accumulated from commissions or profits, by recommending concrete measures for improvements in quality and in various other ways the syndicates became very influential in shaping the production policies of the trusts.

During the first five years of NEP practical questions of reconstruction held the stage. It was necessary to overcome a succession of numerous "crises" and to start the wheels of industry again. The NEP represented a transitional system under which a predominantly nationalized industry adapted itself to the environment of an agricultural country of primitive individualist peasant cultivation. Since this adaptation implied a market relationship between the state and peasant economy, the economic characteristic of this period consisted in the manoeuvring on the market of state industry organized in financially autonomous units. Ordinary commercial forms, practises and relationships prevailed; and the state in adapting itself to the market and to peasant agriculture was ipso facto limited and conditioned by it.

When the period of reconstruction came to a close, the question of the next stage of advance appeared in an urgent form. This question was a crucial one; how to build socialism in a backward peasant country? As soon as such a task was set, the situation demanded no longer merely an adaptation to the peasant market but the controlling of that market, the appropriate transformation of the environment itself. The question as to further advance had already been posed by Lenin in 1920 at the close of the purely politico-military stage of the revolution. He had answered it with the slogan of electrification. To Lenin's view the political revolution, the intrenching of the working class in power and the uprooting of the old privileged class, was the prerequisite of an economic revolution which would necessarily follow it. The economic revolution was the more lengthy process of building stone by stone the structure of a socialist economy. In a backward peasant country this could be done only on the basis of industrialization or mechanization of the economic system. It is part of the Marxian doctrine that handicraft production creates the system of petty properties and petty trade, whereas the Bessemer process, electricity and the conveyor system produce corporation enterprise, the combine and the trust. In accordance with this view socialism in Russia could develop only on the basis of twentieth century technique; and the economic revolution had to be simultaneously a technical revolution and a social revolution, the latter being unthinkable without the former, the former being inseparable from and subordinated to the latter.

Before this technical-social revolution could be achieved, the fundamental issue as to the position of agriculture under conditions of rapid industrialization on a socialist basis had to be faced and settled. In the latter half of the reconstruction period it became clear that under the conditions of NEP there had been a certain revival of class differentiation in the village, in particular the reappearance of a class of embryocapitalist rich peasants, the kulaki. And while any appreciable development of industry necessarily rested on a growth of the agricultural surplus necessary to give food and raw materials to industry and grain for export, there seemed small chance for agriculture to develop at anything but an extremely slow rate unless the recrudescence of semicapitalist kulak agriculture was definitely encouraged. This problem became particularly acute in the summer of 1928, when instead of exporting grain Russia had to import it from abroad. During the two previous years the issue had been thoroughly discussed in theoretical journals, in the press, in party and Soviet meetings and conferences. This discussion period had two main phases: the acute controversy between the official majority of the party and Trotsky, who wished for a forcing of the pace and advocated "socialist accumulation" at the expense of agriculture; and that between the opinion championed mainly by Stalin and the so-called Right wing, which was inclined to preserve for a longer period the forms characteristic of the reconstruction period. These were no mere academic issues, nor were they simply a raçade for personal rivalries. They were vital differences of view as to the way of building socialism in a peasant country; and the answer to the question offered the urgently needed key to immediate practical policies. History was at a crossroads, and once a decision had been taken there could be no turning back.

The alternative decided upon was to go beyond the limits imposed by the NEP, involving the adaptation to a peasant environment as its keystone, and to effect a new social revolution in the countryside. Already at the fourteenth congress of the Communist party in 1925 maximum possible industrialization had been approved as the correct policy in the stage following the reconstruction period. This was interpreted as implying special insistence on the

growth of "heavy industry" to provide the basis on which the transformation of the lighter finishing industries necessarily rested. At the fifteenth party congress in December, 1927, this policy was reiterated and combined with its essential corollary, the policy of agricultural collectivization. The reorganization of agriculture on a collective basis was to take two forms: the development of giant state farms, the sovkhozy, mostly on previously uncultivated land in north Caucasus, Siberia, Kazakstan and elsewhere; and the formation of collective farms, the kolkhoxy, by inducing the peasants to pool their land, livestock and implements and to farm cooperatively. On these large scale enclosed farms the most up to date American methods of mechanized agriculture were to be introduced: the social revolution in the village was to provide the basis for a technical revolution in agricultural methods. This double policy was embodied in the Five-Year Plan of 1928, in which it was provided that 18 percent of the agricultural area was to be collectivized by 1933 and that by that date 43 percent of the marketable surplus was to come from state and collective farms. Actually the results of this daring agricultural revolution, which at first aroused extreme skepticism inside as well as outside Russia, surpassed the expectation even of its originators. By virtue of a mixture of "pressure," of economic inducements and of propaganda the provisions of the plan for agriculture had already been exceeded by the harvest of 1930; with the result that Russia was again able to appear on the world market as an exporter of grain on a considerable scale. By the summer of the following year it was claimed that one half of the peasant households of the whole Soviet Union were organized in collective farms and that over 60 percent of the total cultivated area was under state and collective farms.

The period of the NEP afforded the breathing space necessary not only to settle important issues of policy and to reconstruct and consolidate the national economy but also to develop the administrative apparatus for planning, to acquire experience in planned control on a smaller scale and to train a new generation of administrators drawn from the ranks and thoroughly imbued with the ideal of building a new planned economy.

Virtually the first act of preparation for the achievement of an industrial revolution on a socialist basis was the establishment in 1920 of the Goelro, or the State Commission for Electrification, at the personal initiative of Lenin. It

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prepared a plan for the electrification of the country which covered from ten to fifteen years, and which was approved by the Eighth All-Russian Congress of Soviets held in December, 1920. In the following year it was reorganized into the Gosplan, of which the president of the Goelro, Krzhizhanovsky, a prominent engineer and an old friend of Lenin, was appointed president. At that time the Gosplan was composed of forty leading workers, mainly economists, statisticians and engineers. Only a few of these were Communists: the remainder were specialists carried over from the old regime. Subsequently successive reorganizations and enlargements took place, until at present the Gosplan employs a large staff of technical experts controlled by a praesidium of twenty-two persons. It is divided into departments whose work is coordinated by the bureau of national economic planning. In addition to departments serving the purposes of internal organization there are departments charged with planning power supply, industrial output, agricultural output, industrial and residential construction, the work of transport and communication services, the distribution of consumers' goods, the training of labor and technical personnel, general education and scientific research. Subordinate to the Gosplan are also a number of planning organs for constituent areas of the union: for each constituent republic, for each economic region, such as the Urals, and for each province. In addition the various people's commissariats, concerned with economic affairs, and the cooperatives have specialized planning departments which work in direct contact with the Gosplan in framing the plans for their particular spheres.

The Gosplan is a purely advisory body. Although in 1923 Trotsky proposed that it should be clothed with executive powers, the proposal was rejected on the ground that it was politically inexpedient to give such decisive powers to a body of bourgeois specialists with merely a sprinkling of Communists among them. The Gosplan passes judgment on the plans of all economic departments and tenders that judgment directly to the highest organ in the economic sphere, the STO, by whose decisions the recommendations of the Gosplan become executive orders.

Next to the STO the most important administrative body in the economic sphere is the Vesenha. This body was instituted in the first months after the revolution as the supreme controlling organ in economic affairs. But at the end

of the civil war period, when the wartime Council of Defense was reorganized into the Council of Labor and Defense, or the STO, and became the supreme coordinating body between economic departments, the Vesenha was appointed de jure to the role to which it had in fact been progressively tending, that of a virtual Commissariat of Industry. Until 1930 the Vesenha was organized on the basis of departments corresponding to each industry (glavki). In 1930 the syndicates, which had been gradually and spontaneously assuming large administrative powers over industry, were transformed into "combines," most of the industrial departments of the Vesenha being abolished and their functions transferred to the combines. Unlike the old industrial departments of the Vesenha the combines are financially autonomous bodies and separate legal entities. The Vesenha itself is now divided almost entirely into functional departments. The most important of these is the planning section concerned with preparing the economic plans in consultation with the Gosplan and also supervising technical research, improvements and rationalization. The next in importance is the department of inspection and audit, an organ of ex post facto control over industry. Finally, it includes a pricing and costings section and research departments concerned with industrial technique, geological surveying and geodesy. The Vesenha is directly concerned only with industry which operates on an allunion scale. Enterprises which serve a purely local market are organized in trusts of a purely local character, and these come under the control of economic councils of the various republics or provinces.

Initially the Gosplan took over and reorganized the work that had formerly been divided among ten or more different "central commissions" and "high commissions" attached to various commissariats. In the succeeding years it played an important role in planning the reconstruction of the economic system after the ravages of war, civil war and famine: the overcoming of the fuel crisis and the transport crisis in 1921-22, the reorganization of industry on the basis of the new trusts in 1922-23, the handling of the "scissors crisis" (the disequilibrium caused by the high prices of manufactures as compared with those of agricultural products) in 1923-24, the monetary stabilization of 1924 and the inflation crisis of 1925-26.

The most important general tasks which have characterized the work of the Gosplan in the

past decade and which most fully represent the qualitatively unique function of the Gosplan in the economic system have been three in number. The first was the preparation of the scheme of regionalization of the Soviet Union: the division of the country into economic regions as the essential preliminary to the industrialization on the basis of the localization of specific industries in the most suitable regions and of the geographical grouping of associated industries in the most economical way. At the base of this lay important geological and climatic considerations; and connected with it and in part dependent on it were questions of the development of transport, of raw material resources and of electrification.

The second and later task was the preparation of the "control figures" of the national economy in 1925–26. These early control figures were a combination of statistical data, estimates and forecasts, representing the objective factors in the situation, with purposive directions as to the lines and the goal of conscious economic activity. The combination of the two formed the coordinated plan or program by which the activities of all organs of the state with economic functions were to be directed. The period covered by these control figures was one year.

These first control figures, continued in an improved and elaborated form ever since, were a preliminary manoeuvre, as it were, for the third and crowning task of the Gosplan, the preparation of a five-year plan in 1927. The early control figures were admittedly crude and imperfect; they were based on inadequate statistics and the directives which they implied were not closely enough related, either in conception or in execution, to concrete realities. In the following three years, however, a considerable improvement in statistical information and the technique of gathering statistical data was achieved, much valuable experience was garnered and the apparatus of planning was developed and improved. In 1928 the preliminary draft of a five-year plan of the preceding year was succeeded by a still more ambitious draft, which fitted into the wider perspective of a more vaguely sketched twenty-year plan. Within the limits of the fiveyear plan provision was made for annual control figures to adapt in greater detail the program for the coming year to the results of the previous year and to the changing requirements of a developing situation. The new draft was prepared in a maximum and a minimum variant, the latter being based on less favorable assumptions regarding crop yields, improvements in the productivity of labor, availability of foreign credits and benefits to be derived from foreign trade; the difference in anticipated accomplishment averages about 20 percent. The Fifth All-Union Soviet Congress of 1928 adopted the maximum variant as the state economic program for the period from October, 1928, to October, 1933, which is the now famous Five-Year Plan, or Piatiletka. Later the control figures for 1930 and 1931 have revised the figures of the plan drastically in an upward direction under the aim of "carrying out the Five-Year Plan in four years."

In the earlier period of its life the role of the Gosplan was mainly that of a coordinating body; it passed judgment on plans which were originated elsewhere. After the various economic departments and the cooperatives had drawn up their separate programs for the coming year in the form of budgets covering capital investments, output and price policy, estimated profits, credit requirements and the like, the Gosplan reviewed these, coordinated them and advised revision in an upward or a downward direction in any particular. There arose, for instance, such questions as the harmonizing of the relative growth of agriculture and of industry; of the work of the cooperatives or of the railways with the requirements of the commodity turnover; of the demands of industry for credit facilities with the resources of the State Bank and the policy of the Commissariat of Finance; of the import and export program of the Commissariat of Trade with the needs of the internal market.

As the period of reconstructing industry came to a close and the period of entirely new construction began, the function of the Gosplan ceased to be predominantly passive and became the active role of initiating policy in accordance with the directives of the party and the government. Decisions concerning capital development and the process of industrialization of the country—the proportion of resources to be devoted to capital construction, the relative rates of development of different parts of the economic system—were preliminary to the making of sectional plans; and the mobilizing from the center of the resources for construction work-allocations of capital to industries, distribution of raw materials and the like-became the prerequisite of any detailed program. It became the duty of the Gosplan to set the tempo of the whole economic system and to establish the main lines within which the various sectional programs were to be prepared. Of this new role the Five-Year Plan was the concrete expression.

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It is not to be inferred, however, that the Five-Year Plan is a merely abstract creation, imposed bureaucratically from above. The Gosplan postulates the goal and the main directives in a preliminary draft plan, commonly after general discussion by conferences of planning workers. This draft is then submitted to the Vesenha, the commissariats of Transport, Agriculture, Trade and Supply and to the cooperatives, and from them is passed on to their constituent bodies until it reaches the lowest stage, the factory, where it is customarily discussed by a general conference of all the workers. On the basis of these discussions amendments are suggested and the skeleton is clothed in the flesh of more detailed formulation. These fuller, more detailed departmental programs are then submitted again to the Gosplan, which has the task of passing final judgment on them. Even when these plans have reached the final stage of adoption by the STO they are binding on the economic system as general directives rather than as hard and fast bureaucratic regulations. Considerable latitude exists in practise for adaptation by the subordinate organs to actual circumstances, and subsequent modifications are frequently suggested by them in view of unforeseen circumstances, these changes being sanctioned either before or after execution.

Since the relations between various units even within the socialized sector of the national economy take the form of contracts of purchase and sale at specified prices, the regulation of prices, wages and salaries, the policy of long and short cerm credit extension and the system of taxation must be closely coordinated with the instructions concerning material accomplishments furnished by the Five-Year Plan. An important constituent part of the Five-Year Plan is therefore the financial plan, embracing estimates of all financial operations under state control, such as the state and local budgets, the capital accounts of the economic organizations and social insurance funds, and long and short term credit plans. The degree to which the anticipations of the financial plan are carried out also throws much additional light on the execution of the plan of production and consumption as measured in physical units. Since the financial plan is of such importance, the organizations responsible for its drafting and execution-the State Bank and the Commissariat of Finance—occupy a somewhat more independent position with reference to the Gosplan than do the other economic commissariats and the cooperatives.

The keynote of the Five-Year Plan is the mobilization in capital investment or construction work of an average of 30 percent of the national income for each of the five years and a doubling of the national income between 1928 and 1933. If account is taken of the growth of population, which is a rapid one, the national income per capita is expected to increase by 80 percent, while real income available for consumption purposes to the urban and rural population will rise by some 50 percent. The rate of economic development thus provided for is about six times the normal development of world production and more than twice that achieved by industrial countries even in boom years. A more detailed analysis shows that the rate of growth planned for industries engaged in the production of capital equipment and industrial raw materials and supplies is larger than that for consumers' goods industries, and that the anticipated increase of the share of national income under direct control of the state apparatus is greater than that of private undertakings.

Economic planning is not of course a new invention. Improved methods of "scientific" business planning have been the common talk of capitalist business since the last quarter of the nineteenth century, and with the growth of monopolistic capitalism the sphere of such conscious control over economic activities has progressively widened. During the World War and again in recent years, largely under the influence of Russia's example, there has been increasing discussion of a planned economy under the aegis of the central bank, trade associations, public corporations, cartels and syndicates. What is new in the Gosplan system is the subordination of the whole economy of a country to a single plan. Under a regime of private capital the sphere of conscious control is necessarily limited to the individual property unit. Between such units the relation must be predominantly that of laissez faire. In these interstitial relations the state may intervene with negative restrictions and indirect controls, as occurred on a considerable scale in most belligerent countries during the war. But it cannot without infringing the basic principles of private property exercise direct, positive and initiating influence as under the planning system in operation in Russia after 1928. In other words, whereas in a capitalist society extension of state functions might conceiv ably go so far as to approximate the system prevalent in Russia under the NEP, these functions could not extend to anything so radical as the planning system in operation during the period subsequent to 1928.

Another distinguishing feature of contemporary Russian economy is that it attempts to carry out the process of industrialization, the transformation of a country of primitive productive methods into a country of up to date mechanical technique, at a much more rapid tempo than had been witnessed during the industrial revolutions in England in the beginning and in the United States in the middle of the last century, in Germany in the 1870's and in Japan at the turn of the century. It attempts to achieve this tempo by consciously mobilizing and directing capital resources and planning their utilization, as in England or America a large combine might plan and direct the reorganization of the plants under its control.

There are in addition certain subsidiary features of Soviet planned economy which are hardly conceivable apart from the historical process through which Russia has passed since 1917, and which are likely to render western analogies to it incomplete. These characteristic features center about the peculiar role of the Russian Communist party in the successful operation of the Five-Year Plan. In capitalist countries uniformity of executive policy is achieved through the medium of a highly trained and trustworthy civil service. The more educated and reliable the civil service, the more initiative can be left to individuals and the better can unity of policy be combined with requisite flexibility in detail. In Russia, where the old czarist officialdom hardly possessed these qualifications and by its social composition and training was unsuited to the operation of a socialist planning system on so extensive a scale, the Communist party is not only the governing party in the legislature but also the unifying and guiding hand in the execution of policy. As such the Russian Communist party provides a new historical type of party. It is by reason of this double function that severe qualifications are imposed for admission to membership in the party and a strict internal discipline is maintained. The party is not, however, an exclusive official caste, and the execution of the plan does not primarily depend on the efficiency of an official hierarchy passing down orders from above and "putting across" orders in military fashion. Lenin defined the dictatorship of the proletariat, which for him was the necessary political form of the transition between capitalism and socialism, as a state that embodies a new kind of democracy for the prole-

tariat and the dispossessed and a new kind of dictatorship against the bourgeoisie and as being necessarily fulfilled through the instrumentality of sp^cial institutions of a new type, the soviets. As has been mentioned above, the construction of the plan is the work of the subordinate organs, including factory meetings, to the same extent as it is of the Gosplan itself. Similarly, the execution of the plan depends as much on the activity and initiative of the workers themselves as on the directions handed down from above. It is one of the essential features of Communist theory that the party's duty is not primarily to give orders, but to lead and to guide, to stimulate the masses in playing an initiating role in creating and executing the plan. There is no democracy in Soviet Russia in the sense of parliamentary democracy with a multiple party system. But there exists in Russia's planned economy something that may be called a workers' democracy. It is a new type of democracy in the sense that collective interests secure fairly full expression through the apparatus of soviets, trade unions, factory conferences and the like; and that a large part is played by rank and file participation and initiative in framing, adapting and executing the plan. This schooling process of active workers' democracy has played an important role in developing a new generation of industrial administrators from the ranks of the workers. And it is through this active participation of broad masses of the population that the eventual "withering away of the state" (as a hierarchy separated from the people), which figures in Marxist theory, is conceived as being attained.

A planned economy seems to open considerable possibilities of adapting the various branches of the economic system to one another and eliminating industrial and financial crises more successfully than is done under a system of laissez faire. Moreover, not only does it reduce risk and uncertainty by the pooling of risks and by eliminating competition but by planning capital investment and technical change it can considerably reduce those uncertainties which usually characterize economic forecasts. The chief difficulties of a planned economy are those of administration and of human factors: the difficulty of finding the requisite ability to handle problems on so large a scale. Its potentialities there fore seem to be limited not primarily by economic considerations but by the quality of personnel and by administrative inventiveness.

The building of a planned economy in the Soviet Union is bound to have important effects

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on the rest of the world. It may mean to some extent an invasion of important markets in other countries by Russian manufactured goods. But the aim of Russian planning is to make the country self-sufficing. For a long time to come its growing internal market is likely to absorb its output of industrial goods; indeed, with the relaxation of the immediate pressure of the early years of planning, which is responsible for the corced export of certain goods at present, Russian exports of manufactured goods may actually decrease rather than increase. Russia is likely to remain primarily an exporter of raw produce; but since it does not export capital and so needs no export surplus, it will continue to buy from other countries as much as it sells. Therefore the effect of the Five-Year Plan on the rest of the world through purely trade channels will probably be much less than is popularly imagined. Its effect on the rest of the world will certainly be profound, but it will be on another plane. The influence of the social theory for which it stands and as pointing the way for the social and economic thought of the West both as a concrete challenge to the backward peoples of Asia as well as to the working class of developed industrial countries may well be epoch making. And it seems likely to have some immediate concrete influence in encouraging various planning schemes in other countries. Such transplantation to capitalist countries, however, seems to be confined within fairly narrow limits. To copy it on any extensive scale in the west would be inconsistent with the basic principles of individualist enterprise, the profit motive and the association of control with risk. Moreover, certain features of Soviet planned economy, which are essentially the product of the whole process of the Russian Revolution, seem to make the system qualita-

tively different. They have the significance of chemical elements the addition of which transforms the character of the whole composition. If this be so, these specific features are particularly important to understand.

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Sec: National Economic Planning; Rationalization; Industrial Revolution; Bolshevism; Communist Parties; Russian Revolution.

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